SPYNIE PALACE AND THE BISHOPS OF MORAY

history, architecture and archaeology

by

John Lewis & Denys Pringle

With contributions from

Ruby Ceron-Cerrasco, Naomi Crowley, Julie Franklin, Thea Gabra-Sanders, Dennis Gallagher, Pamela Graves, Sheila Hamilton-Dyer, Nicholas M McQ Holmes, Mary Markus, Coralie Mills, Robin Murdoch, Tanya O'Sullivan, Helen Smith, Mike Spearman, Clare Thomas

SOCIETY OF ANTIQUARIES OF SCOTLAND MONOGRAPH SERIES NUMBER 21

EDINBURGH 2002



SOCIETY OF ANTIQUARIES OF SCOTLAND MONOGRAPH SERIES

SERIES EDITOR ♦ ALEXANDRA SHEPHERD

VOLUME EDITOR ♦ ANNA RITCHIE

This volume is published with the aid of a generous grant from



British Library Cataloguing-in-Publication Data

A catalogue record for this publication is available from the British Library

ISBN 0 903903 21 0

CONTENTS

Preface and acknowledgements		ix	
List of contributors			X
English and foreign language summaries			xi
Li	st of illu	strations	XV
1	Histori	cal introduction	1
	1.1	The bishopric of Moray (1120–1224)	1
	1.2	The bishop's residence at Spynie (1124–1460)	2
	1.3	The 15th-century rebuilding of the palace	3
	1.4	Bishop Patrick Hepburn (1538–73)	4
	1.5	The Protestant bishops (1573–1689)	6
	1.6	The palace abandoned (1689–1973)	10
	1.7	The toun of Spynie	11
2	Locatio	on and physiography	13
3	The re	sults of the excavations	16
	3.1	Introduction	16
		Period 1: pre-bishopric occupation	16
	V	.1 Introduction	16
		.2 Investigations near Castle Cottage	17
		.3 Features in the palace courtyard	21
	3.3	Period 2: the early years of the bishopric (12th century)	23
		.1 Introduction	23
		.2 The ditch	23
		.3 Inside the enclosure	26
	3.4	Period 3: 13th-century occupation	26
		.1 Introduction	26
		.2 The south-west corner of the palace enclosure	26
		.3 The remainder of the palace enclosure	29
	3.5	Period 4: the remodelling of the palace (14th–early 15th century)	29
		.1 Introduction	29
		.2 The south side of the palace enclosure	30
		.3 The putative round tower	38
		.4 The west range	40
		.5 The north side of the palace enclosure	42
		.6 The north-west range	43
		.7 The north-west tower	48
		.8 Outside the north curtain wall	49
		.9 The east side of the palace enclosure	49
		.10 Outside the south side of the palace	50
	3.6	Period 5: upgrading the palace (15th-16th century)	51
		.1 Introduction	51
		.2 The south-west tower (David's tower)	51

		.3 Excavations in David's tower	59
		.4 The south side of the palace enclosure	6
		.5 The west range	63
		.6 The north range	68
		.7 The watergate and its passage	80
		.8 The north-west range	8
		.9 The north-west tower	84
		.10 Outside the north curtain wall	84
		.11 The east side of the palace enclosure	86
		.12 Outside the east curtain wall	9
		.13 Outside the south curtain wall	92
	3.7	Period 6: the final years of the bishopric (late 16th–late 17th century)	93
		.1 Introduction	93
		.2 The north range	93
		.3 The north-west range	93
		.4 Outside the north curtain wall	95
		.5 The east range and its environs	91
	3.0	.6 Structures to the south of the palace enclosure	97
	3.8	Period 7: post-bishopric Spynie	99
		.1 Introduction .2 The lochside structures	99
			101
		.3 Castle Cottage.4 The palace enclosure	10
		.4 The palace enclosure	10.
4	The fir	nds	102
	4.1	Coins, jetons and other numismatica by Nicholas M McQ Holmes	102
		.1 Description and discussion	102
		.2 Catalogue	104
	4.2	Small finds of metal, stone and bone by Julie Franklin	113
		.1 Copper-alloy objects	11.
		.2 Lead objects	119
		.3 Composite objects	119
		.4 Iron objects	120
		.5 Stone objects	124
		.6 Bone objects	124
		.7 Objects not retrieved from the excavations	12-
	4.3	Prehistoric pottery by Helen Smith	12:
	4.4	Medieval and post-medieval pottery by Naomi Crowley	12:
	4.5	Window glass by Pamela Graves	132
	4.6	Vessel glass by Robin Murdoch	13
	4.7	Clay tobacco pipes by Dennis Gallagher	140
	4.8	Leather by Clare Thomas	144
	4.9	Textiles by Thea Gabra-Sanders	146
		Architectural fragments by Mary Markus	150
		Building materials by Naomi Crowley	159
		Burnt and industrial debris by Mike Spearman	160
	4.13	Faunal remains	160
		.1 Mammals by Tanya O'Sullivan	16
		.2 Fish by Ruby Ceron-Cerrasco & Sheila Hamilton-Dyer	162
		.3 Birds by Tanya O'Sullivan 4 Marina mellyaga by Halan Smith	16.
	4 1 4	.4 Marine molluscs by Helen Smith Dendrochronology of timbers by Coralie Mills	16. 16.
	4 14	· Denaroemonology of innocis by Corane Wills	104

	CONTENTS ♦ vii
5 General discussion	166
5.1 Spynic in prehistory (Period 1)	166
5.2 Spynie during the 12th and 13th centuries (Periods 2 and 3)	166
5.3 The 14th and early 15th centuries (Period 4)	169
5.4 The later 15th and 16th centuries (Period 5)	171
5.5 The final additions to the palace and its subsequent decline (Periods 5A and 6)	178
5.6 The palace abandoned	179
Appendices	
1 The furnishing of Spynie Palace in the 17th century by Dennis Gallagher	181
2 Cache of objects in the watergate passage	192
Glossary	195
References	196
Index	203

PREFACE AND ACKNOWLEDGEMENTS

Spynie Palace, or Castle, was the principal residence of the bishops of Moray from the 13th century until the Reformation. In 1690, with the final abolition of episcopacy in the Church of Scotland, it passed to the Crown, and in 1838 the palace (by then in ruins) and its surrounding lands were sold into private ownership. Only in 1973 did the state resume responsibility for what remained of the monument when a guardianship agreement, under the provisions of the Historic Buildings and Ancient Monuments Act of 1953, was made with the present owner, Mr Alexander Dunbar of Pitgavenie.

Between 1974 and 1994, when the palace was finally opened to the public, the Ancient Monuments Division of the Department of the Environment (later the Scottish Development Department, now Historic Scotland) undertook a thorough programme of masonry consolidation. From 1986, when the architects and masons began to require ground clearance in order to complete their task, this work was accompanied by a programme of archaeological excavation, directed by John Lewis.

This volume represents the final definitive report on the archaeological work carried out at Spynie between 1986 and 1994. As well as editing the volume, John Lewis has written the sections of the report relating to the below-ground archaeology and geology. Denys Pringle, who was responsible for overseeing the project for Historic Scotland in 1988–89 and 1992–99, has contributed the historical introduction and written the sections relating to the above-ground remains. Since the distinction between above- and below-ground archaeology appears to us unnecessarily arbitrary, and nowhere more so than in the case of Spynie Palace, we have interwoven our respective accounts into what we hope will read as a seamless descriptive narrative, tracing the structural development of the site.

We would like to thank the many members of staff who beavered away at Spynie between 1986 and 1994. They are Susan Bain, Fiona Baker, Andy Barlow, Jane Brann, John Cannell, Eoin Cox, Irene Cullen, John Godbert, Jaimie Hamilton, Andy Long, Alison McIntyre, Hazel Moore, Robin Murdoch, Neil Oliver, Dave Pollock, Alan Radley, Dave Reed, Helen Smith, Chris Staples, Dave Stewart, Bob Will, Graeme Wilson, Mary Wiltshire and Jonathan Wordsworth.

The post-excavation process was undertaken by an equally large number of specialists: Ruby Ceron-Carrasco (fish bones); Naomi Crowley (medieval pottery and building materials); Julie Franklin (small finds); Thea Gabra-Sanders (textiles); Dennis Gallagher (clay tobacco pipes and transcription of early documents); Pamela Graves (window glass); Sheila Hamilton-Dyer (fish bones); Nicholas Holmes (coins and jetons); Mary Markus (architectural fragments); Coralie Mills (dendrochronology); Robin Murdoch (vessel glass); Nigel Ruckley (stone identification); Tanya O'Sullivan (mammal and bird bones); Helen Smith (prehistoric pottery and marine molluscs); Mike Spearman (burnt and industrial debris); and Clare Thomas (leather). The pottery was drawn by Naomi Crowley, the window glass by Pamela Graves, the vessel glass by Robin Murdoch, the clay tobacco pipes by Dennis Gallagher, the architectural fragments by Sam Scott and all other finds by Marion O'Neil. Illustrations 19, 22, 25, 26, 38, 39, 41-44, 60, 76 and 77 were drawn by Sam Scott; all other line drawings are the work of Angie Townshend.

We are also grateful to Lionel Zambeaux for translating from French Yolaine Lenoir's unpublished dissertation on Spynie during the late 15th century and to Roger Morgan for information concerning real tennis courts; also to Athol Murray for providing us with a transcription of an item in the minutes of the Barony of the Exchequer and Alexander Dunbar of Pitgavenie, the owner of Spynie, for his support of the excavations and his ongoing interest in their outcome.

The excavations and post-excavation work were all funded by Historic Scotland. Over the years they were managed by various Inspectors of Ancient Monuments other than Denys Pringle, including Chris Tabraham, Richard Fawcett, Fiona Stewart, Doreen Grove and Julian Small. The post-excavation process has been managed at different stages by Olwyn Owen and Nick Bridgland.

John Lewis, Scotia Archaeology, 1 Ferntower Place, Crieff PH7 3DD Denys Pringle, University of Wales Cardiff, PO Box 909, Cardiff CF1 3XV July 2001

List of Contributors

Ruby Ceron-Cerrasco, Flat 4, 11 Ramsay Gardens, Edinburgh EH1 2NA

Naomi Crowley, 68 Craigleith Hill Avenue, Edinburgh EH4 2JN

Julie Franklin, 3F3, 5 Bothwell Street, Edinburgh EH7 5PY

Thea Gabra-Sanders, 18 Avon Place, Edinburgh EH4 6RE

Dennis Gallagher, 4 Sylvan Place, Edinburgh EH9 1LH

Pamela Graves, Department of Archaeology, University of Durham, South Road, Durham DH1 3LE

Sheila Hamilton-Dyers, 5 Suffolk Avenue, Shirley, Southampton SO15 5EF

Nicholas M McQ Holmes, National Museums of Scotland, Chambers Street, Edinburgh EH1 1JF Mary Markus, 45 Kessington Road, Bearsden, Glasgow G61 2HJ

Coralic Mills, AOC Archaeology Group, Edgefield Industrial Estate, Edgefield Road, Loanhead, Midlothian EH20 9SY

Robin Murdoch, 21 Marchbank Gardens, Balerno, Midlothian EH14 7ET

Tanya O'Sullivan, 18 Ardenlee Gardens, Saul Road, Downpatrick, Northern Ireland

Helen Smith, 16 The Quilts, Edinburgh EH6 5RL

Mike Spearman, National Museums of Scotland, Chambers Street, Edinburgh EH1 1JF

Clare Thomas, Stillness, Aberfeldy, Perthshire PH15 2LD

ENGLISH AND FORIEGN LANGUAGE SUMMARIES

SUMMARY

The surviving ruins of Spynie Palace near Elgin in Morayshire represent a bishop's residence of the 12th to 17th centuries, established on the south shore of the former Loch of Spynie (NGR NJ 230658). Excavations between 1986 and 1994 revealed an earlier phase of timber buildings in the 12th century, enclosed by a rectangular ditch. This ringwork was presumably built by one of the early bishops of Moray, who appear to have had no fixed seat but to have moved between their manors of Birnie, Kinneddar and Spynie. By 1172/4 the nearby church of the Holy Trinity was serving as the cathedral for the diocese, and Spynie manor house would have become the bishop's official residence or palace. Although the cathedral was moved to Elgin in 1224, Spynic remained the bishop's palace until the end of the 17th century.

In the 13th century, the timber buildings were replaced or at least augmented by stone buildings. One of these, Structure 2, appears to have been a chapel with decorated window glass of the type known as *grisaille*. The gradual replacement of timber with stone buildings continued well beyond the 13th century, but there is no evidence of a stone curtain wall before the 14th century, when the first great rebuilding programme began. This first stone castle at Spynie was approximately square, 49m by 44m in area, with a curtain wall 7m high and a principal gate in the south wall. A substantial rectangular tower projected from the south-cast corner and a smaller tower from the north-west corner. The south-western angle may have been strengthened by a round tower. Ranges of accomodation were built on the south, west and north-west sides of the castle, and the quality and orientation of the south range, together with the fact that its first floor was used as a chapel in Period 5, suggests that it held the chapel in Period 4 as well. The bishop's hall was probably in the west range, but the question still remains of where the bishop's private chamber was located. It is possible that it was in the round tower that may have preceded David's tower at the south-west angle.

Another major rebuilding programme began in the later 15th century and continued into the early 16th, and this resulted in the palace still visible today. The principal gate was moved to the east side of the castle, the south range was remodelled, a massive residential tower (David's tower) was built at the south-west angle and the old hall in the west range was converted into a kitchen to serve the new tower-house. A new north range was built with a great hall on the first floor, level with the courtyard. In 1470 there is the first mention of the appointment of a palace constable, reflecting the dual roles of the palace as the administrative centre of both the diocese and the temporal estate.

Alongside the arms of Scotland on the south front of David's tower are the arms of Bishop David Stewart (1462–76), who presumably began the building of the tower, and Bishop Patrick Hepburn (1538–73), who remodelled it. Appendix 1 contains a transcription of an inventory compiled in 1607 of the contents of David's tower, which is invaluable in helping to identify the various rooms in the tower as well as their furnishings, and in interpreting other parts of the palace. The closest known parallel for David's tower in a Scottish episcopal palace is the Great Tower added to the Bishop's Castle in Glasgow between 1426 and 1446. Spynie was crected into a free burgh of barony in 1451, but the settlement that bore that grand name was probably only a small township.

Bishop Patrick Hepburn was probably also responsible for strengthening the palace defences by the insertion of wide-mouth gun-loops and perhaps narrowing the watergate in the north curtain wall. He was the last of the Roman Catholic Bishops of Moray and continued to live at Spynie even after the Reformation. There are

historical references to gardens, a tennis court and rabbit warrens at Spynie in the 16th century. After Spynie ceased to be the bishop's residence in the 17th century, it was stripped of much of its ironwork and wooden doors, joists and flooring, and it gradually became a romantic ruin. It was taken into state care in 1973 and opened to the public in 1994.

RÉSUMÉ • SYLVIE GRIGAS

Les restes des ruins du Palais de Spynie près de Elgin dans le Compté de Moray font partie de la demeure d'un évêque habitée entre le 12è et le 17è siècle et établit sur la rive sud de l'ancien Loch de Spynie (NGR NJ230658). Des fouilles effectuées entre 1986 et 1994 ont révélé l'existence de bâtiments en bois de période précédente datant du 12è siècle. Ces bâtiments étaient aussi entourés d'un fossé rectangulaire. Cette douve fut probablement contstruite par un des premiers vêques de Moray, qui semblait n'avoir aucun point d'attache mais qui se serait plutôt déplacé entre les manoirs de Birnie, Kinneddar et Spynie. A partir de 1172/4 l'église voisine de la Sainte Trinité (Holy Trinity) servait de cathédrale au diocèse et le manoir de Spynie serait alors devenu la résidence officielle de l'évêque ou l'évêché. Bien que la cathédrale fut déplacée à Elgin en 1224, Spynie demeura évêché jusqu'à la fin du 17à siècle.

Au 13è siècle les bâtiments en bois furent remplacés ou tout du moins agrémentés de pierre. L'un d'entre eux, structure 2, semblerait être une chapelle décorée de vitraux de type 'grisaille'. Bien après le 13è siècle les bâtiments en bois continuèrent à être remplacés par des bâtiments en pierre. Cependant il n'existe aucune preuve qu'une muraille d'enceinte fut érigée avant le 14è siècle, moment où le premier grand programme de reconstruction commenca.

Ce premier château en pierre à Spynie était presque carré, 49m x 44m, entouré d'une muraille de 7m de haut et avec une porte principale située au sud. Une grande tour rectangulaire s'élevait au SE alors qu'on trouvait une plus petite tour au NO. L'angle SO a pu être renforcé par une tour ronde. Un certain nombre de pièces habitables furent construites dans les ailes sud, ouest et NO du château. Puisque l'aile sud était de bonne qualité et bien orientée et que son premier étage était utilisé comme chapelle en Période 5, tout semble à croire que cette aile renfermait également la chapelle en Période 4. La grande salle de l'évêque se trouvait probablement dans l'aile ouest mais on s'interroge encore sur l'emplacement de l'appartement privé de l'évêque. Il se peut qu'il se trouvait à l'intérieur de la tour ronde qui aurait précéde la tour de David à l'angle SO.

Un autre programme de reconstruction important commenca à la fin du 15è siècle et continua pendant le 16è siècle, celui-ci a permis au palais d'être encore visible de nos jours. La porte principale fut déplacée à l'est de château, l'aile sud fut repensée, une gigantesque tour habitable (la Tour de David) fut construite à l'angle SO et l'ancienne grande salle de l'aile ouest fut convertie en cuisines pour servir la nouvelle tour. Une nouvelle aile nord fut contruite avec une grande salle au premier étage, au même étage que la cour. En 1470 on mentionne pour la première fois la nomination d'un administrateur, ce qui prouve que le palais remplissait deux fonctions. Il était centre administratif à la fois pour le diocèse et le domaine temporel.

Aux côtés des armoiries de l'Encosse au sud de la Tour de David se trouvent les armoires de l'Evêque Stewart (1462–1476), qui commenca probablement la construction de la tour, et celles de l'Evêque Hepburn (1538–1573), qui la refaçonna. Le document 1 en annexe contient la transcription d'un inventaire du contenu de la Tour de David effectué en 1607. Cet inventaire est essential et nous aide à identifier les différentes pièces de la tour ainsi que son mobilier et nous permet également d'interprêter les autres parties du palais. L'équivalent connu le plus proche de la tour de David dans un palais épiscopal écossais est la Grande Tour ajoutée au Château Episcopal de Glasgow entre 1426 et 1446. Spynic fut édifié dans un bourg de baronnie libre en 1451, mais le bourg qui portait ce grand nom ne fut probablement qu'une petite commune.

L'Evêque Hepburn fut à l'origine du renforcement des défenses du palais auquel il ajouta de larges meurtrières et peut-être fit-il construire des grilles d'égout plus petites dans la muraille nord. Il fut le dernier évêque catholique de Moray et continua à vivre à Spynie même après la Réforme. Historiquement, à Spynie au 16è siècle, on fait référence à des jardins, à un terrain de tennis et à des terriers. Lorsque le palais cessa d'être la demeure de l'évêque au 17è siècle, il fut dépouillé de la plupart de ses portes en fer et en bois, de ses solives et de ses sols pour finir en ruine romantique. Spynie fut pris en charge par l'état en 1973 et ouvert au public en 1994.

ZUSAMMENFASSUNG • STEPHANIE FERGUSON

Die erhaltenen Ruinen des Spynie Palasts in der Nähe von Elgin in Morayshire stellen eine Bischofsresidenz des 12. bis 17. Jahrhunderts dar, welche am Südufer des früheren Loch of Spynie (NGR NJ 230658) gegründet wurde. Ausgrabungen zwischen 1986 und 1994 enthüllten eine frühere Phase von hölzernen Gebäuden im 12. Jahrhundert, umschlossen von einem rechteckigen Graben. Diese ringförmige Befestigung wurde wahrscheinlich von einem der frühen Bischöfe von Moray gebaut. Diese hatten keinen festen Sitz, sondern hielten sich abwechselnd auf ihren Gütern zu Birnie, Kineddar und Spynie auf. Seit 1172/4 diente die nahe liegende Kirche der Heiligen Dreieinigkeit als Kathedrale der Diözese und das Spynie Herrenhaus wird die offizielle Bischofsresidenz oder Palast gewensen sein.

Obwohl die Kathedrale in 1224 nach Elgin verlegt wurde, blieb Spynie bis zum Ende des 17. Jahrhundert der Bischofspalast.

Im 13. Jahrhundert wurden die Holzbauten durch Steingebäude ersetzt oder zumindest verstärkt. Eines von diesen, Struktur 2, scheint eine Kapelle gewesen zu sein, mit verziertem Fensterglas der sogenannten grisaille Art. Die allmähliche Ersetzung von Holz- durch Steingebäude dauerte bis weit ins 13. Jahrhundert. Jedoch gibt es keinen Beweis für eine steinerne äußere Burgmauer von dem 14. Jahrhundert, als das erste große Ausbauprogramm anfing. Diese erste Steinburg zu Spynie war fast rechteckig, 49m mal 44m Fläche, mit einer 7m hohem Burgmauer und einem Haupttor in der Südwand. Ein solider rechteckiger Turm ragte aus der südöstlichen Ecke hervor und ein kleinerer Turm aus der nordwestlichen Ecke. Der südwestliche Winkel könnte durch einen Rundturm befestigt gewesen sein. Reihen von verschiedenen Behausungen lagen an den Süd-, West- und Nordwestseiten der Burg. Die Qualität und Orientation der Südreihe, verbunden mit der Tatsache, daß ihr erstes Geschoß als Kapelle in der Periode 5 genutzt wurde, läßt darauf schließen, daß sie auch in der Periode 4 die Kapelle enthielt. Der Bischofssaal lag wahrscheinlich in der Westreihe, jedoch bleibt die Frage, wo die bischöfliche Privatkammer lag. Es ist möglich, daß sie sich in dem Rundturm befand, der vielleicht dem David's Turm am südwestlichen Winkel vorausging.

Ein erneutes größeres Umbauprogramm begann im späten 15. Jahrhundert und dauerte bis ins frühe 16. Jahrhundert. Dies ergab den Palast, der heute noch sichtbar ist. Das Haupttor wurde zur Ostseite der Burg verlegt und die Südreihe umgemodelt. Ein massiver Wohnturm (David's Turm) wurde an der Südwestseite gebaut. Der alte Saal in der Westreihe wurde zur Küche für den neuen Wohnturm umfunktioniert. Eine neue Nordreihe wurde errichtet, mit einem grossen Saal im ersten Geschoß, ebenerdig mit dem Hof. Im Jahre 1470 wird erstmalsdie Ernennung eines Palast-Konstablers erwähnt. Dies macht die Doppelrolle des Palastes als Führungszentrum sowohl für die Diözese wie auch für das weltliche Gut deutlich.

Neben dem Wappen Schottlands an der Südfront des David's Turm findet man das Wappen von Bischof David Stewart (1462–76), der wahrscheinlich den Bau des Turms begann, und von Bischof Patrick Hepburn (1538–73), der ihn umbaute. Anhang 1 enthält die Abschrift einer Inventur der Inhalte des David's Turm aus dem Jahre 1607. Dies ist eine unschätzbare Hilfe zur Identifikation der verschiedenen Zimmer im Turm wie auch zur Interpretation anderer Trakte des Palastes. Das ähnlichste Gegenstück zu David's Turm in einem schottisch-bischöflichen Palast ist der *Great Tower*, der zwischen 1426 und 1446 zur Bischofsburg in Glasgow zugebaut wurde. Spynie wurde in Jahre 1451 zu einem Burgflecken mit Freiherrenstand ernannt, jedoch war die Ansiedlung, die diesen erhabenen Namen trug, wahrscheinlich nur eine kleine Ortschaft.

Bischof Patrick Hepburn war wahrscheinlich verantwortlich für die Verstärkung der Palastverteidigung durch das Einfügen von breiten Schießscharten und eventuell auch für die Verengung des Wassertors in der Nordburgmauer. Er war der letzte der römisch-katholischen Bischöfe von Moray und lebte selbst nach der Reformation weiterhin zu Spynie. Es gibt historische Erwähnungen von Gärten, einem Tennisplatz und Kaninchenbauten zu Spynie im 16. Jahrhundert. Nachdem es im 17. Jahrhundert aufhörte, als Bischofsresidenz zu dienen, wurde Spynie nach und nach ausgeplündert und vieler der Eisenarbeiten, hölzeren Türen, Trägern und Böden beraubt. Es wurde allmählich zu einer romantischen Ruine. Sie wurde in 1973 vom Staat übernommen und 1994 für die Öffentlichkeit geöffnet.

RESUMEN • MARY KEMP CLARKE

Los restos del Palacio de Spynie, en las cercanías de Elgin en el condado de Moray, representan una residencia obispal de los siglos XII al XVII, emplazada sobre la orilla sur del desaparecido lago de Spynie (NGR NJ 230658). Excavaciones realizadas entre 1986 y 1994 descubrieron restos de una fase anterior compuesta de edificios de madera del siglo XII, rodeado por un foso rectangular. Se piensa que este trabajo anular fue construido por uno de los primeros obispos de Moray, los cuales parecen no haber tenido una seda fija, trasladándose en cambio entre los asentamientos de Birnie, Kinneddar y Spynie. Ya en 1172/4 la cercana iglesia del 'Holy Trinity' (la Santa Trinidad) servía como la catedral de la diócesis, y la residencia de Spynie se habría convertido en domicilio oficial o palacio del obispo. A pesar de que luego en 1224 la catedral fuera trasladada a Elgin, Spynie continuó siendo el palacio obispal hasta fines del siglo XVII.

En el siglo XIII, los edificios de madera fueron reemplazados o ampliados con edificios de piedra. Uno de éstos, la Estructura No.2, parece haber sido una capilla con vitrales decorados en el estilo conocido como "grisaille". El paulatino cambio de edificios de madera a edificios de piedra continuó después del siglo XII, pero no hay evidencia de que existiera un muro contina antes de siglo XIV, cuando comenzó el primer gran programa de reconstrucción. Este primer castillo de piedra tenía una planta casi cuadrada, unos 49 metros x 44 metros en superficie, con un muro contina de 7 metros de alto, y con portilla principal en el lado sur del muro. De la esquina sudeste sobresalía una torre rectangular de buenas proporciones, y había una mas pequeña en la esquina noroeste. Tal vez hubo una torre redonda reforzando el ángulo sudoeste. Alas con estancias se construyeron dentro del castillo en el sur, oeste y noroeste. La calidad y la orientación de los apostentos ubicados en el lado sur, junto con el hecho de que en el Período 5 la primer planta se usó como capilla, sugieren que en el Período 4 también se utilizaran como capilla. Es probable que la sala del obispo se encontrara en el ala oeste, pero aun no sabemos dónde se encontraba su apostento privado. Es posible que se encontrara en la torre redonda que antedata la de David en el rincón sudoeste.

A fines del siglo XV comenzó una neuva etapa de reconstrucción que continuó en el siglo XVI, y resultó en el palacio que vemos hoy día. Se cambió la entrada principal al lado este del castillo, se remodeló el ala sur, se construyó una enorme torre residencial (la torre de David) en el rincón sudoeste, y la gran sala en el ala oeste se convirtió en cocina para

la nueva casa torre. Una neuva ala se construyó del lado norte con una gran sala en el primer piso, al mismo nivel que el patio interior. En 1470 por primera vez se nombra a un intendente para el palacio, reflejando así el doble propósito del palacio, como sede administrativa de la diócesis y como latifundio señorial.

En la fachada sur de la torre de David se encuentra el escudo de armas de Escocia junto con las del Obispo David Stewart (1462–76) quien inició la construcción de la torre, y las del Obispo Patrick Hepburn (1538–73) quien la remodeló. El Apéndice 1 contiene una transcripción del inventario del contenido de la torre de David recopilado en 1607, documento imprescindible para identificar el uso y amueblado de las varias habitaciones dentro de la torre, y para la interpretación de otras partes del palacio. El paralelo más cercano en una palacio episcopal para la torre de David es la gran torre que fue añadida al castillo obispal en Glasgow entre los años 1426 y 1446. En 1451 Spynie se elevó a 'burgo señorial', pero en realidad el lugar con tan gran título no era mas que un pequeño poblado.

Es probable que fuera el Obispo Patrick Hepburn el responsable de reforzar las defensas del palacio añadiendo troneras a boca abierta, y haciendo mas pequeña la puerta del agua en la parte norte del muro cortina. Fue el último de los obispos de la iglesia católica apostólica romana en Moray y continuó domiciliado en Spynie después de la Reforma. Hay testimonios históricos que indican jardines, cancha de tenis y madrigueras en Spynie en el siglo XVI. Cuando dejó de ser la residencia del obispo en el siglo XVII, desmantelaron gran parte del hierro y las puertas de madera, las vigas y los revestimientos para el suelo, convirtiéndola poco a poco en una ruina romántica. En 1973 su cuidado pasó a manos estatales y en 1994 lo abrieron al público.

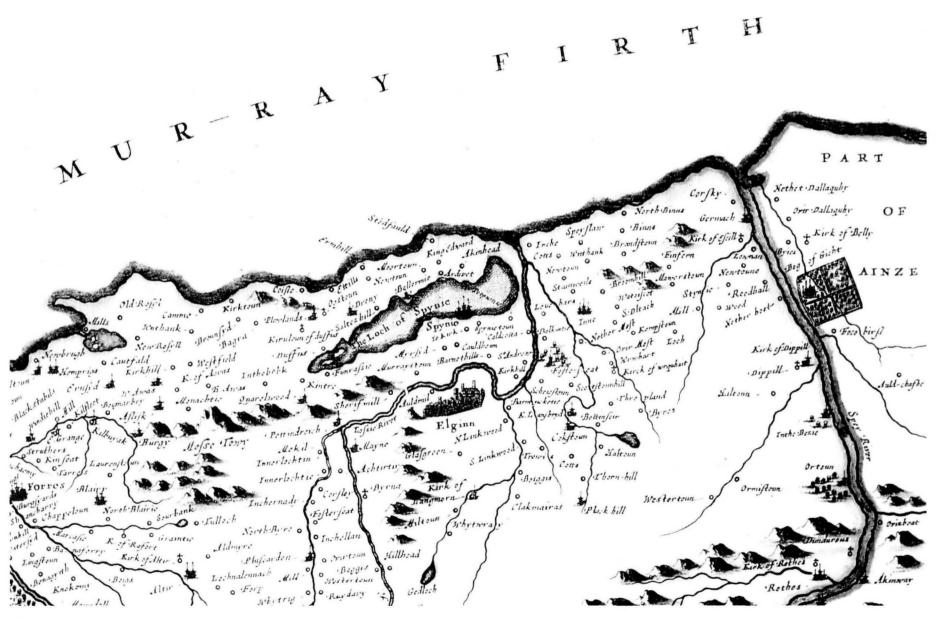
LIST OF ILLUSTRATIONS

Frontispiece: Spynie Palace from the air.

1	The area around the palace in the late 16th century.	xviii
2	The location of Spynie Palace.	13
3	A geological map of the area around Spynie.	14
4	The environs of the palace.	17
5	Plan of prehistoric features near Castle Cottage.	18
6	Spynie Palace, viewed from the south.	19
7	Plan of Spynie Palace, showing the areas excavated between 1986 and 1994.	20
8	Phase plan of Spynie Palace.	opp 20
9	Plan of the prehistoric features in the south-west corner of the courtyard.	21
10	The palace courtyard, viewed from the north-west during the 1993 season of excavation.	22
11	Plan showing Period 2 and 3 features.	24
12	Section across the Period 2 ditch.	25
13	Plan showing Period 3 Structures 1 and 2.	27
14	View, from west, of some of the Period 2 post-pits and the remains of the Period 3 buildings.	28
15	The south range early in the excavation.	30
16	Plan of the Period 4 south range.	31
17	The south range viewed from the south.	32
18	The inside face of the south wall of the south range.	32
19	The south wall of the south range.	33
20	View, from the east, of the south range during excavation.	35
21	The south-east tower viewed from the west.	36
22	Floor plans of the south-east tower.	37
23	The outside face of the west curtain wall in 1963.	38
24	Sectional elevation through the west range and north-west tower, and floor plans	
	of the north-west tower.	39
25	Elevation, section and plan of one of the partially blocked windows in the west curtain wall.	40
26	The north-east corner of David's tower, viewed from the east.	41
27	View, from the east, along the wall-head of the north curtain.	42
28	Plan of the Period 4 features in the east chamber of the north-west range.	44
29	Section across part of the east chamber of the north-west range.	45
30	The east chamber of the north-west range, showing Kiln 3 overlying the remains of Kiln 2.	46
31	Plan of Period 4 features in the west chambers of the north-west range.	47
32	View, from the north, of the west latrine tower.	48
33	The north-west tower, viewed from the south.	48
34	The excavated remains of the cobbled road which may have linked the palace with	
	the Holy Trinity Church.	50
35	David's tower viewed from the south.	52
36	David's tower viewed from the north-east.	52
37	Plans of the basement, ground floor, first floor and second floor of David's tower.	54
38	Plans of the third and fourth floors of David's tower.	55
39	Sectional elevation of the north side of David's tower.	56
40	Sectional elevation of the south side of David's tower.	56
41	Sectional elevation of the west side of David's tower.	57
	The action of the second control of the seco	50.00

42	Sectional elevation of the east side of David's tower.	58
43	Plan of the east side of David's tower at hall level.	6(
44	Plan of the west end of the south range.	61
45	View, from the south, of Structure 3 during the excavation.	64
46	Plan of Structure 3 and the cobbled path.	65
47	John Nattes' pen and wash drawing of 1799, showing the basement of Structure 3 with	
	its vaulted roof still intact.	66
48	Structure 4, from the north, showing the windows in the upper floors of the extant section	
	of its south wall.	67
49	Plan of Structure 4.	6
50	The north range, viewed from the west, prior to excavation.	69
51	The north range, viewed from the west, following reinstatement of the basement floor level.	69
52	The retaining wall against the north end of the courtyard.	70
53	Section through the levelling deposits on the north side of the north range.	71
54	View, from the west, of the east section of the wall-head of the north curtain.	71
5.5	Plan of the wall-head of the north curtain.	72
56	Plan of the east end of the north range basement.	7.3
57	Sectional elevation of the east gable of the north range and courtyard-level plan of the	_
-0	withdrawing room.	74
58	Section across the upper part of the well.	7.5
59	View of the top of the well.	75
60	The retaining wall at the north end of the courtyard, showing the mural drain.	76
61	The west wall of the north range, viewed from the north.	78 79
62	The valued chamber linking the north and east ranges.	80
63 64	The watergate passage partially cleared of rubble.	81
65	The watergate passage fully excavated. Elevations of the east and west walls of the watergate passage.	82
66	Elevation of the outside face of the watergate.	83
67	The east chamber of the north-west range early in the excavation.	83
68	View, from the north, of the east chamber of the north-west range.	84
69	Plan of the east chamber of the north-west range, the watergate passage and the west wall	
0,7	of the north range.	85
70	Plan of the Period 5 features outside the north curtain wall.	86
71	The east gate viewed from within the courtyard.	8
72	The Period 5 east gate: east elevation, arch construction, profile of gateway buttress and	
	plans at upper and ground levels.	88
73	View, from the east, of the Period 5 east gate with cobbled road in the foreground.	89
	West elevation of the east gate and profile through it.	89
7.5	The east range, viewed from the south.	9(
76	Elevation of part of the external face of the east curtain wall.	9:
77	The Period 4 cobbled road exposed in the field to the south of the palace.	92
78	Plan of the west and central chambers of the north-west range in Period 5A.	9-
79	The east latrine tower and its waste channel, viewed from the north-east.	95
80	Plan, showing structures and features on the platform outside the east curtain.	96
81	The south-west corner of the palace, showing the Period 6 defensive walls near David's tower.	9
82	Plan of the Period 6 features outside the south-west corner of the palace enclosure.	98
83	Plan, showing the location of Period 7 features at the lochside, and a plan of the	
	grain-drying kiln.	100
84	Plan of the 'Bishop's well'.	10
85	Jetons.	108
86	Jetons.	109
87	Jetons and coin fragment.	111
88	Copper-alloy objects.	115
89	Copper-alloy and lead objects.	118
90 91	Composite objects. Iron objects.	120 122
91	Iron and stone objects.	123
14	non and stone objects.	12.

	LIST	OF ILLUSTRATIONS • xvii
93	Pottery, Fabric 1.	129
94	Pottery, Fabrics 2, 3, 4, 10 and 12.	130
95	Painted window glass.	135
96	Vessel glass.	139
97	Clay tobacco pipes.	142
98	Clay tobacco pipes.	143
99	Leather.	145
100	Architectural fragments.	152
101	Architectural fragments.	153
102	Architectural fragments.	154
103	Architectural fragments.	156
104	Architectural fragments.	157
105	Map of Spynie Loch with the locations of prehistoric sites.	167
106	The inside face of the west curtain wall in 1963, prior to masonry consolidati	ion. 170
107	An engraving of Spynie Palace in the late 18th century.	172
108	Drawing of Spynie Palace in the mid-19th century.	177
109	An illustration of Spynie Palace at the turn of the 19th century, showing fisher	ermen's
	cottages at the edge of the loch.	180
110	First page of 1607 inventory describing the contents of the house of Spynie.	185



illus 1 The area around the palace in the late 16th-century, showing the extent of Spynic Loch (from Blaeu's Atlas of 1654).

HISTORICAL INTRODUCTION

1.1 THE BISHOPRIC OF MORAY (1120-1224)

The origins of the bishopric of Moray are obscure. In the 1120s a bishop of Moray called Gregory (Gregorius) appears as a witness to various royal charters. His name, a Latinized form of the native Giric or Grig, suggests that he may have been the latest in a line of bishops appointed by the Celtomagnates of the region, known as 'mormaers'. Under David I, the power of these local rulers was reduced as the king gradually incorporated Moray into the secular ecclesiastical organization of his kingdom. As part of this process, burghs were established at Elgin, Forres and Inverness and, by the end of the century, Elgin was the seat of a sheriff. At the same time, major landed fiefs were granted to Anglo-Norman and Flemish immigrants upon whose loyalty the king could rely. One such was Hugh de Freskyn, the builder of Duffus Castle, from whom the family of Moray (de Moravia) was descended. Uniformity in ecclesiastical administration was also achieved and the existing Celtic church of the region was gradually accommodated into the diocesan structure of the Roman Church. Not only were alien religious houses introduced, such as the Benedictines at Urquhart around 1136 and the Cistercians at Kinloss in 1150/1, but by 1152 even the bishop, William, had a Norman name (Donaldson 1974, 1). In 1159, he attended the papal court of Alexander III at Anagni, south of Rome, returning to Scotland as papal legate the following year (Bower, IV, 265).

At first it seems that the bishops of Moray had no fixed residence or cathedral church but moved as best suited them between the churches of Birnie, Kinneddar and Spynie (RM, 40-43; cf RRS I, 19-20)). Between March 1207 and June 1208, however, with the authorization of Pope Innocent III, Bishop Brice of Douglas established the church of the Holy Trinity at Spynie as his cathedral church (Donaldson 1974, 2; Simpson 1927, 1). Although papal authorization had only been obtained in April 1206, it may be that this represented in effect no more than

a confirmation of an existing state of affairs for, between 1172 and 1174, King William I the Lion had granted of teinds (tithes) of his revenues and pleas throughout the diocese 'to the church of the Holy Trinity of the bishopric of Moray and to Lord Simon (of Tosny), Bishop of Moray', a grant that was confirmed to Bishop Simon's successor, Bishop Richard of Lincoln, around 1187 and again in 1199 (RRS II, 212, 301-2, 400; RM, 4, 7, 13). Bishop Simon (1171–84) also made an agreement with Freskyn, the lord of Duffus Castle, concerning the woods and moss of Spynie and Findrassie (RM, 113-4, cf 132).

The mandate of Innocent III that authorized the erection of the church of Spynie into a cathedral explains that it was chosen, on the advice of the whole chapter and 'other wise laymen' (aliorumque virorum prudentium), on the one hand because it was conveniently located to administer the diocese and on the other because it was not easily accessible to the miscreants who persecuted the Church in those parts (RM, 39-40). At this time, Spynie lay on the edge of a large loch that was open to the sea. For those settled in and around Elgin it was certainly less exposed than Birnie and more convenient than Kinneddar.

A chapter of eight canons, including a dean, a chanter or precentor, a treasurer, a chancellor and an archdeacon served the cathedral at Spynie. Its constitution was based on that of Lincoln cathedral (RM, 40-44, cf 15-16, 48-58). Bishop Brice also granted the chapter the church of Deveth with all its appurtenances for the upkeep of the church fabric at Spynie (RM, 61).

The cathedral did not remain long at Spynie for, on 19 July 1224, with the support of King Alexander II and the permission of Pope Honorius III, Bishop Andrew of Moray transferred his scat to the church of the Holy Trinity of Elgin where he and his chapter could rely on the protection afforded by the king's castle and where there was a burgh market to supply their material needs (RM, 19, 63-65; Donaldson 1974, 2; Fawcett 1991, 34). The endowment for the church fabric was similarly transferred (RM, 65-6).

The church at Spynie, however, continued to function as a parish church until the construction of New Spynie church in 1736–40 (McKean 1987, 105). Until the Reformation, it was also a prebend of one of the canons of Elgin Cathedral.

1.2 THE BISHOP'S RESIDENCE AT SPYNIE (1224–1460)

Despite the removal of the cathedral to Elgin in 1224, the Bishop of Moray continued to maintain his principal residence at Spynie. Although there is no specific documentary reference to the building and no part of the surviving masonry appears to be of so early a date, it seems very possible that, like the nearby castle of Duffus, the earliest buildings would have been largely of timber. Its layout can only be surmised but may be assumed to have included a hall and chamber associated with service buildings, a kitchen, bakehouse, brewhouse, granary and stables.

The first explicit reference to the bishop's residence at Spynic is made in a 'Short Description of the Kingdom of Scotland', compiled around the time of Edward I's expedition into Scotland in 1296 or some time afterwards. This describes the region of Moray as extending for 24 leagues in width and 30 in length and containing the castle of Elgin and the castle of Spynic (*castrum de Spyny*), representing respectively the seats of the civil and ecclesiastical authorities (*Brevis Descriptio*, 34; Simpson 1927, 2-3).

In the 14th century, documentary sources are more informative. Bishop John of Pilmuir issued a writ at Spynie on 12 April 1343 in favour of the Maison Dieu in Elgin (RM, 126-7). King David II was the bishop's guest there on 5 January 1362 (RMS, I, 30, 35); and the same bishop died 'in the eastle of Spynie' (in castro de Spyny) on 28 September 1362 (RM, 360). During the ensuing vacancy, the king was again at Spynie on 28 November (RMS, I, 34); and on 13 February 1368, there is recorded a payment of teinds by an officer of the king's chamber there (RM, 166).

In 1368, the bishop's chamber at Spynie is mentioned, when Alexander of Chisolm paid homage in it to Bishop Alexander Bur 'in the presence of the whole multitude of canons, chaplains and others invited there to lunch' on Trinity Sunday (RM, 369; Simpson 1927, 3). Robert II was at Spynie on 7 October 1371, when he initiated an enquiry as to whether the Crown or the bishop should exercise patronage of the Maison Dieu in Elgin (RM, 127; Simpson 1927, 4). And on 6 February 1383, Bishop Alexander Bur, writing from 'our castle of Spynie

(castrum nostrum de Spyni) in Moray', provided a bursary to enable William Chalmers to pursue his studies at the Scots College in Paris (RM, 322-3; Simpson 1927, 3).

From August 1370, the Bishop of Moray had been paying Robert II's son, Alexander Stewart, Earl of Buchan, what amounted to 'protection money' for the defence of his lands and men (RM, 171); but when, in February 1390, the bishop turned instead for protection to Thomas Dunbar, son of the Earl of Moray and sheriff of Inverness (RM, 201), Buchan - known to history as the Wolf of Badenoch unleashed on Elgin a band of 'wyld wykkyd Helandmen' who, on 17 June, burnt the town, the cathedral and the eighteen manses of the canons (Wyntoun III, 55; Bower VII, 446; cf Bower IX, 137; Grant 1993, 143; Nicholson 1974, 204-5). It is not known whether the 'Wolf' visited Spynie during this campaign. On 19 August, Robert III sent letters patent to Bishop Alexander from Scone, ordering the earls of Buchan and Moray, 'not to interfere in any part with the castle of Spynie by further pretext' (ne se intromittant de castro de Spyny quovis colore amplius) and releasing the bishop from any obligation due to Thomas Dunbar for the failed protection of his lands and possessions (RM, 204; cf Simpson 1927, 5). Whether Spynie had actually suffered damage at this time is unrecorded, though it is clear from the king's letter that both earls were keen to extend their 'protection' to it also.

When Bishop Alexander died 'in the castle of Spyny' on 15 May 1397 (RM, 360), the palace and temporalities of the see again passed to the Crown during the following vacancy. It seems that Robert III chose none other than the Wolf of Badenoch himself as keeper, for later, on 3 May 1398, he wrote to the earl directing him to hand over all the possessions of the bishopric to the new bishop, William of Spynie, including the castle of Spynie and its appurtenances, and not to claim any expenses for his custody of it (RM, 208; Simpson 1927, 5).

Both James I (1406–37) and James II (1437–60) made use of the bishop's hospitality at Spynie when travelling in the north. Between April 1428 and

March 1429, for example, the royal clerk, John of Winchester, made a payment of £36 14s 4d to the custumars of Aberdeen for 10 chalders of salt for the king's larder at Inverness, Darnaway and Spynie plus £8 for carriage (ER IV, 509; Simpson 1927, 18). The same clerk succeeded Columba of Dunbar as Bishop of Moray on the latter's death at Spynie in 1435 (RM, 360).

James II was visiting Bishop John at Spynie on 9 February 1456 when a barrel of salted salmon from the River Spey was delivered there and charged to the king's household account (ER VI, 380; Fraser 1885a, I, 128; II, 228; Simpson 1927, 18). The account rendered by the king's chamberlain 'beyond the Spey' for the period July 1457 to June 1458 also records deliveries of corn, malt and flour for the king's use at Inverness, Spynie and Elgin (ER VI, 476-7). The king was expected again at Spynie just after Christmas 1458, for the Exchequer account for 1459 records that payments had been made to John the Lardenar for provisioning the king in Inverness,

Elgin and Spynie for the space of two weeks and

for mending the barrels and butts for filling with ale in Inverness, Elgin, and Spynie . . . and also for the fees of the brewers, and for the fuel for brewing, and for bringing water to the maltings . . . and divers other small expenses that are called 'on-costs' (oncostez).

Whoever drank the beer is not recorded for, as it turned out, the king never came (ER VI, 519-20; 527; Simpson 1927, 18-19).

Bishop John of Winchester died on 20 April 1460 and was laid to rest in a fine tomb in the south choir aisle of Elgin Cathedral (Mackintosh & Richardson 1980, 22; Fawcett 2001, 70-71, figs 140-142). During the vacancy, the temporalities, which in 1451–2 had been erected into a barony and free regality (RM, 223-6), were again administered by the Crown (ER VI, 649, 661, 662; VII, 16, 19).

1.3 THE 15TH-CENTURY REBUILDING OF THE PALACE

While other 15th-century bishops are remembered for the part that they played in rebuilding the cathedral of Elgin, burnt in 1390 (Fawcett 2001, 6), the enduring monument to Bishop David Stewart (1462-76), apart from his tomb in Elgin Cathedral (Fawcett 2001, 74, fig 149), is 'the great tower of Spynie Castle, a mighty strong house', Archbishop Spottiswood of St Andrews described it in the later 17th century; already by then it was known as 'David's tower'. A later tradition maintains that it was built in response to threats from the Earl of Huntly, whom Stewart had excommunicated for non-payment of taxes (Rhind 1839, 110; Shaw 1882, III, 299), although the building's purpose seems to have been more domestic than defensive. The building of this tower, completed by Bishop William Tulloch (1477–82), whose arms appear just below the parapet on the south face (Simpson 1927, 10), marked a significant stage in the reorganization of the medieval castle.

Although the precise dating of the sequence of building works is uncertain, by the early years of the 16th century the palace appears to have achieved more or less the form in which it has come down to us. The new south-west tower, containing the bishop's private residence, would have been served by a new kitchen in the first floor of the west range, the position of an earlier hall. This hall was in turn replaced by a large, new 'laich' hall in the north

range. In the south range, the external windows of the first-floor chapel were narrowed and the main gate was blocked up and replaced by a new, more defensible gate on the east. It is possible that the latter dates from the time of Bishop John of Winchester (1435–60) if the arms set over it are indeed his, but this remains uncertain (Simpson 1927, 13-15).

Unfortunately, little evidence survives to show how the various parts of the palace were used. Although the palace would doubtless have had a chapel from the time of its foundation, one is first specifically mentioned only as late as 26 September 1464 when a deed of Alexander, Earl of Mar, was formally copied in it in the presence of the bishop and others (Innes 1859, 15). On 19 April 1524 Alexander Sutherland, rector of Duffus, was appointed castle chaplain (RM, 401).

Part of the residential accommodation inside the castle-palace, possibly that in the east range adjacent to the main gate, was also evidently occupied by a keeper or constable. On 27 August 1470, Bishop David Stewart appointed his relative, James Stewart, to the office of constable of the palace of Spynie (palatii de Spineto constabularium), together with the lands of Little Inverlochy and its mill, sufficient victuals for himself and two servants, and straw and oats for three horses. This act received royal

confirmation on 22 February 1472 (RMS II, 218), and James Stewart was still holding the office in August 1477 (Innes 1859, 62).

As in former times, the palace was also used by the king when travelling in the area. James IV (1488–1513) was there on 22 November 1493 (RMS II, 461) and again on 12 October 1505 while making a pilgrimage to the shrine of St Duthac in Tain (RMS II, 613; cf ALTHS III, xxii-xxiii). On the latter occasion, the Treasurer's account records 14s being paid 'to the madinnis that sang to the King at Spinie' (ALTHS III, 166). On his return journey, James reached Spynie on 22 October; and the same account records 42s being paid 'to the King to play at the cartis in Spynee' (ALTHS III, 167) – evidently he lost!

Following the death of Bishop Robert Shaw in 1527 (Watt 1969, 217), the Treasurer, Archibald Douglas, who was entrusted by the Crown with the temporalities of the bishopric and the custody of Spynie Castle, complained to the Lords of Council on 26 November that the Earl of Moray had taken the castle and refused to hand it over to him (ALC, 271). Alexander Douglas was subsequently nominated to the see. Like the Treasurer, he was a kinsman of the Earl of Angus, who at that time was custodian of the young King James V (Donaldson 1978, 39-40). By the end of 1528, however, the Douglases had fallen from power and the following year Alexander Stewart was nominated in his place, though he does not seem to have been consecrated until a little before April 1532 (Watt 1969, 217).

1.4 BISHOP PATRICK HEPBURN (1538–73)

Bishop Patrick Hepburn was granted the temporalities of the see of Moray, including the palace of Spynie, on 24 November 1538 (RSS II, no 2772; Watt 1969, 217). He was to be the last Roman Catholic incumbent before the Reformation changed forever the system of church government in Scotland. His episcopate extended through the troubled reign of Queen Mary (1542–67) and the first six years of that of her son, James VI (1567–1625).

Following her return from France in August 1561 to assume personal rule in Scotland, Queen Mary undertook a series of journeys through her kingdom. On 9 September 1562 she arrived in Inverness, intending to lodge in her castle there. The captain, however, refused her entry without the express command of the hereditary keeper, George Gordon, fourth Earl of Huntly (CSP I, 651). Apart from his general concern at the concessions that Mary had made to the church reformers since her return, Huntly's motives appear to have been twofold: first, he had recently learnt that the earldom of Moray, which he was administering, was to be granted to Lord James Stewart, an illegitimate son of James V; secondly, he had designs to marry the queen to his third son, Sir John Gordon (Donaldson 1978, 111-12).

On 10 September, Mary summoned the country to her assistance and ordered the Gordons to surrender Inverness Castle which, as the English ambassador, Thomas Randolf, related to Lord Cecil, 'theie dyd, not beinge above xij or xiiij hable persons'. The captain was hanged and his head set up on the wall (CSP I, 651). After remaining in Inverness for five

days, Mary started homeward. On the 17th, as Randolph relates, she reached Spynie, 'a house of the Bishop of Moray's, well served by her nobles, obeyed of her subjects, and convoyed by great numbers of horse and foot' (CSP I, 651; cf ALHTS XI, 200; Simpson 1927, 19). Leaving on the 19th, she proceeded to Cullen, Boyne, and finally Aberdeen (Furgol 1987, fiche 1, C6). Although he had assembled his forces at Strathbogie (Huntly Castle), Huntly did not attempt to attack Mary until she reached Aberdeen. At the battle of Corrichie, on 28 October 1562, the Gordons were defeated. The fourth earl died after capture and was forfeited posthumously; the would-be king, Sir John Gordon, was summarily executed (Donaldson 1978, 112).

Mary was subsequently married, in July 1565, to Henry Stewart, Lord Darnley and then, within three months of Darnley's murder in February 1567, to James Hepburn, fourth Earl of Bothwell. This, her third marriage, was effectively sundered on 15 June when, at Carberry field, Bothwell escaped from the confederacy of nobles who had opposed the marriage, while Mary was led away into captivity and forced abdication at Lochleven Castle (Donaldson 1978, 116-31). Bothwell fled north and on 16 July was recorded by English sources as having been lately with George Gordon, fifth Earl of Huntly, at Huntly Castle, attempting to raise a force. But, though Huntly had been with Mary and Bothwell at Carberry, he now gave the latter little support. Bothwell therefore quickly stole away by night to the house of his kinsman, the Bishop of Moray, at Spynic which he knew from his youth (CSP II, 354; Simpson 1927, 19). The bishop's treasonable behaviour was noted by the Privy Council who, on 21 July 1567, commanded his feuars to suspend their payment of rents (RPC I, 531).

Among the inhabitants of Spynie Palace at this time was an English agent, Christopher Rokesbye (or Rokeby) who, in July 1566, had been involved in a plot to trick Queen Mary into an alliance with English Catholics. He had been apprehended and imprisoned, first in the Bishop of Moray's house in the Cowgate, Edinburgh and then at Spynie (CSP II, 197). Word reaching Lord Throckmorton from Rokesbye and relayed to Queen Elizabeth I on 31 July 1567 suggested that all was not well in the bishop's household after Bothwell's arrival there. Rokesbye reported that a plot to kill him was hatched, supported secretly by the Earl of Huntly and involving Archibald Lindsay, captain chamberlain) of the castle, James Lindsay, one of the bishop's servants, a Hepburn laird of Ricarton and three of the bishop's sons. Throckmorton declined either to support the conspiracy or to encourage an alternative plan to abduct Bothwell to England, which would have had little chance of success, seeing that Bothwell was protected by twelve to fourteen 'desperate persons'. Bothwell, however, took preemptive action by killing one of the bishop's sons, putting all his servants out of the palace and entrusting the guard to his own men (CSP II, 369-70). By the end of the year, he had fled northward again to his earldom of Orkney, pursued by Bishop Adam Bothwell and 400 men, and thence to Shetland and final exile in Denmark (Donaldson 1978, 157-8).

James, Earl of Moray, was proclaimed regent for the infant King James VI on 22 August 1567 (Donaldson 1978, 131). On 10 April 1568, Bishop Patrick demitted to him in feuferm the toun and lands of Spynie, as well as the ruined palace of Kinneddar with its harbour, called Stodfald (or Stotfald), while reserving to himself the harbour and fishery of Ernehill whenever he should be in residence in the palace. Sasine for all this was to be held in the 'castle and fortalice of Spynie' (RMS IV, 481-3; cf RPC, ser 2, VIII, 255). At the same time, the bishop appointed Moray, and his heirs, bailiff and justiciar of the regality and lordship of Spynie and hereditary captain and keeper of 'the castle, tower, palace and fortalice of Spynie'. The feu of these offices was to be:

the loch and wood of Spynie, with the rabbit warren, gardens, orchards, little gardens and greens, lying about and near the said castle, with £200 from the rents of the said lands ...

reserving to the said bishop the use of the place, loch, doocot, rabbit warren, orchards, gardens, herbaria and lie garding, woods or lie park and lie Laverok-mos, during his residence there. (RMS IV, 489; cf RPC, ser 2, VIII, 255)

The bishop's garden (hort/us/ seu viridari/um/ Episcopi de Spyne) was mentioned on 6 February 1556 as the place where Bishop Patrick received the obedience of his cathedral's succentor (or subcantor), Alexander Dunbar (RM, 429). A rental of the bishopric dating from 1565 describes the annual rent of the bishop's garden or orchard as '£4 ferm, with certain winter fruits for the provisioning of the lord', and mentions by name the gardener, John Rynd (RM, 435).

During the last six years of his life, it appears from charter evidence that Bishop Patrick spent much of his time at Spynie (eg RM, 397-401, 403, 406-7, 409, 412-14; RMS IV, 661-2; RMS V, 365-6). He also appears to have remodelled the south-west tower, enlarging its windows and placing his own arms beside those of Bishop David Stewart (1462–76) below the royal arms on the south face (Simpson 1927, 10). Archibald Lindsay, the rector of Kingussie, was still acting as chamberlain of Spynie in 1569 (RM, 403).

On 17 December 1572, still vacillating in his political allegiance, Bishop Patrick sought an accommodation with the party supporting the captive Queen Mary by renting the lands of Kinneddar and the toun and lands of Spynie to George, fifth Earl of Huntly, for an annual rent (RMS V, 365-6). When Huntly and the Hamiltons were eventually forced to submit to the king's party, led by James Douglas, fourth Earl of Morton, it was therefore decreed by the Privy Council on 23 February 1573 that the house of Spynie was to be delivered to the king on 15 days' notice (RSS II, 195; CSP IV, 495; Simpson 1927, 20-21). However, the Earl of Huntly was still in residence on 23 March 1573 (CSP IV, 524), and it is uncertain when he eventually vacated the palace. It appears from a complaint subsequently made to the Privy Council (17 March 1574) that during the time of the troubles John, master of Forbes, had been detained prisoner in the castle of Spynie by the Earl of Huntly and his kinsman, Adam Gordon of Auchindoun, and upon being set free had been charged £705 for the expense of his imprisonment (RSS II, 338; Simpson 1927, 21). Bishop Patrick Hepburn is said to have died in Spynie Castle on 20 June 1573 (Watt 1969, 217).

1.5 THE PROTESTANT BISHOPS (1573–1689)

George Douglas was elected Bishop of Moray in December 1573. He received the temporalities of the see on 23 March 1574 (RSS VI, no 2407; Watt 1969, 217), and is mentioned as being at Spynie together with the archdeacon of Moray, Gavin Dunbar, on 18 November (RMS IV, 731). Although Douglas may be regarded as the first non-Roman Catholic Bishop of Moray, it was to be another century before the Church of Scotland finally adopted the presbyterian form of organization which still functions today. During that time, bishops came and went as different forms of church government were tried and rejected, depending as often as not on whichever way the political wind was blowing.

During the adolescence of the young King James VI official religious policy was largely dictated by the particular leanings of whatever faction had control of the king's person. In June 1583, however, James freed himself from the ultra-protestant group led by the Earl of Gowrie, which had kidnapped him the previous August, and began to pursue a more independent line (Donaldson 1978, 180). Among those who returned to royal favour were nobles of more conservative 'Catholic' persuasion, including George, sixth Earl of Huntly. In September 1583 the Bishop of Moray was required to hand over the castle of Spynie to Huntly (CSP VI, no 627), and in December 1586 the king confirmed the grant of the toun and lands of Spynie that Bishop Patrick Hepburn had made to the fifth earl in 1572 (RMS V, 365-6). The bishop is recorded in residence on 15 January 1584 (RM, 409). Huntly, for his part, used the castle in 1586-7 as a place of imprisonment for Robert Leslie of Kinimvie, a tenant of John, Earl of Atholl (RPC XIV, 366; Simpson 1927, 22).

On 29 July 1587, the temporalities of the see were annexed by the Crown under the terms of the Act of Annexation (RMS V, 591-2). However, Bishop George appears to have continued to reside at Spynie (RMS VI, 656). James VI stayed there on 12-13 and 25 July 1589, while on his way to and from a hunting expedition at Cromarty (CSP X, 117), but as whose guest is not recorded. On Bishop George Douglas's death on 28 December 1589, however, the Earl of Huntly took possession of the palace (Watt 1969, 217; Maclean 1974, 8). His occupancy was immediately challenged by James Stewart of Doune, Earl of Moray, who laid claim to the temporalities of the see on the basis of the grant made to the late Regent Moray, his father-in-law, by Bishop Patrick Hepburn in 1568 (CSP X, 277; cf 279). The king resolved the dispute, on 6 May 1590, by incorporating all the temporalities of the see into a free barony of Spynie, which he conferred on his favourite, Alexander Lindsay, son of the tenth Earl of Crawford (RMS V, 591-2, 781-2; CSP X, 298; RPC IV, xxviii; Simpson 1927, 23). However, although the new barony included Spynie Castle, Huntly still refused to give it up; and when Lindsay tried to take it by force, he was captured and was only released after agreeing that Huntly would continue as hereditary constable (CSP X, 411, 716). The feud between Moray and Huntly took longer to settle. In February 1591, while Huntly was reportedly intending to move to Spynie and plant his forces in Elgin, Huntly was said to be preparing to lie at Forres (CSP X, 469). A year later, however, in February 1592, Huntly led a raid on the house of Donibristle which resulted in Moray's murder and his own, albeit brief, imprisonment (Donaldson 1978, 189).

Despite James VI's initial even-handedness towards the Roman Catholic party, in particular towards the northern earls, Huntly and Errol, public opinion and political circumstances eventually forced him to take action against them and to make concessions to the protestants. The power of the bishops had already been weakened by the Act of Annexation (1587) which had deprived them of their lands, and since the end of 1589 the see of Moray had been vacant. In May 1592, the presbyterian form of church government was authorized by parliament and, in late 1594, the northern Catholic earls, Huntly and Errol, were excommunicated by the church's general assembly. In October the king moved against them. By the end of November he had taken and fortified Spynie Palace (CSP XI, 466, 479), and in March 1595 Huntly and Errol agreed to go abroad (Donaldson 1978, 193). In December 1595, Spynie is mentioned as one of the places on the coast that had been fortified against the Spaniards (CSP XII, 76).

On 17 April 1593, James VI had confirmed the act of 1590 by which he had granted the barony and regality of Spynie, together with the palace, to Alexander Lindsay, Lord Spynie. On 18 December 1599, Lord Spynie appointed John Innes of Leuchars for life, and following him his son, Alexander and his heirs, to the office of bailie of the barony and regality of Spynie,

and also the office of constable of the castle of Spynie, of the gardens and everything within the precincts of the said place for its better custody for the use and habitation of the said lord (RMS VI, 330; cf RM, 427).

The castle of Spynie with its adjacent enclosed orchard and wood is shown pictorially in this period on Timothy Pont's map (Stone 1989, 203). The role of the palace in the exercise of local justice is also illustrated by the trial of John Duncan, a common thief, on 20 January 1595, as recorded in the *Register of the Regality Court of Spynie*. This unfortunate had been apprehended and imprisoned by Lord Spynie's chamberlain; but, while awaiting trial, he had tried to escape 'ower the vall of Spyne vpoun ane cord', was caught, 'convict and ordainit to be hangit to the deid' (Stewart 1852, 127-8; Simpson 1927, 24).

That the reform of the church also impinged on local parish affairs is illustrated by an incident which took place on 21 February 1598 when George Innes, brother of Alexander Innes, minister of Birnie, assaulted the parson of Spynie, Mr Alexander Rawson, and pursued him through Elgin with a drawn sword, making him afraid to return to his own church (RPC V, 445-6; cf VI, 618, 629, 630). The Elgin Kirk Sessions also record that on 23 May 1603 certain persons were observed 'all playand in the Castell of Spynie the tyme of the sermone befoir none and playand thair at the ally bowallis under the said Castell of Spynie' (Cramond 1903, II, 111).

Having dealt with the errant northern earls, James VI was free to turn his attention to bringing the presbyterians under control. Although bishops had been excluded from church administration since 1592, episcopacy had not been formally abolished. By restoring the powers of the bishops, the king hoped to be able not only to exert more influence on the national church but also to respond to the assembly's petition in 1597 that the church be represented in parliament. In 1600, titular 'bishops', with the ecclesiastical status of minister but the right to sit in parliament, were therefore appointed to the sees of Aberdeen, Ross and Caithness (Donaldson 1978, 200-202); and on 30 November 1602 Alexander Douglas, the chief minister in Elgin, was appointed in similar fashion to the see of Moray (Watt 1969, 217).

The temporal possessions of the bishoprics, withdrawn by the Act of Annexation in 1587, were also restored in July 1606 (RM, 425; Donaldson 1978, 205; Simpson 1927, 24-5). In fact Lord Spynie had already surrendered the temporalities of the see of Moray, including Spynie Palace, to the Crown in December 1605 (Watt 1969, 217; cf Maclean 1974, 7). What remained of his barony of Spynie, including the advowsons of various churches

(among them Spynie) (RMS VI, 620) that had belonged to prebends of Elgin Cathedral, was subsequently amalgamated with the lands and toun of Ballysak in the county of Forfar which, in July 1621, was renamed the 'manorplace and fortalice of Spynie' (RMS VIII, 65, cf 413).

Bishop Alexander took possession of the former bishop's palace of Spynie some time before 18 February 1607, when an inventory was made of its contents (NAS: GD 188/2/9/1; see Appendix 1, no 1). In 1609, he also confirmed the grant of lands in Kinneddar that his predecessor, Patrick Hepburn, had made to the Earl of Moray and his heirs, repeating the same reservation of rights regarding fishing and the use of the harbour while he was in residence at Spynie (RMS VII, 775-6). The final step in James VI's episcopal policy was taken in October 1610 when the ecclesiastical office of bishop was also revived (Donaldson 1978, 215-6). Douglas was formally consecrated bishop in Edinburgh on 15 March 1611 (Watt 1969, 217).

The inventory of the palace's contents made for Bishop Alexander Douglas on 18 February 1607 gives an idea of the uses of the various rooms at the time of the restoration of episcopacy in 1606. As would be expected, the palace was but sparsely furnished at this time and the inventory concentrates more on the condition of the fixtures than on moveable furnishings. Starting from the north, in the 'auld laiche hall' and its chamber, it proceeds to the associated pantry, cellar, kitchen, brewhouse, bakehouse and basement well-house. The north-west tower, known as the Water Tower, contained the 'house of the parson' (of Spynie, presumably). In the west range, the inventory describes a new kitchen situated above a chamber and a wine cellar. Next came the salt house and wine cellar under David's tower, followed by a detailed description of the rooms on its upper floors. In the south range, the chapel contained a pulpit, a small desk, an 'oratour' and (as now) a fixed piscina whose doors were lacking a lock. On the ground floor of this range were a mart house (or cattle byre), work house and stable, while the south-east tower contained chambers, including that of John Douglas. In the east range were various other chambers and offices, including a dovecot, a hay loft and a gunnell (granary). The inventory also lists some outer buildings which no longer survive (see Appendix 1, no 1).

On 18-19 October 1619, Bishop Alexander Douglas granted to his wife, Mary Innes, and his son, Alexander Douglas, the toun and lands of Spynie, the brewhouse and its croft, and that part of the wood of Spynie 'betwixt the Windlands and the

marches pairted thorough the wood of Spynie foresaid, upon the north syde of the grein gate, passing the quarrie hollis [quarry holes] at the west to the end of the person's glebe, that toucheth the park dyke at the east,' with privileges of turf and divot from the bishop's moss (RMS XI, 103).

Alexander Douglas died in May 1623 and was succeeded as bishop by John Guthrie (Watt 1969, 217-18). On 20th November Alexander Innes, son of John Innes of Leuchars (see above), made a formal resignation in Bishop John's favour of 'the office of Constabularie of the fortalice and castle of Spynie' and of all the profits and duties of the lordship and regality pertaining to the bishopric that had been granted to his father in 1599 (RM, 427). A brief inventory of the contents of the palace, made the following year, sheds some light on its general state at that time. The Great Tower, served by the adjacent 'small kitchine', seems to have been the principal residence for the bishop and his family. The chapel is described at one point as 'all ruinous' and at another as containing 'some broken tymber wark'. The main outer gate had an iron vett and a timber door, both fastened with iron straps (or 'catbands'), while the water gate (bakyet to the loche) had an iron yett without a slot (Appendix 1, no 2).

The careful religious policy patiently pursued by James VI was not to be maintained after his death in 1625. His son, Charles I, soon succeeded in polarizing opinion by attempting to force Scotland into accepting a form of church organisation based on that of England. Opposition was articulated by the National Covenant, a document of protest that was subscribed to in Edinburgh by a group of leading churchmen and laymen in February 1638. At a meeting of the church's general assembly in Glasgow in November 1638, bishops, including the royalist John Guthrie of Moray, were again deposed (Watt 1969, 218). However, John Spalding's history tells us that already in April Guthrie had furnished 'his houss of Spynnie with all necessarie provisioun, men and meit, ammunition, pulder and ball, as he who foirsaw gryt trubles to follow' (Spalding 1851, I, 88; Simpson 1927, 25). His testament, drawn up on 10 February 1638, also required that:

The castle and planting be keeped in good order, till my successor peaciablic receive the same, no timber work, destinate for the house, be removed, and the register with the wreittes, as thei are in severall boxes be trewlie and without fraude deliverit to him. (Appendix 1, no 3)

An inventory made later, in 1640, suggests that the members of the bishop's own family who were living in David's tower at this time included his wife, Nicola Wood, his three sons, John (parson of Duffus), Andrew and Patrick, and his three daughters, Bethis, Nicola (married to Joseph Brodie, minister of Forres) and Lucretia (married to David Collace, minister of Kinneddar) (Appendix 1, no 5).

In March 1639, the bishop was debarred from preaching any more in Elgin by the commissioners of the General Assembly and retired to his castle (Spalding 1851, I, 142-3; Simpson 1927, 25-6); but the Covenanters declined to attempt to take Spynie as Guthrie was well respected in his diocese (Simpson 1927, 26). At the provincial synod of Moray on 25 February 1640, however, it was learnt that he had preached a sermon in the chapel of Spynie and that he still refused to subscribe to the Covenant. In July, therefore, a Covenanting force of 800 men, including 300 musketeers and six cannon, under the command of Major-General Robert Monro, advanced on Spynie, having already plundered the royalist castle of Huntly. The bishop surrendered on 16 July; but although Monro removed his armaments, he permitted the bishop to remain living there with his wife and female servants (Spalding 1851, I, 305; Simpson 1927, 27-8). Nonetheless, the bishop was required to pay for the maintenance of a garrison of 25 men, commanded by Lieutenant Carincroce, who controlled the palace gates and acted in effect as his jailers (Appendix 1, no 4).

On 4 September 1640, Guthrie was accused of simony, the baptism of illegitimates, dancing, and other similarly heinous offences, and was imprisoned, first in Aberdeen and then, the following year, in the Tolbooth in Edinburgh. His wife meanwhile remained at Spynic (Spalding 1851, I, 333, 338; Simpson 1927, 28; Maclean 1974, 7-8). On 12 November 1641, Charles I granted the 'manse and manor place of Spynie called the castle of Spynie' to James, Earl of Moray, and his heirs for a £10 rent (RMS VIII, 374). Moray immediately took possession of the palace and evicted those who had been holding it for the past two years on behalf of the Committee of Estates. However, it seems that the king had earlier reappointed as keeper John Innes of Leuchars who, on 3 December, complained to the Privy Council about Moray's action. The lords accordingly ordered the house to be sequestrated in the keeping of the provost of Elgin, Mr John Hay, until it had been determined who had right (RPC, ser 2, VII, 174; Simpson 1927, 30). Moray and Innes eventually seem to have reached an accommodation whereby Moray retained the keepership while giving Innes 2,000 merks (£1,333) 'for his good will thairof' (Spalding 1851, II, 141; Simpson 1927, 29).

Meanwhile, in April 1642, the bishop's furniture was shipped from Spynie to Dundee in William Fraser's barque, the "William" (Appendix 1, nos 7-8). An inventory made by his eldest son, John Guthrie, parson of Duffus, and the Earl of Moray's chamberlain, John Dunbar, on 3 May, lists the furniture left behind in the Great Tower, chapel and kitchen (Appendix 1, no 6). Guthrie's wife followed with her remaining 'goodis, geir, insicht and plenishing [household furnishings]' in May 1642, handing over the keys as she did so to the constable, the Earl of Moray (Spalding 1828, 43; 1850-51, II, 141; Simpson 1927, 28-9). In November 1644, Guthrie himself was released and allowed to retire with her to his family estate in Angus where he died in 1649 (Simpson 1927, 29-30; Watt 1969, 218).

On Lady Guthrie's departure from Spynie, the Earl of Moray installed his nephew, John Innes, there with his family (Spalding 1850–51 II, 142; Simpson 1927, 29-30). On 27 October 1642, Innes's wife wrote to her mother, Lady Ross, 'Your ladyship knos the Erll of Murray hes giuen ws the houss of Speyni for a tym'. She continues that she expected that the earl would visit them there, and that she

wald fane haue a chamer or twa weell drest for his coming, because he is weri curious in thos things; and trewli for the presentt we hau not on stand of good curtteins nor any thing of that sortt; for the cloth which Sandi Bran broughtt me I connott gett my bouttouns brouthered [embroidered] on itt this yeer. I haue als much sad green serg of our aune making as will be ane bed, bot I cannot get less and fringes to itt heer; but I haue written to Anna to buy als many less and fringes to itt half silk and half worsett [worsted] as well seru itt; and I shall send her money soon efter Mertimes [Martinmas, 11 November]. This is the treuth of our statt, which I haue written to your ladyship. (Fraser 1885b, 51; Simpson 1927, 30-31)

During the Marquis of Montrose's campaign in support of Charles I, in May 1645, John Innes fortified himself in the palace with a number of the Covenanting burgesses of Elgin (Spalding 1850–51,

II, 447; Simpson 1927, 31). On 9 May, Montrose defeated the Covenanters at Auldearn and two days later occupied Elgin, burning the farmyard offices of Spynie (Cramond 1903, 2, 355-6; 358-9; Simpson 1927, 31-2). The palace was then besieged by Lord Lewis Gordon, acting for the Earl of Huntly, who, however, failed to take it from Innes's deputy, Grant of Ballindalloch (Simpson 1927, 32-3). About this time, the palace was described by Sir Robert Gordon of Straloch as 'surrounded by charming gardens and a wood, which last is not now in existence' (Simpson 1927, 16).

Episcopacy was restored to the Scottish church in 1662, and Murdo Mackenzie, minister of Elgin, was duly consecrated Bishop of Moray (Maclean 1974, 8). This no doubt explains why, on 3 March, the heirs of Bishop Alexander Douglas obtained a royal confirmation of the grant of lands at Spynie that he had made to them in 1619 (RMS XI, 103; see above). The palace, however, passed to the new bishop. Although a bishop's heirs could reclaim from his successor up to £1,000 Scots spent on repairs to the official residence, Bishop Murdo was obliged to point out to Parliament that Spynie 'is become so ruinows & decayed that far more nor the sume forsaid cannot make the same or any considerable parte therof habitable'. He was consequently granted £1,000 by Parliament for repairs (APS VII, 409-10). Mackenzie was succeeded in 1677 by Dr James Aitken, a former rector of Winfrith in Dorset (Maclean 1974, 8). Bishop Colin Falconer, who followed him in 1680, died in Spynie Palace on 11 November 1686 and was buried in St Giles' church, Elgin (Shaw 1882, 347). He was succeeded by Bishops Alexander Rose (1687) and William Hay (Maclean 1974, 8).

Bishop Hay was consecrated in March 1688 but in July 1689 and June 1690 Parliament passed two Acts, once more abolishing episcopacy and finally setting up a presbyterian form of government in the Church of Scotland (APS X 104, 133-4). Spynie Palace was therefore once more annexed by the Crown (Shaw 1882, III, 359). Bishop Hay, having sworn an oath of obedience to the deposed king, James VII, now refused to swear another to King William and Queen Mary. He was therefore removed from his charge of Elgin parish and moved to his son-in-law's house at Castlehill, Inverness, where he lived until 1707 (Maclean 1974, 8, 9).

1.6 THE PALACE ABANDONED (1689–1973)

After its annexation by the Crown, the palace was rented out for £12 a year; but because it was no longer inhabited,

the Lessees or Tacksmen either carried off, or suffered others to carry off, the iron gate, the iron chain of the portcullis, the oaken josts or roof, the doors, flooring, &c. In a word, all the iron-work and timber was carried away, and only the stone walls remain. (Shaw 1882, III, 359)

This despoliation of the property is also attested in an item entered in the minutes of the Barons of the Exchequer on 25 January 1728:

It appearing to the Barons by a precognition taken before three Justices of the Peace of the Shire of Elgin and Murray, that for some years past there has been great wast and embezilment committed at the Palace of Spynic, belonging to the late Bishop of Murray, and that great part of the planting and trees in the garden and orchard belonging to the Palace has been cut down and destroyed, Ordered that Robert Urquhart of Burdsyards, Generall Collector of the Bishops Rents, Sheriff Depute of Murray, and Justice of the Peace, do forthwith repair to the said Castle and Precinct of Spynie, and view and examine the same, and that he do summon such famous witnesses, who can bear faith in the matter, and of them inquire upon oath, by whom and when since the year 1720, any and what wast and embezilment of any sort or kind, in and about the said Bishop's Castle or Palace, or any outhouses or dwellings thereto belonging, and of what value, has been committed and done, as also what trees, timber or planting since the said year 1720, has been cutt down, felled or taken away, and by whom, and of what value the same be, all of which he is to report to the Court without delay. (NAS: E305/3, 173-4).

Unfortunately, Urquhart's report was destroyed in a fire at the Exchequer's Office in 1811 and has not survived (Athol Murray pers comm).

Richard Pococke, Bishop of Meath, described David's tower as still intact in July 1760 (Pococke 1760, 187); but in 1775 an engraving by Lachlan Shaw shows it in its present state. Remains of paintings on some of the palace walls, portraying 'a landscape with trees, and several representations of scriptural history', were still discernible shortly before 1794 (OSA X, 625-6). Engravings by Francis

Grose (1791, II, opp 280 and 281) and Cordiner (1795) show the palace ruins standing in an open landscape, devoid of trees. Between 1808 and 1812, the Loch of Spynie was partly drained by the engineer Thomas Telford, after which its waters ceased to lap at the cliffs below the palace (Simpson 1927, 18).

Around 1825, when John Shanks began to clear Elgin Cathedral of rubble (Mackintosh & Richardson 1980, 44-5; Fawcett 2001, 11), the Barons of the Exchequer took the remains of the palace in hand, erecting a lodge (Castle Cottage) for a keeper in 1828 and planting hardwood between it and the palace (Simpson 1927, 37). A drawing by Sophia, Lady Dunbar, dated 29 June 1843, shows the young trees to be by then well established (cf Aberdeen Art Gallery 1987). In 1838, however, the Commissioners of Her Majesty's Woods, Forests, Land Revenues, Works and Buildings sold the Crown Lands of Spynie, which had formerly belonged to the Bishop of Moray, including Spynie Palace, to the trustees of the Earl of Fife for £1,950 (NAS: DD27/1214; GR 2045/31 (1840)).

The ruins of the palace were scheduled as an ancient monument in 1920. Between 1927 and 1936, with the encouragement of the local MP, Mr Ramsay Macdonald, the Ministry of Works negotiations with the owner, Captain J Brander-Dunbar of Pitgaveny, to take the monument into state guardianship. These proved unsuccessful, owing to the difficult demands made by the owner (NAS: DD27/1214). Another attempted negotiation by Mr W Douglas Simpson on behalf of the Ancient Monuments Board in August 1947 was no more successful. However, agreement was eventually the Ancient Monuments reached whereby Department was permitted to undertake some timely repairs. In April 1963, work was carried out, under instruction of the Department's architect, Mr W W M Boal, on the north wall and on the west wall just north of David's tower at a cost of £1,849 8s 4d. (NAS: DD27/1215; Moray and Nairn Express, 24 August 1963). By March 1965, the total cost had reached £4,168 7s 7d and the works had also included the south wall of the tower (NAS: DD27/1215). A further £739 17s 3d of expenditure in 1965-6 concluded the works which, according to a report made by Mr J Douglas Hogg in December 1973, had by then covered the whole tower-house, the south wall of the chapel, the north, west and east walls of the courtyard, and the inside face of the gatehouse (HS: AML/GE/9/2/2).

On 23 December 1973, the palace was placed in the guardianship of the Secretary of State for Scotland by its owner, Mr Alexander Dunbar of Pitgaveny. A comprehensive programme of consolidation was begun which, from 1986 onwards, was accompanied by an annual season of excavation. The monument was finally opened to the public on 2 August 1994.

THE BISHOPS OF MORAY

Gregory	c 1114/20-1127/31
William	1152/3-1162
Felix	1166-1171
Simon of Tosny	1171-1184
Richard of Lincoln	1187-1203
Brice of Douglas	1203-1222
Andrew of Moray	1222-1242
Simon	1244-1251
Radulf	c 1252
Archibald	1252-1298
David of Moray	1299-1326
John of Pilmuir	1326-1362
Alexander Bur	1362-1397
William of Spynie	1397-1406
John of Innes	1407-1414
Henry of Lichton	1414-1422
Columba of Dunbar	1422-1435
John of Winchester	1435-1460
James Stewart	1460-1462
David Stewart	1462-1476
William Tulloch	1477-1482
Andrew Stewart	1482-1501

Andrew Forman	1501-1514/16
James Hepburn	1516-1524
Robert Shaw	1525-1527
Alexander Douglas	1528
Alexander Stewart	1529-1537
Patrick Hepburn	1538-1573
George Douglas	1573-1589

The temporalities were annexed to Crown on 29 July 1587 and granted to Alexander Lindsay, first Lord Spynie, on 6 May 1590 (and again on 17 April 1593). He surrended them to the Crown around 17 December 1605.

Alexander Douglas	1602–1623
John Guthrie	1623-1638 (continued to
	live at Spynie until 1640;
	he died in 1649)
Murdo Mackenzie	1662–1677
James Aitken	1677-1680
Colin Falconer	1680-1686
Alexander Rose	1687–1688
William Hay	1688-1707

Bishop Hay moved his residence to Inverness in 1690 when Spynie reverted to the Crown.

The succession of Bishops of Moray is maintained in the Episcopal Church of Scotland, the cathedral church and official residence if the present Bishops of Moray and Ross now being located in Inverness.

1.7 THE TOUN OF SPYNIE

Although Spynie Palace stands today as an isolated ruin, during the Middle Ages it would have been associated with the buildings of a small toun or township. Archaeological investigation has located a cobbled road running south from the palace towards Elgin, and surface finds from the field through which it runs point to the former existence of medieval buildings in that area (NAS, DD27/4363). Other buildings would have been constructed around the edges of the loch, as in later times.

Spynie's location on an outlet to the open sea caused its neighbours, the Earl of Moray and the burgesses of Elgin, to cast covetous eyes upon it. In the later fourteenth century, a dispute over fishing caused Bishop Alexander Bur (1362-97) to issue a 'protestation' defending his rights over Spynie, Kinneddar and an island in the loch. This document

gives us a valuable insight into the economic life of the inhabitants of Spynie at that time. We learn, for example, that for more than a century 'the bishops of Moray . . . had and were accustomed to have the fishers of sea fish living in the toun of Spynie with their wives and families, sailing from Spynie out to sea and bringing back their boats (batellas) with fish through the same port'. In the loch itself, the fishermen sailed their boats and cobbles to catch salmon, grisle, shellfish (pectines) and other kinds of fish with nets and hooks. Bishop Alexander's predecessor, John of Pilmuir, had also improved and deepened the channel of the port by sinking some ships, thereby altering the water course (RM, 192; Cramond 1903, I, 16; cf Simpson 1927, 17).

On 4 July 1451, James II erected Spynie into a free burgh of barony, upholding the right of the inhabitants to engage in fishing, fishmongery, butchery, brewing and other trades, and granting them a weekly market on a Wednesday and an annual fair on Holy Trinity (RM, 221-2). Around 1459, corn was being exported to the port of Leith from Spynie and Findhorn (Cramond 1903, I, 36; Simpson & Stevenson 1982, 2).

In a rental of 1565, the toun of Spynie was paying the bishop £10 annually in rent, and 40s for the malthouse with its croft (RM, 433). Although the customs of Spynie and Findhorn were granted to the Earl of Moray in 1566 (RSS II, 135-6) and the burgh itself in feuferm in April 1568 (RMS IV, 481-3), it was by then already in decline as a town.

An action passed in Elgin burgh court in December 1582 by the bishop's chamberlain, Sir John Gibson, parson of Unthank, against James Rynd for non-payment of his rents (*maillis*) for the brewland and one-sixteenth part of the town and lands of Spynie for the years 1573 and 1574 indicates that, whereas the malting had retained its value of £10 a year, that of the town had fallen to £5 (Cramond 1903, I, 168). On Blaeu's map (illus 1) 'Spynietoun' is shown lying just east of the palace and church although Pont's map of some 60 years before (on which Blaeu's map was based) shows neither the town nor the church (Stone 1989, 202). By the end of the 17th century, with the silting up of the loch, the town had disappeared.

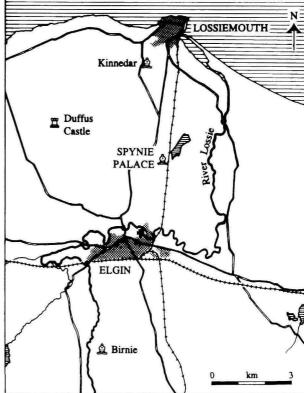
LOCATION AND PHYSIOGRAPHY

The partly ruinous palace (or castle) of Spynie (NGR: NJ 230 658) stands on the south shore of the former Loch of Spynie, some 3km north of Elgin and 5km south of the Moray Firth at Lossiemouth, in Moray (illus 2). Its principal standing structures consist of a stone-walled enclosure, measuring 49m east/west by 44m north/south with towers at its north-west, south-west and south-east angles and the remains of masonry ranges against each of its sides. The largest of the palace buildings, and by far the most prominent landmark for some distance, is the south-west tower, known locally as 'David's (or Davy's) Tower', named after its builder, Bishop David Stewart (1462–76).

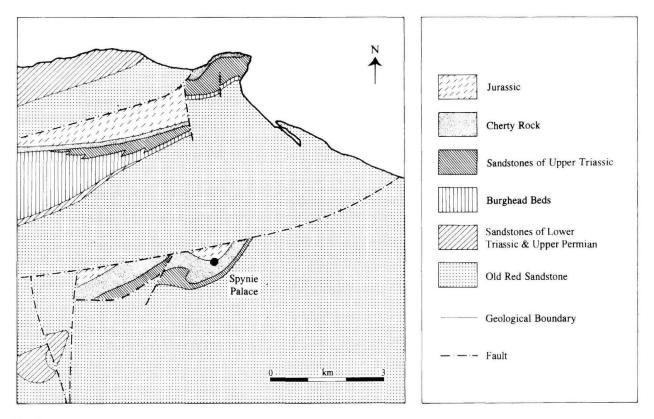
To the north and east of the palace, the ground remains quite waterlogged and is now densely

wooded. In all other directions, the land is well drained and largely given over to arable farming although there is some coniferous forestry to the west. There is little now to remind the visitor of the origin of Spynie's name which is derived from the Gaelic spiathanaig, meaning hawthorn (Watson 1993, 474). In general, the land around the palace is reasonably level although there is a gentle upward slope to the south-west towards Spynie Hill upon which stand the ruins of Spynie Farm. Adjacent to the farm is a graveyard within which are the remains of the Holy Trinity Church which dates back to the 12th century, perhaps earlier. Also on Spynie Hill are at least five disused quarries, some of the numerous sandstone quarries to be found in the Elgin area.





illus 2
The location of Spynie Palace (based on the Ordnance Survey map, Crown Copyright).



illus 3 A geological map of the area around Spynie (after Peacock et al 1968).

The former Elgin to Lossiemouth railway ran south to north, some 120m east of the palace. Opened in 1852, the line carried goods and passengers until its closure on 4 April 1964 (Seaton 1985, 36). Its course is now used as a thoroughfare for farm vehicles.

The palace is now approached from the west, along a track leading from the Elgin to Lossiemouth road, 1km away. This track dates from the 1820s when attempts were made to arrest the deterioration of the ruined palace and to improve its surroundings. As part of this programme, a caretaker's house (Castle Cottage) was built on the side of the track, some 200m west of the palace. This cottage, which had become quite derelict, was demolished in late 1994 and another house built near by to accommodate the newly-installed custodian of the palace. During its occupation, the palace was approached by metalled roads leading from the south-west (probably from the Holy Trinity Church) and the south-east (probably directly from Elgin).

The solid geology around Elgin consists mainly of beds of Upper Old Red Sandstone although there are also significant outcrops of Permo-Triassic sandstones to the north of the area (illus 3). Both geological eras are represented in a quarry on Spynie Hill, to the west of Spynie Farm, where fine-grained sandstones as well as pebbly and red-brown marly sandstones were exploited commercially for several centuries. There are many other abandoned quarries to the north and west of Elgin, including those at Bishopmill on the north edge of the town, where grey, cream, yellow and orange fine- to medium-grained sandstones were formerly extracted (Peacock *et al* 1968, 50).

At some locations, including Spynie, the sandstones are overlain by a relatively thin, but complex, sediment of chert, sandy limestone, calcareous sandstone and silicified sandstone of Upper Triassic age. The appearance of this material, known as Cherty Rock, varies enormously and all of its many varieties can be seen throughout the palace buildings. Its densest form contains high proportions of chert, making it unworkable as a building stone although large boulders of it were utilized in the foundations and cores of walls, particularly in the south wall of the north range and the west wall of the east range. A more limy form is particularly evident in the south, east and west curtain walls, suggesting that different areas were quarried during different building campaigns. Certainly from the 14th century (and probably before), local sandstones were utilized at least for quoins, door and window surrounds and moulded stonework, and sometimes for larger stretches of masonry.

Events of the Glacial and post-Glacial periods have masked much of the solid geology of the area. On Spynic Hill, the sandstones are overlain by boulder clay; further down the slope, this has been partially covered with yellow and orange sands and gravel of alluvial origin. These undulating deposits do not appear to have been reworked by the late Glacial sea.

Parts of the Spynic depression, an area of low-lying land about 3-5km wide and extending about 11km from a point beyond Duffus Castle to the banks of the River Lossie, were altered significantly in post-Glacial times. Changes at the east end of the depression were to have a particularly important effect on the inhabitants of Spynic Palace.

In the immediate post-Glacial period, when the sea reached its maximum height of about 5.5m (18 ft) OD, the River Lossie issued into the sea some distance to the south-east of its present mouth. When banks of shingle accumulated at its mouth, the river was diverted westwards for a time. During this period a lagoon, which may have been brackish or even freshwater for a time, formed on the landward side of the shingle, apparently draining out near Roseisle in Burghead Bay (Peacock *et al* 1968, 114).

Eventually, however, the River Lossic broke through the shingle, causing the Roseisle outlet to silt up. Thereafter, the deposition of more shingle constricted the outflow from the lagoon which, together with an increase in silting throughout the medieval period, saw Spynie Loch cut off from the sea by the late 15th century.

The present contours of the palace courtyard are the result of several phases of landscaping carried out in preparation for the construction of various elements of the complex. It is not possible now to interpret fully the topography of the courtyard prior to these extensive building works although a reasonable idea can be gained from the surviving evidence. There was a uniform northward slope downwards across the whole site, its gradient increasing as it neared the old shore of the loch. This slope was levelled up so that the north-west range could be built in the 14th century although the opposite was to happen over a century later when the basement of the north range was installed. More localized undulations, such as those around the south and west ranges, also had to be levelled at about the same time. The highest point within the courtyard seems to have been around its centre; and it is quite possible that materials had to be removed from this area to create a reasonably level surface although there is no evidence for this.

THE RESULTS OF THE EXCAVATIONS

3.1 INTRODUCTION

For reasons of convenience, the excavation results have been divided into six major periods, reflecting the principal phases of occupation of the site. It is realized that such divisions are somewhat artificial; undoubtedly there would have been numerous smaller episodes of change within the palace that are not chronicled herein and it is difficult to date much of what has survived. However, it was felt that a broad chronological framework would help the reader follow the palace's long and complex history. Those periods listed below signify the most dramatic changes to the layout of the palace.

Period 1 includes all activity preceding the occupation of Spynie as an episcopal residence; it encompasses a long interval of time, most of it prehistoric. Periods 2-6 refer to the use of the palace as the home of the Bishops of Moray and Period 7 catalogues its occupation after the bishopric was disestablished (although parts of the nearby loch-side

area continued to be occupied). The phasing of the site is as follows:

Period 1: pre-bishopric

Period 2: the early years of the bishopric (12th century)

Period 3: 13th-century occupation

Period 4: the remodelling of the palace (14th century)

Period 5: the upgrading of Spynie Palace (late 15th and 16th centuries)

Period 6: the final years of the bishopric (17th century)

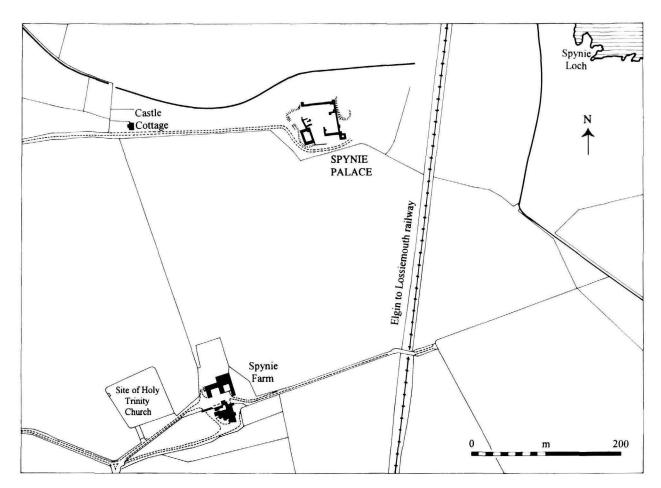
Period 7: post-bishopric occupation

3.2 PERIOD 1: PRE-BISHOPRIC OCCUPATION

3.2.1 INTRODUCTION

There is every likelihood that there has been human habitation around the edges of Spynic Loch since Neolithic times, or even earlier. The loch, during both its freshwater and marine phases, would have provided ideal habitats for a diverse range of flora and fauna, and the light, sandy soils of the area would have been easily worked by simple ards or ploughs. Many shell middens have been recorded around the former shores of the loch, including mounds described in the mid-19th century as measuring 80 by 30 yards (73 by 27m) and 30 by 26 yards (27 by 24m) at Caysebrigs, 2km north-east of the palace (Elgin nd, 23). A house named

Cocklehill' some 2 km north of the palace, on what was once the north shore of the loch, bears further witness to the mounds of shells that once covered large parts of this area. Such shell mounds are now far less extensive because of exploitation by farmers, presumably to neutralize the acid soils of the area (*Elgin Courant*, 13 February 1863). In 1980, during the excavation of a gas pipeline trench, a band of oyster shells, 0.35m thick and about 40m long, was uncovered some 300m west of Castle Cottage (*DES 1980*, 15). Excavation adjacent to Castle Cottage in 1994 also uncovered evidence of early human usage of the site although actual occupation could not be



illus 4
The environs of the palace, showing the positions of the Holy Trinity Church, Spynie Farm and Castle Cottage.

proved. In addition, rabbit burrowing has resulted in many worked flints being deposited on the face of the sandy cliff to the north and west of the palace.

Amongst several stray finds retrieved from the vicinity of Spynie are: a pottery urn (Elgin Museum accession no 1852.1); an Early Bronze Age flat axe (1868.8); an Early Bronze Age flanged and recurved axe (1875.3); and a Late Bronze Age socketed and

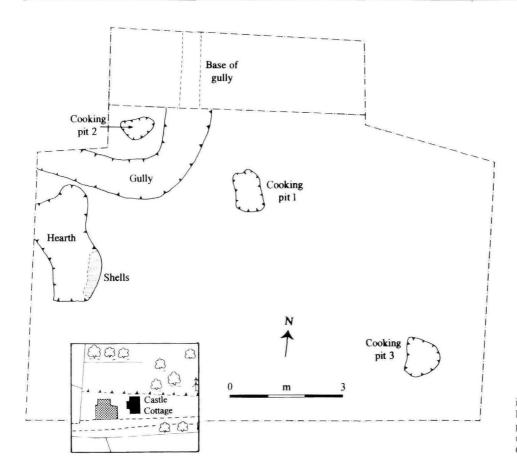
looped axe (1868.9). The discovery of sherds of probable Bronze Age pottery, together with an assemblage of marine shells which appeared to have been deposited with some care in a pit within the palace enclosure, confirms that there was prehistoric activity on the palace site. Several post-pits near by are probably also prehistoric in origin although these features could not be dated.

3.2.2 INVESTIGATIONS NEAR CASTLE COTTAGE

As part of the programme to upgrade the palace and open it to the public, Castle Cottage (the original keeper's lodge, built in 1828) was demolished in 1994 and a new house to accommodate the palace custodian was erected a short distance further west. Before construction work commenced, the opportunity was taken to investigate the area of development, located some 200m W of the palace (illus 4). Situated about 10m above OD, Castle Cottage sat near the edge of a level terrace whose N

side dropped abruptly towards the former loch. The soft sand of the terrace had been sealed by 0.4-0.5m of topsoil whose deposition probably began soon after the peak of the last marine transgression, around 5000–4500 BC. Some topsoil had already been laid down before the first known human activity in this area.

The main area of excavation corresponded roughly with the site of the new building and measured



illus 5 Plan showing the prehistoric features uncovered near Castle Cottage.

12.0m E/W by 8.3m wide, the area to its immediate N having been disturbed by the builders before it could be investigated archaeologically (illus 5). Three cooking pits, a hearth, a curved, linear gully and several deposits of marine shells were identified in this trench. The pits and hearth had all been cut into the sandy subsoil whose edges had been discoloured pale yellow by heat. The building works also entailed the excavation of three soakaways, each about 2m square, and several service trenches, including a cable trench linking the new house to the palace. Spreads of shells were encountered within the cable trench, some 4m from the main trench and also 80m further east. Nothing of archaeological interest was uncovered within any of the soakaways.

THE HEARTH

The hearth, which measured 3.0m by 1.5m and 0.35m deep, was located on the W side of the trench and extended beyond it. It was clearly a two-phase feature. The original hearth consisted of burnt stones set on undisturbed beach sand and overlain by charcoal-stained soil, sand and a few shells. Above it was a second hearth of burnt stones with some associated charcoal.

Banked up against the SE side of the hearth were substantial quantities of shells, mainly oyster, common periwinkle and cockle, with smaller numbers of striped venus and fragments of whelk, limpet and pullet carpet. The shells of a few land snails were also found amongst this assemblage. The oyster shells were significantly smaller than those retrieved from the cooking pits, suggesting that the hearth was not contemporary with those other features. The rest of the hearth was covered with dark, humic soil, charcoal and shattered stone but few shells.

COOKING PIT 1

This oval pit measured 1.05m by 0.70m and 0.22m deep and was densely packed with marine shells in a dark, sandy matrix. About 300 shells (half the pit's contents) were retained. Complete shells included those of common oyster, cockle, periwinkle, whelk, pullet carpet shell and a single limpet. Also within this assemblage were fragments from the shells of other species, including mussel, and a few shells of land snails.



illus 6 Spynie Palace, viewed from the south.

COOKING PIT 2

This small pit, measuring 0.90m by 0.55m and 0.12m deep, was located 3m NW of Pit 1. Its fill was similar to that of Pit 1 and contained shells (whole and fragmentary) from the same species. The two pits appear to be contemporary.

COOKING PIT 3

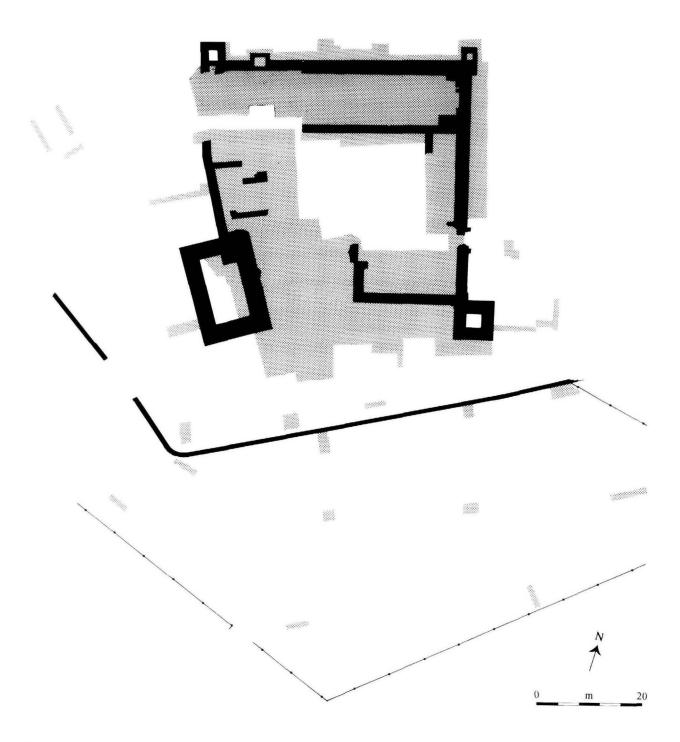
Located some 6m SE of Pit 1 and measuring 1.0m by 0.9m and 0.2m deep, Pit 3 was filled with dark, sandy loam containing many stones and charcoal flecks but only a few shell fragments of common oyster, cockle and perhaps whelk. No land snail shells were recovered.

THE GULLY

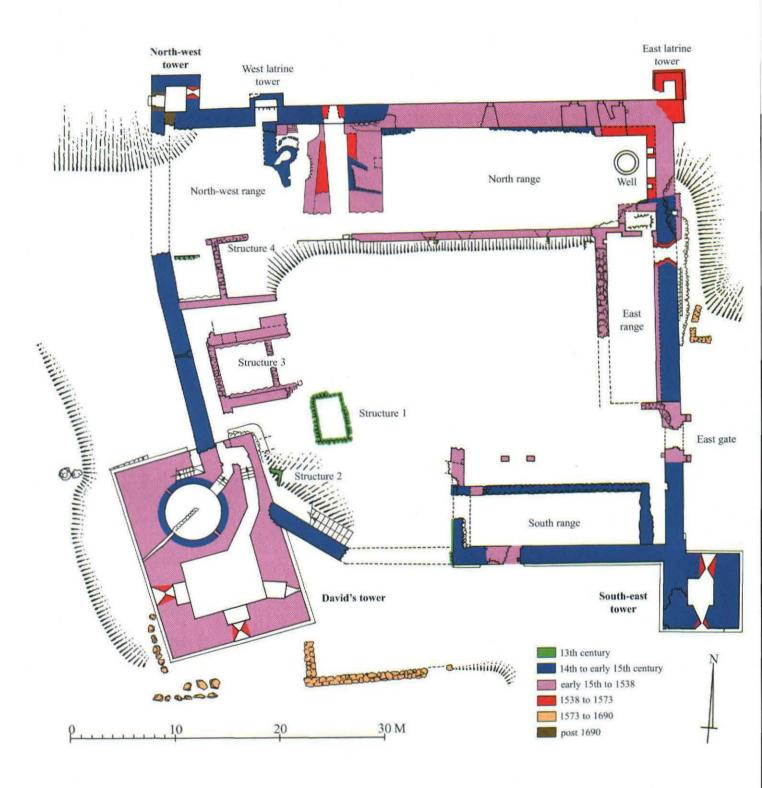
The gully, which was 1.0m wide and 0.2m deep, ran eastwards from the NW corner of the trench for 3m

before returning northwards for a further 2m. Its base could just be discerned for another 2m beyond the edge of the main trench although the builders had removed almost all trace of it. Part of the upper mandible of a cow and a few charcoal fragments were retrieved from the gully's fill of light brown, sandy loam containing some stones. At the top of the gully was one sherd of medieval pottery although this was probably associated with the material overlying it. However, it was clear that the gully post-dated the cooking pits because it cut through the heat-affected sand adjacent to Pit 2.

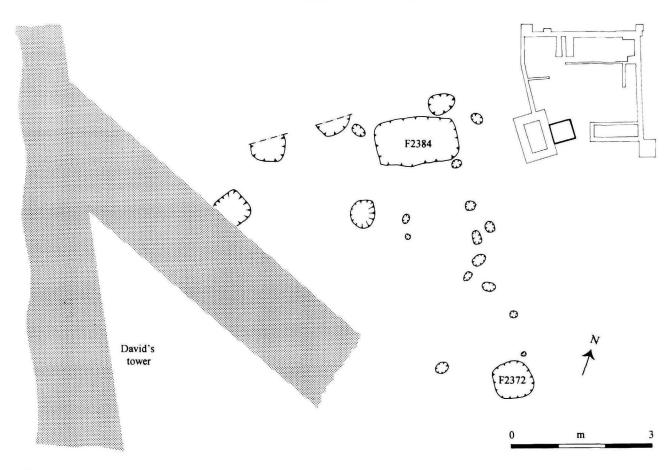
Unfortunately, none of the charcoal derived from any of these cliff-top features was suitable for radiocarbon dating. Most of it was degraded and perhaps derived from driftwood; there was also a very strong possibility of contamination caused by animal burrowing which was rife over much of this area.



illus 7 Plan of Spynie Palace, showing the areas excavated between 1986 and 1994.



illus 8 Phase plan of Spynie Palace.



illus 9 Plan of prehistoric features in the south-west corner of the courtyard.

3.2.3 FEATURES IN THE PALACE COURTYARD (illus 9)

The earliest datable feature uncovered within the palace enclosure was a sub-rectangular pit (F2372), which had steep sides and a flat base and measured 0.9m by 0.7m and 0.5m deep. Its primary fill was loose, orange, gritty sand (probably redeposited subsoil) with a few flecks of charcoal. On the N side of the pit was a heap of periwinkle shells covered by oyster shells. To their W were eight sherds of undecorated pottery of probable Bronze Age date, two of them conjoining and the remainder very small. The shells appeared to be food debris, perhaps representing the remains of a single meal consumed on the site. However, they seemed to have been arranged with some care and their deposition may point to something other than simple disposal. There is no obvious ritual significance for such an arrangement and it may be wondered whether the pit had

been dug and the shells and pottery placed in it by children at play.

Pit F2372 was sealed by a layer of dark grey, silty soil, 50-70mm thick, best interpreted as a buried topsoil. This was spread over an area measuring approximately 7m square to the immediate east of the SW curtain wall; it was not encountered elsewhere in the courtyard, presumably because it had been removed during later developments, and was very patchy even where it did survive. Within this area were several other features, mostly post-pits. Some of them were sealed by the buried soil whilst others lay directly beneath the topsoil. Although the evidence is not conclusive, it seems likely that most, if not all, of these features were also prehistoric. Several of them formed a roughly straight line



extending northwards for 5.5m from pit F2372, perhaps delineating one side of a timber building of which no other trace has been found. Towards the N end of this line was a much larger pit (F2384),

measuring approximately 2m by 1m, which had been filled with rubble before the buried soil had built up. Its function remains unknown.

3.3 PERIOD 2: THE EARLY YEARS OF THE BISHOPRIC (12th century)

3.3.1 INTRODUCTION

Although the bishopric of Moray was probably established early in the 12th century, it was only towards the end of that century that the church of the Holy Trinity at Spynie was adopted as the cathedral church for the diocese (Chapter 1.1). It may be assumed that the bishop had a residence there from that time although there is no evidence to prove that it occupied the same site as the later palace. However, excavation has demonstrated that there was a timber and earth castle on the site some time before the stone castle was built. The evidence of artefacts retrieved from the bottom of a ditch

surrounding this early castle indicates occupation during the late 12th century, thus corroborating the documentary evidence.

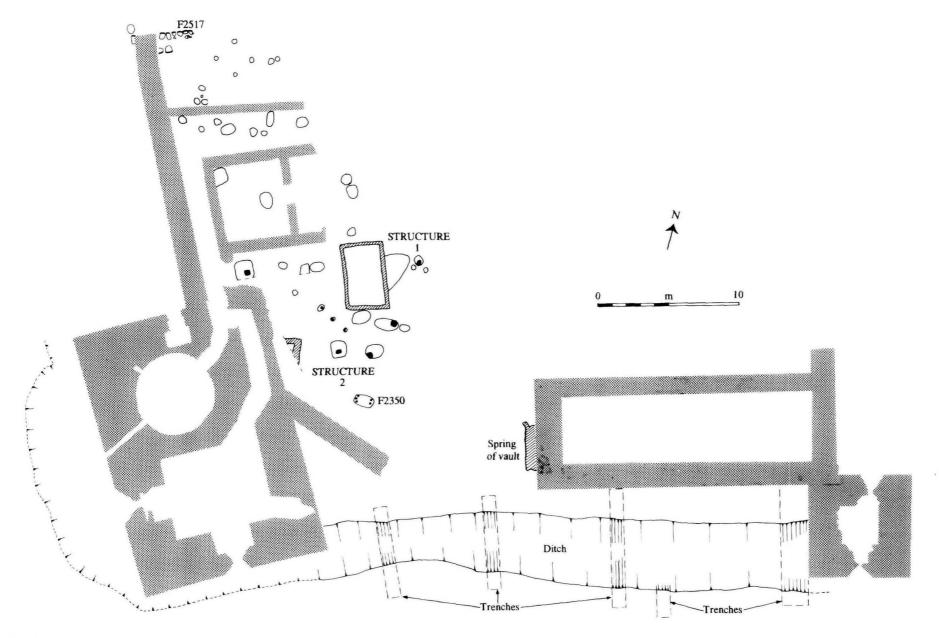
At some stage, the slight E to W slope on the W side of the palace enclosure was levelled with up to 0.5m of sand, gravel and pebbles. Those materials had been cut by several large post-pits which pre-dated the W range, ruling out the possibility that the levelling up was associated with the construction of that building.

3.3.2 THE DITCH (illus 11, 12)

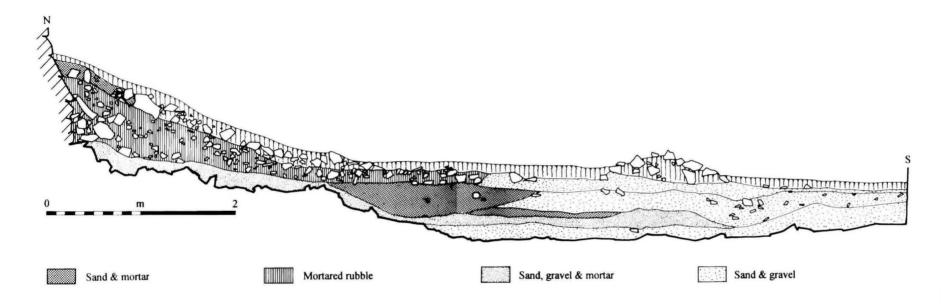
Before the start of excavation, the ditch was visible as a shallow depression (this has been levelled since) outside the S range. It appears to have returned northwards below David's tower although it was difficult, from exploratory trenching, to distinguish between the ditch and what may have been a wide cut for the building's construction. By the same token, it was not possible to tell whether the depression running alongside the outside of the W curtain was the continuation of the ditch or the result of later activities. However, the ditch certainly did not extend far west of David's tower and it would be surprising if it had not returned northwards, parallel with the west range. Even less is known of its course on the E side of the palace, beyond the SE tower. Excavation demonstrated that the profile of the ditch had been a little more pronounced than it was immediately prior to the investigations but that it had never been very deep. If there had been an earth bank or palisade associated with the ditch, the wholesale remodelling carried out in Periods 4 and 5 had removed all evidence of it.

Four sections were cut across the S arm of the ditch, one of them against the west wall of the SE tower. The ditch was also partially exposed in a 1986 exploratory trench and in a service trench against the doorway that pierces the N wall of David's tower, outside the curtain wall.

In the 2m-wide trench adjacent to the SE tower, the ditch was approximately 6m wide, narrowing at a depth of 1.1m to only 1.8m at its flat base. It was cut through the sand and gravel subsoil as far as (and in places into) the underlying bedrock. At the bottom of the ditch were shattered bedrock and deposits of loamy sands, resulting from the erosion of its sides and base and perhaps deposited while it was still in use. Unfortunately, no artefacts were retrieved from these materials to help date that usage. However, the main infilling deposits of the ditch yielded pottery that proved valuable for dating the early occupation of the palace. Overlying the primary erosion deposits was about 0.2m of humic loam containing pottery from at least three vessels. Eight conjoining sherds



illus 11 Plan showing Period 2 and 3 features.



illus 12 Section across the Period 2 ditch.

were from a small, globular-handled ladle in a bluegrey fabric, imported from the Rhineland between the mid-11th century and the late 12th century (Vince 1991, 103; see Chapter 4.4). Other pottery included east coast light gritty ware of probable 12th-century date. Although this assemblage does not provide a secure date for either the use of the ditch or its abandonment, it is a strong indication that the site was occupied during the 12th century. In the three trenches further W, the maximum surviving depth of the ditch was only 0.6m. It was filled mainly with primary erosion deposits, mostly of weathered bedrock and sand, overlain by topsoil, suggesting that the ditch had been left to silt up and that no attempt had been made to level it. There was no trace of an associated defensive earthwork although there had probably been one, if only to make use of the upcast from the ditch.

3.3.3 INSIDE THE ENCLOSURE (illus 11)

Because the buried soil sealing some of the prehistoric pits in the south-west corner of the court-yard survived only in patches, it was impossible to date most of the features in that area. However, there was one feature which clearly cut the buried soil: a sub-rectangular pit (F2350), measuring 1.3m long, 0.7m wide and 0.30m deep, with three small post-pits at one end and two at the other. Within its fill were large quantities of fish bone that may simply have been midden material. Alternatively, this material could have been waste from fish-processing, an interpretation that is supported by the arrangement of the post-pits which perhaps indicated where a drying platform had stood.

Beyond the N surviving limit of the buried soil were several pits of probable medieval date. Further N, within and adjacent to the Period 4 west range, were many more such features cut into levelling deposits. Some of these pits may have held scaffolding uprights during the construction of the W range but

many of the larger ones, particularly those to the S of the W range, could have supported structural members for earlier timber buildings. The pits formed no obvious pattern, one possible reason being that others contemporary with them had been removed or masked during later developments such as the construction of Structure 2 in Period 3, the W range in Period 4 and David's tower in Period 5. Other pits may survive within those parts of the courtyard that have not been excavated, and their future discovery may help interpret the arrangement within the Period 2 enclosure.

Unfortunately, none of the excavated pits could be dated. Any timber building that had stood within the enclosure may have had a relatively short lifespan, for its supports would have been prone to decay; or perhaps the site was occupied only intermittently before the seat of the diocese was fixed at Spynie in the late 12th century.

3.4 PERIOD 3: 13TH-CENTURY OCCUPATION

3.4.1 INTRODUCTION

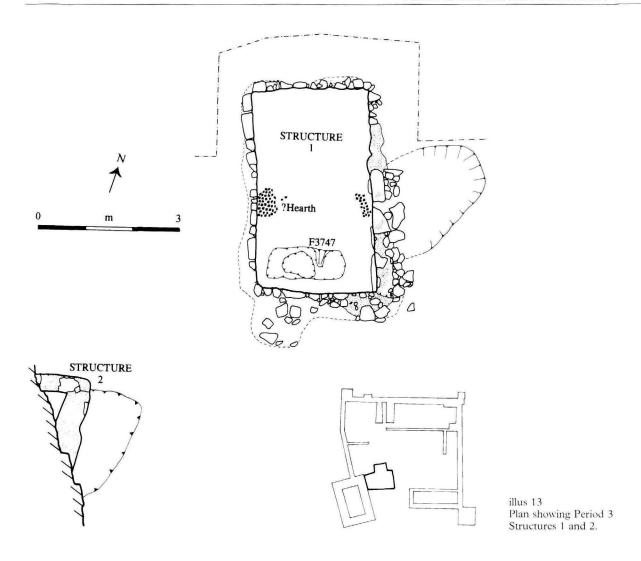
In 1207/8, during the episcopate of Bishop Brice (1203-23), Spynie was confirmed as the seat of the diocese by a bull of Pope Innocent III. There is also evidence to suggest that the castle had become a residence of some significance by this time. Excavation revealed only glimpses of the 13th-century castle although it did confirm that masonry

buildings – at least one of them a structure of some quality – had stood within the courtyard at that time. It is very likely that timber buildings stood alongside the masonry ones and it should not be ruled out that some of the post-pits attributed to Period 2 may actually date from this phase of the palace.

3.4.2 THE SOUTH-WEST CORNER OF THE PALACE ENCLOSURE (illus 11, 13, 14)

The complete ground plan of one early masonry building (Structure 1) was uncovered in this area, as

was the corner of another (Structure 2) which appeared to be contemporary with it. Almost all



traces of the latter building had been obliterated when the massive David's tower was built in Period 5. The remnants of another early building were also evident against the W gable of the Period 4 south range.

STRUCTURE 1

Approximately 6m to the E of David's tower were the masonry foundations of a small rectangular building, Structure 1, which measured 4.30m N/S by 2.50m wide internally. Like the nearby Structure 2, this building was set a short way into the subsoil but was completely demolished above ground level. Its walls comprised mainly random rubble, some of it quite small, although some partially-worked sandstone had been incorporated in places. The N and W walls were clay-bonded, the S wall was bonded with mortar whilst both materials had been used in the E wall. The N wall and the N end of the E wall had

been poorly constructed and may have been rebuilt at some stage.

Structure 1 is unlikely to have stood more than two floors high and may only have had one storey. There was no evidence of an internal stair, and any access between floors was presumably by a ladder or by an external timber stair. It is possible that such a stair had been set into the 0.4m-deep cut against the E wall of the building although this could also have been the remnant of an earlier (?Period 2) feature. Its size makes it unlikely that Structure 1 was partitioned at any level.

Cut into the subsoil towards the S end of the building was a sub-rectangular pit (F3747), measuring 1.6m by 0.7m and 0.2m deep. The pit was filled with compact sands containing some charcoal, lumps of clay, an iron nail, fragments of glass and towards its centre, where it deepened to



illus 14
View, from west, of some of the Period 2 post-pits and the remains of the Period 3 buildings. Structures 1 is in the top left corner of the frame, and the remains of Structure 2 in the foreground, cut by the foundations of the Period 5 David's tower.

0.4m, several animal bones. Some of the bones were articulated and one bovine jawbone had been placed at right angles over another. It is not clear whether this pit pre-dated the building or was contemporary with it, and its purpose is even less clear. It was scaled with a deposit of sand, which covered the whole of the interior of Structure 1 and from which an iron knife was recovered (see Chapter 4.2.4). Over this sand were spreads of compact mortar, perhaps construction debris or the remnants of bedding for a floor (although there was no trace of flags or tiles). There appeared to have been a hearth against the W wall of Structure 1, where its masonry was heat-affected and the sand adjacent to it heavily burnt, although no trace of the hearth itself survived.

STRUCTURE 2

All that remained of Structure 2 were the foundations of its NE corner, which projected just beyond the E wall of David's tower. All other traces of this building had been swept away to accommodate this tower in Period 5 – or perhaps even earlier, in Period 4 (see below 3.6). The two short stretches of its N and E walls, which were aligned at an angle of less than 90°, comprised mortar-bonded, rubble foundations, set 0.50m into the subsoil. At this level, the walls were only 0.5m wide although they were probably much thicker above ground level.

The remains of Structure 2 were sealed by rubble and mortar together with substantial quantities of burnt clay, ash and charcoal (including what may have been fragments of planks), an indication that the building had probably burned down rather than simply been demolished. Finds retrieved from those deposits included pottery, metal objects, animal bone and numerous fragments of painted window glass, the latter closely resembling trefoil grisaille glass from the chapter house of Elgin Cathedral which dates from the second quarter of the 13th century (Graves 1985, fig 20; see Chapter 4.5). These materials were overlain by fine, black silt containing lumps of charcoal, probably derived from rainwater washing over further remains of the burnt-out and demolished building.

STRUCTURE AGAINST THE SOUTH RANGE

Although very little remained of the W wall of the S range (see below 3.5.2), it was clear that it had been built against an already existing structure. This earlier building survived as 3.3m of its E wall, which stood to a maximum height of about 1.5m, including the springing course for a vault on its W face. It might be tempting to equate the N side of this ?Period 3 structure with the wall whose foundations extended westwards from the NW corner of the S range. However, that wall appeared to have been laid against the stonework of the south range and therefore is interpreted as a Period 5 feature (see below 3.5.2). No other trace of the Period 3 building was uncovered and its full extent and function remain unknown; although, on the evidence of the springer for a vault, it was at least two storeys high.

3.4.3 THE REMAINDER OF THE ENCLOSURE

It is not known just how far north the Period 3 palace extended, a question that could remain unresolved because later rebuilding operations may well have destroyed or masked the evidence. There seems to have been no attempt to level up the steeply-sloping ground in what is now the NW corner of the enclosure, suggesting that the 13th-century castle did not extend as far north as its successors did in later centuries. Thin spreads of sand, clay and gravel within that area simply appeared to be builders' waste rather than a serious attempt to level the ground. They were cut-by the foundation trench for a wall (F2517), which survived as only one course of a 2.1m-long, 0.40m-wide stretch of clay-bonded, rubble masonry. This was overlain by the Period 4

W curtain wall and clearly belonged to an earlier phase of the palace, probably Period 3.

Several fragments of trefoil *grisaille* window glass, similar to that associated with Structure 2, were also retrieved from the Period 4 south range. The glass occurred chiefly in the foundation cut for its E wall, although some was also retrieved from a residual context within the interior of the building. Whilst there appeared to be more than one phase of construction for the E wall of the range, there was no evidence that any part of it pre-dated Period 4. However, the presence of the glass does suggest that an important building, possibly a chapel, had stood within this area during Period 3.

3.5 PERIOD 4: THE REMODELLING OF THE PALACE (14th - early 15th century)

3.5.1 INTRODUCTION

Both the architectural and archaeological indications are that a castle built mostly of stone was erected at Spynic some time during the 14th century. There is insufficient evidence to date this transformation very closely; indeed, it may have been spread over several decades, continuing as and when funds were available. The rebuilding of the palace may have been initiated by Bishop David of Moray (1299-1326). One of Robert Bruce's staunchest allies, he returned to Spynie from self-imposed exile in Orkney following the death, in 1307, of King Edward I of England who had been anxious to apprehend him. The palace may have suffered during the Wars of Independence and may have been in need of repair as a result. It is also conceivable that what was primarily an earth and timber castle dating back to the 13th century was not considered a suitable residence for a bishop whose seat was the magnificent cathedral at Elgin. Even if Bishop David had instigated this new programme, it is unlikely to have been completed until some time after his death in 1326.

To accommodate the new layout, any timber buildings still standing were probably dismantled along with the Period 3 masonry Structures 1 and 2. The ditch around the early palace was partially filled in (it seems never to have been completely levelled) and any associated bank and palisade flattened before the foundations of new stone and lime

buildings were laid. There was no attempt to move the palace to a new site, an indication perhaps of how suitable Spynie's location was considered to be.

Although the arrangement of the palace buildings was to change drastically during Period 5, there was no significant alteration to the area of its precinct after the 14th century. This measured approximately 49m E/W by 44m N/S and was defined by ranges of stone buildings linked by a curtain wall. All of those buildings underwent drastic changes (in some cases they were completely demolished) during later developments. There were masonry buildings on the S and perhaps the W sides of the palace although in Period 4 the evidence for the latter consisted only of a series of windows piercing the curtain wall at first-floor level. There was probably a first-floor chapel at the E end of the S range, as there was from Period 5 onwards. To the west of it, in the centre of the range, lay the principal entrance into the palace.

Small amounts of debris had been deposited around the NW corner of the palace before this time (see above 3.4.3) but no attempt was made to level that area until Period 4, when large quantities of subsoil were redeposited to provide a platform for the new NW range. Although the E section of the N curtain was rebuilt in Period 5 as part of the N range, this wall dates from Period 4. It is not clear if the small NW tower and the latrine tower against the NE

corner of the enclosure date from this period or if they were later additions.

Although bearing the tell-tale marks of numerous alterations (mostly to accommodate developments within the Period 5 E range), the E curtain wall is also a 14th-century structure. A few stretches of it still retain a three-coursed chamfered plinth which continues along the outside faces of the S range and the SE corner tower (see below 3.5.2). Buildings may have been set against the E curtain at this time although the later construction of, and changes to, the E range together with post-abandonment

demolition and clearance work may have removed the relevant evidence.

The construction of the massive David's tower in the late 15th century (Period 5) destroyed most of the evidence pertaining to the Period 4 arrangement in the SW corner of the palace. The short stretch of curtain wall that runs south-eastwards from the tower is clearly earlier than the tower's E wall and can be assumed to date to Period 4, even though its precise relationship with the S range could not be established.

3.5.2 THE SOUTH SIDE OF THE PALACE ENCLOSURE

The south limit of the enclosure was defined by the south range, which lay just inside the line of the Period 2 ditch. This would place it roughly over the site of the putative earthen bank, which would have been levelled in preparation for the construction of the building. At the same time, the ditch was filled in, at least to a level that would not cause the foundations of the range to be undermined. The SE

illus 15 The south range early in the excavation. Viewed from the west.

tower was built directly over the ditch, the bottom of which was at roughly the same level as the floor of the tower's basement.

THE SOUTH RANGE (illus 15-20)

As well as clearing away the earth and timber defences and any remaining timber and masonry structures, the builders of the Period 4 palace also had to level a gentle downward slope from west to east. This they achieved by using subsoil from the W end of the building and raising the ground at its E end. One of these spreads of sand, gravel and pebbles extended over the width of the building, continuing below the foundation of its N wall and into the courtyard.

The building history of the S range seems to have been complex. Although some of the alterations to its fabric can be readily identified and dated with some accuracy, it is not so easy to relate them to any of the features revealed by excavation. For example, there was evidence of more than one phase of construction at the E end of the building, phases that were not easily linked to others in the S range or elsewhere within the palace. Of the numerous small pits uncovered within the building, several may have been stone holes although most were probably post-pits associated with its construction or with alterations to its fabric. Only four of these pits could be attributed with confidence to Period 4, and the remainder had no associated stratigraphic evidence to help date them. Certainly, none of the post-pits appeared to pre-date the S range.

As first built in the 14th century, the S range seems to have comprised a chapel-gatehouse range of masonry and timber construction. The interpretation

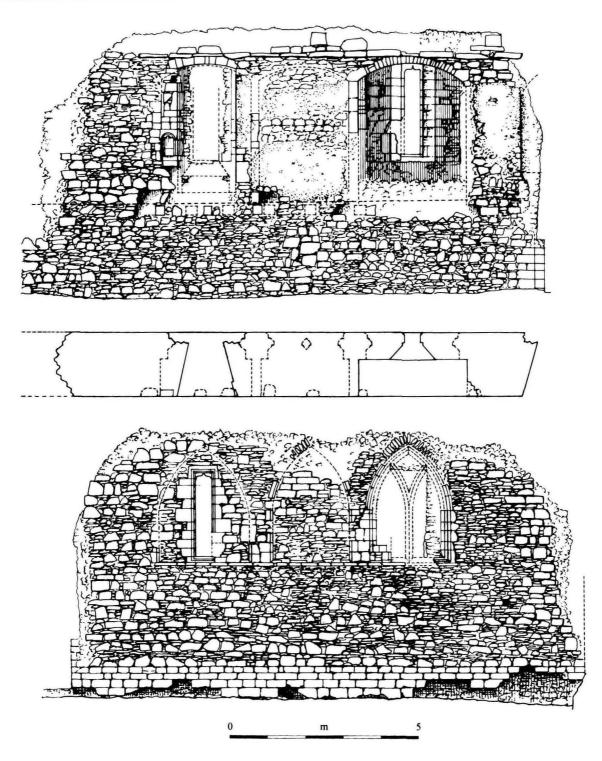
illus 16 Plan of the Period 4 south range, together with the spring of the Period 3 vault against its west wall and the doorway in the building's north wall, blocked in Period 5.



illus 17 The south range viewed from the south.



illus 18 The inside face of the south wall of the south range.



illus 19 The south wall of the south range: north and south elevations and a plan at window level.

of its first floor as a chapel, as opposed to a room of secular function such as a hall, is suggested by its orientation, by the size of its windows (see below) and by the architectural and documentary evidence for its use as a chapel from the 15th century onwards (see Period 5).

The S range measured approximately 18.3m E/W by 5.0m wide internally within walls whose degrees of survival varied greatly (illus 16). The S and E walls were almost intact, each being 1.8m thick and standing to their original heights of about 6.7m, whereas its other walls were almost totally

demolished. The W wall was in a very fragmentary state and stood to a maximum height of only 1.5m at its S end. It appears to have been built against an existing barrel-vaulted structure (perhaps a Period 3 structure: see above 3.4.2), only remnants of which survived. It was not clear whether a breach at the N end of the W wall was the result of stone-robbing or if there had been a doorway there. At the base of the wall on the N side of that gap was a large, flat stone, perhaps to support a door jamb although the evidence was far from conclusive.

Even less remained of the N wall. At its W end, where it was 1.5m thick, it stood to a height of about 1.5m. However, this piece of walling appears to represent the blocking, in Period 5, of the inner end of a gate passage (see below 3.6.7). Despite recent masonry consolidation, the point where this abuts the W wall is still visible. On its S side, the base of the opening has a chamfered plinth, which is not repeated on its N side, suggesting there had been an inner door into the courtyard at this point. Along most of its length, the N wall had been demolished to its foundations, which were only 1.1-1.3m wide. Even these were almost completely removed during the programme of masonry consolidation in 1963. Towards the E end of this wall was a 2.5m-long stretch where even the foundations were missing.

Both sides of the E, S and W walls of the range were faced with partly coursed, mortar-bonded rubble, mainly split boulders of very limy Cherty Rock although a few squared sandstone blocks (perhaps reused from a demolished Period 3 building) had been incorporated in places. It should be noted, however, that large stretches of these walls were refaced during the 1960s and it is not always clear precisely which elements of them are genuine. The outer face of the extant part of the N wall consisted entirely of coursed ashlar, as perhaps had the rest of this side, to present a façade of high-quality masonry inside the palace courtyard. In contrast, the other side of this wall was faced with rubble. Each wall had a core of mortar-bonded rubble. Their foundations mostly comprised angular rubble, often quite large and tightly packed, within bedding trenches about 0.5m deep. The exception was the W end of the N wall whose foundations were much looser, probably because they had been disturbed. Coarse sand, gravel and small pebbles infilled the gaps between the foundation stones although mortar had been used at the E end of the S wall. The foundations had all been levelled off with a layer of coarse sand upon which the masonry of the walls was bedded.

There were enough anomalies within the foun-

dations of the E wall of the building to suggest there had been more than one phase of construction. However, these differences may simply reflect variations in the materials available to the builders or mark breaks in building campaigns. Most of these foundations comprised large, drystone rubble projecting 0.8m from the wall face whereas, at the S end of the wall, a plinth of heavily mortared-masonry, 2.7m long and 0.3m high, lay between the foundations and the upstanding masonry.

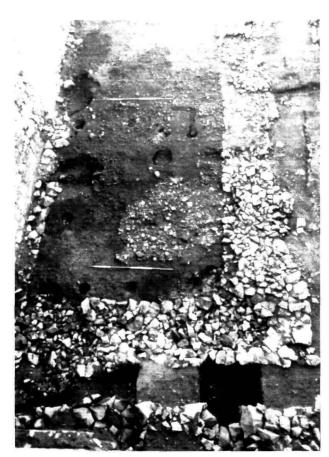
There are several features visible within the standing masonry of both faces of the E wall. Unfortunately, details of those features were masked when the wall was repointed in recent years, before the archaeological investigations began. On the inside face of the wall, roughly in line with the mortared plinth at foundation level, is a vertical line of sandstone blocks which can just be discerned on the wall's outer face. Although resembling the jamb of a blocked doorway, it did not extend as far as the base of the wall and no trace of a corresponding jamb was visible. Excavation inside the S range uncovered nothing to shed light on this enigma and, as the area immediately outside the building's E wall was not investigated, the problem remains unresolved.

The S wall of the building was almost intact along most of its length, standing to the same height as the W and SW curtain walls. On the external face of the wall, towards its base, was a three-coursed chamfered plinth, a decorative device that continued along the face of the SE tower and along the E curtain wall.

At first-floor level, the S wall of the chapel had been pierced by three windows, their outlines being clearly visible in the outside face of the wall (illus 17 & 19). Although these windows were modified considerably (and in one case blocked) during Period 5, they appear originally to have been broadly similar in dimensions and design. On the outside they were represented by pointed-arched openings, 2.15m wide and 3.1m high, with their chamfered jambs set tightly against each other. The openings are likely to have contained tracery although no details of such survive in situ. Internally they opened into segmental rear-arches, the westernmost being some 2.6m wide and the others (obscured by blockings) apparently somewhat less (illus 18 & 19). The first storey of the building was thus well illuminated from its S side and may have been equally well lit from its N side. There may even have been windows at ground-floor level on the courtyard side but, no doubt for reasons of security, none faced south. The floor of this chapel was supported on timber joists whose sockets, measuring 0.5m by 0.4m and spaced 1.4m apart, pierced the wall just below the windows.

The outer gateway, probably the main entrance to the palace in this period, was set in the S wall of the range, 2.8m from its W gable. The chamfered plinth that runs along the external base of the wall stops some 0.25m from the opening, indicating that the gate was an original feature of the wall. The opening itself is some 2.6m wide between the jambs (the W one appears to be missing), widening into a passage, 3.15m wide. The right-hand jamb survives to a height of 1.88m and is 0.44m thick, and it bears a plain chamfer on its outer arris. Although the arch is missing, it would have extended well above the level of the floor relating to the windows. In Period 5, the gate was blocked with mortared rubble, only a small part of which was removed during the excavation. No evidence was found to indicate the arrangement of the door hinges but, to judge by the width of the gate, the door was probably two-leafed. Immediately behind the door in its eastern reveal, 1.3m above threshold level, is the slot for the draw-bar used to secure it. It measures 0.25 by 0.20m in section and at least 5m deep. Nothing remains of the threshold which was probably removed when the gateway was blocked in Period 5. At its inner end, the gatepassage is rebated on both sides to take a pair of inner doors, the rebates being 0.25m wide and 0.18m deep. Because the distance between the inner and outer door checks was only 0.92m and the swing of each outer door leaf (assuming there were two) would have been some 1.55m, the outer door could not have been opened when the inner one was shut. It seems likely therefore that the inner one was an iron yett, which would have been closed only when the security of the palace was threatened.

Inside the range, the gate-passage would have widened out to around 6.5m. It was defined on its W by the W gable wall, which is aligned with the jamb of the blocked inner gate described above. The other jamb of this inner opening has not survived and its width remains unknown. There was probably some kind of partition separating the gate passage from the rest of the ground-floor, perhaps with a door leading into a guard-room. Excavation revealed no trace of such a partition and there is no sign of it in the N elevation of the S wall. However, such evidence may have been obliterated by alterations carried out to this wall face in Period 5; furthermore, the partition may well have been of timber of which all trace has been lost. It cannot have been located more than 2m east of the outer gate opening because the gate passage would then have impinged on the chapel on the floor above.

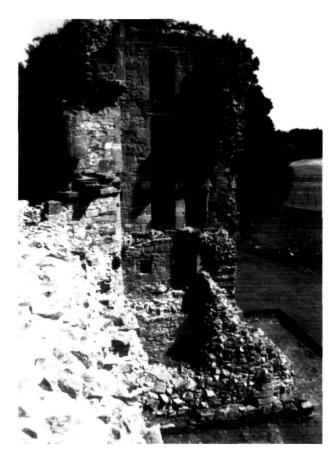


illus 20 View, from the east, of the south range during excavation, showing the passage at the east end of the building.

At the E end of the range was a passage, 1.6m wide (illus 20). Its W wall had been demolished to its foundations which were integral with those of the N wall of the building and which also widened into what appeared to be the base of a stair at the S end of the passage. Such a stair could have given access to the upper floor of the range as well as to the SE tower.

A few patches of plaster adhering to the inside face of the S wall at first-floor level appear to date to Period 5, when the building was remodelled, although the walls were presumably plastered from an earlier date.

Since no trace survived of partition walls or floor surfaces within the ground floor of the range, there was nothing to suggest how much of its space was utilized. The eastern part was probably used for storage, for which a sand and gravel floor would have been sufficient. There may also have been a guard-room associated with the gate which, together with the gate-passage, would have required a harder-wearing floor surface of flagstones or cobbles. Such a



illus 21 The south-east tower viewed from the west.

floor could have been removed without leaving a trace, either when the E gate became the main entrance into the palace or during post-abandonment robbing.

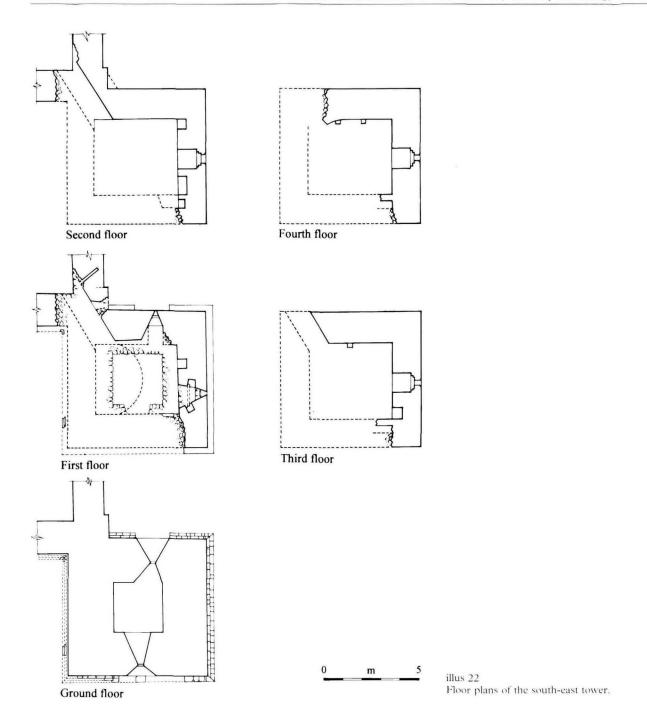
THE SOUTH-EAST TOWER (illus 21, 22)

The SE tower is usually considered to be a late 15thor early 16th-century building, an interpretation supported by the inverted keyhole-shaped gun-loops piercing its walls at first-floor level. However, there is convincing evidence that this building incorporates the partially demolished remains of an earlier tower, contemporary with the original S curtain wall. For example, the three-course chamfered plinth on the outside face of the S range continues around the W wall of the tower and part-way along its S wall. Indeed, one of the corner stones in the re-entrant angle between the tower and the curtain survives in situ. Most of the chamfer has been removed where the building's walls have been rebuilt and where a wide-mouthed gun-loop was inserted into its S wall in the mid-16th century.

The tower was entered at first-floor level from the E end of the S range, through a passage, which continued diagonally through the SE corner of the range. On its E side, the passage was lit by an opening, a mere 0.18m wide. Evidently, the floor of the tower's first storey was of timber, carried on a wide scarcement. Presumably, access to the basement was by a trap-door and ladder.

At basement level the tower measured 2.6m square within walls 2.4m thick, set on foundations comprising rafts of massive rubble boulders with layers of sand between them. To ensure structural stability over the Period 2 ditch, these foundations extended as much as 1.3m beyond the wall faces in the SW corner of the building. In the S wall there are remains of an original embrasure, later converted into a wide-mouthed gun-loop. Another such opening in the N wall appears to be a 16th-century slapping.

Of the first-floor room only the N and E walls and a small part of the S wall survive. This room, which would have measured about 4m N/S by 3.6m wide, appears to have had either an E/W barrel-vault or more likely a groin-vault. However, only the lower parts of the springing remain visible, the rest having been removed when a timber second floor was inserted in Period 5. Originally, the N wall was pierced by a plain splayed arrow-slit with a plunging base; the sides of the splay are slightly rounded, presumably to allow room for the archer, and it is lintelled over with stone slabs. The opening was later converted into an inverted-keyhole type of embrasure by blocking its base and inserting a subrectangular shot-hole below the existing observation slit. In the E wall there is a second inverted-keyhole embrasure but with a rounded, rather than subrectangular, shot-hole. Here too the shot-hole appears to represent a later modification, its bottom stone probably being cut originally as a plain arrow-slit (cf Zeune 1992, 71, table 6). Apart from the difference in the shape of their shot-holes, these embrasures are remarkably similar. Inverted-keyhole embrasures first appeared in England with the advent of hand-held guns in the 1380s, whereas the earliest securely dated Scottish examples range from the 1480s, extending through the 16th century (Zeune 1992, 70-79). The sub-rectangular shot-hole is probably contemporary with the wide-mouthed shot-holes inserted into the basement of the tower and hence of 16th-century date (Period 5). The rounded one could be contemporary or slightly earlier (again Period 5) whereas the original, plain slits seem more likely to belong to the 14th century



(Period 4). Set into the E wall, between the two embrasures, is a rectangular aumbry.

It is difficult to comment in detail on the function of the Period 4 tower because so little of it survives. However, as well as providing flanking fire to cover the south and east sides of the palace (including the S gate), it probably contained chambers and possibly a sacristy associated with the chapel in the gatehouse range.

THE SOUTH-WEST CURTAIN WALL

The remains of this stretch of the curtain wall ran south-eastwards from David's tower which clearly had been built around it. Curiously, its bedding trench, which was 2.6m wide (0.8m more than the wall itself), extended only 7m from the tower. Its foundations comprised two courses of large, angular boulders separated by a layer of coarse sand, which also filled the interstices between the stones. They

were set at least 0.4m into the subsoil but somewhat deeper below the S face of the wall, presumably to provide secure footings on sloping ground. The wall itself, which was built mainly of uncoursed sandstone rubble, stood to its maximum height of 6.7m against the tower, where a door led out onto the wall-walk, but it had been demolished to ground level only a short distance from the building. In an engraving by Lachlan Shaw (1775, 285), there appears to be a

wall linking the S range and David's tower – presumably a curtain wall – although this structure could easily be an amalgam of various elements, including the SW curtain, a Period 6 defensive rubble wall and the artist's imagination. A short section of this wall was rebuilt in the 1990s to serve as a buttress to help stabilize the east wall of David's tower.

3.5.3 THE PUTATIVE ROUND TOWER

Whatever stood at the SW corner of the palace during Period 4 was destroyed when David's tower was built in the late 15th century. However, there are a few clues as to what might have stood there although any interpretations so drawn should be viewed with caution.

One of the unexplained anomalies within David's tower is that one of its two cellars is circular whilst the other, like the rest of the tower, is rectangular. One possibility is that the circular room had been the

basement of a Period 4 round tower. This idea is supported by the highly suggestive evidence of the building plan (see illus 37). It may be noted, for example, that the entrance to the cellar (or tower if such it was) lies directly at the point of intersection of the W and SW curtain walls. Furthermore, the remains of openings in its NW, SW and SE walls make no sense in terms of a cellar but would be well placed to act as ventilation slits in the basement of a putative round tower.



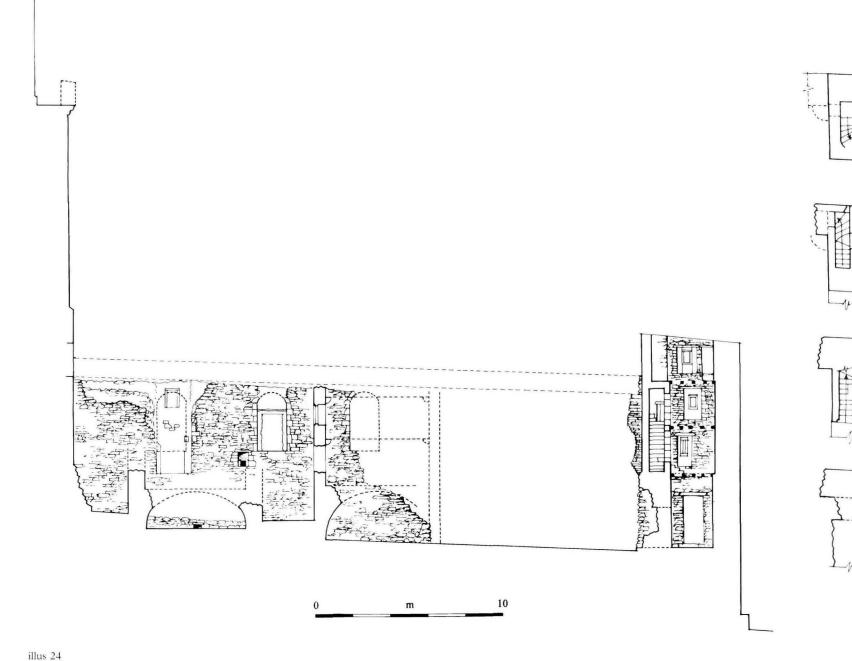
illus 23
The outside face of the west curtain wall in 1963, prior to masonry consolidation.

Third floor

Second floor

First floor

Ground floor



Sectional elevation through the west range and north-west tower, and floor plans of the north-west tower.

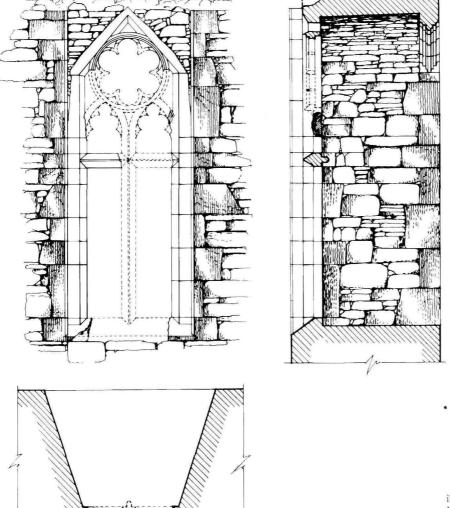
There are no clues within the masonry inside David's tower to corroborate this hypothesis although an analysis of the building's exterior is somewhat more revealing. Where they are set within the former ditch, the tower's walls have a doublesplayed base, faced with dressed sandstone, whereas the foundations of those stretches of its N and E walls lying within the curtain wall comprise very crude rubble standing at least 1.5m above ground level. It is interesting to note that this rough stonework was built around, and hence post-dates, the

truncated remains of what may have been the S wall of the W range (see below 3.5.4). It seems improbable that the builders would have left such a shoddy finish to an otherwise impressive tower unless this masonry was intended to be hidden. Alternatively, this stonework may pre-date David's tower, perhaps buttressing the masonry of an early tower or representing its below-ground foundations which, on this side of the curtain wall, might have been set into the earlier bank.

3.5.4 THE WEST RANGE (illus 23-26)

The only element of the original Period 4 west range still standing is its outer wall, the W curtain. This appears to have been faced with the same type of uncoursed random rubble as was the S range

although much of the facing masonry of both buildings dates from the 1960s when stretches of walling, including a breach at the S end of the W curtain, were rebuilt. The W curtain still stands to a



Elevation, section and plan of one of the partially blocked windows in the west curtain wall.



illus 26
The north-east corner of David's tower, showing its projecting rubble foundations (perhaps remnants of a Period 4 round tower), surrounding truncated wall F3783 (a possible remnant of the south wall of the west range). Viewed from the east.

height of 6.5m, apart from its N end, which is completely demolished. From Period 5 onwards, it was slightly reduced in height and provided with a wall-walk, 1.8m-wide, accessed from second-floor level of David's tower and from the NW tower. Two pointed-arched windows and traces of a third at the N end of the wall at first-floor level allow the W range to be identified as a 14th-century building. The traceried head of one of these windows, which was lowered in position but retained when the wall-head was reduced in Period 5, indicates that the window was a tall, two-light opening with pointed heads touching a foiled circlet (cf Fawcett 1984, type III.B2). Other tracery fragments that were recovered ex situ support a 14th-century date for the windows (see below 4.10). Their fine quality indicates that this was intended to be a building of some status, perhaps with a hall at first-floor level. However, it is far from certain if this range was ever completed in Period 4; the late 14th-century curtain wall at Doune Castle, for example, contains windows for two ranges that were never built (Pringle 1987, 14-17).

Nothing now remains of the other walls of the W

range, except perhaps for the remnant of what may have been its S wall (F3783) whose stub was visible in the face of the rubble below the E wall of David's tower (illus 26). No trace of this wall, which was 1.2m thick and survived to a height of 1.7m, remained beyond the tower's foundations although clearly it must have extended eastwards from that point. A short stretch of this wall has been rebuilt in recent years in order to retain the earth bank (also modern) that now provides access to visitors into David's tower. No trace of the E and N walls of the W range have been uncovered, presumably because they were removed when this part of the palace was comprehensively remodelled in Periods 5 and 6. As a consequence, very few Period 4 features have survived in this area, other than the curtain wall and perhaps a kiln.

KILN 1

The remains of Kiln 1, which had been set into the levelling deposits of sand and gravel, lay against the W curtain wall, about 12m north of David's tower

(illus 45 below). It was keyhole-shaped with a flue extending southwards from the bowl. Only one course of walling survived: 0.3m-wide, rubble bonded with coarse, pinkish brown, clayey sand mixed with a little mortar. Its floor comprised large sandstone flags which were fire-blackened but not cracked. Both the bowl and the flue were filled with fine ash and charcoal (presumably from the last firing), overlain by silt and clay which had washed in after abandonment.

Just to the east of the kiln were the fragmentary remains of a wall (F2737), perhaps belonging to the Period 4 west range although it could have been an even earlier feature. This wall was 1.3m wide and built of mortar-bonded, sandstone rubble of which only one course remained. It had been truncated by the N wall of the Period 5 Structure 3 and petered out some 1.3m north of it.

3.5.5 THE NORTH SIDE OF THE PALACE ENCLOSURE

The northern boundary of the palace enclosure still follows the line of the original 14th-century N curtain wall. It was 44.5m long but more than half of it was dismantled in Period 5 when its lower courses were used as the foundations for a new wall, which also served as the outer wall of the N range.

No Period 4 buildings survived within the area now occupied by the basement of the N range because of the depth of deposits that were removed during the latter's construction. However, at least two phases of



View, from the east, along the west section (Period 4) of the wall-head of the north curtain.

earlier structures had been incorporated into the massive W wall of the Period 5 building. The first of these consisted of five courses (0.80m high) of a 1.3m-long and 0.8m-wide stretch of mortar-bonded wall (F1371), plastered or rendered on its S face. It was aligned ESE/WNW, unlike any other structure or feature surviving in that part of the site. This masonry was uncovered about 1m above the estimated floor level of the N range basement. No trace of it was found inside the building, perhaps because it had been swept away during wholesale levelling in preparation for the construction of the N range in Period 5.

Wall F1371 may even have pre-dated Period 4 because, at some stage before the N range was built, this arrangement was altered to form a 2m-wide recess by the construction of two rather narrow walls (F1390 and F1883) against its S side. This small chamber, which was truncated on its E side and infilled when it was incorporated into the W wall of the N range in Period 5, survived for a length of only 1.5m. Its function remains unknown. One possibility is that it was a guard chamber, perhaps associated with a predecessor to the watergate. If so, on the evidence of the positions of its three remaining walls, the putative earlier entrance would have been located to the east of the extant watergate.

THE NORTH CURTAIN WALL (illus 27, 56)

Although the construction of the Period 5 north range necessitated cutting into a natural slope, it is still possible to envisage the N/S profile of this part of the enclosure during Period 4. The ground had sloped down towards the north at an angle of about 20°, the bedding trench for the curtain wall being cut into this slope, through 0.2m of topsoil (later to be buried beneath Period 5 deposits) and 0.3m of underlying beach sands. Extending 0.4m out from the S face of the wall, the bedding trench was then

backfilled with rubble and sandy soil. The remnants of this stretch of the Period 4 curtain wall survived to a height of 2.0m in places although it was considerably lower elsewhere along its length. It was built of clay-bonded rubble masonry protruding some 0.50m beyond the face of the Period 5 wall.

The 16.5m-long stretch of the N curtain that runs from the NW tower to some 3.5m beyond the watergate survives essentially intact, standing to a height of 6.8m above the threshold level of that doorway. It is 1.7m thick and faced on its north side with mortar-bonded sandstone. The lower half comprises random rubble and pinnings brought to a level every one to three courses, while the masonry of its upper half is squared although not of ashlar

quality. The division between these two building styles corresponds with a line of beam sockets on the outside face of the wall, marking the roof of a lean-to timber building (or buildings) (see below 3.5.8).

When vegetation and debris were removed from the top of the curtain, remnants of a 0.90m-wide wall-walk were revealed. To its outside was a parapet, 0.50m wide, which survived to a maximum height of only three courses. The wall-walk was paved with a series of flags, many of them missing, particularly at the W end of the wall. The flags were slightly troughed and bedded at an angle to allow rainwater to be carried towards a single spout, which projected a short distance beyond the outside face of the wall, just W of the watergate.

3.5.6 THE NORTH-WEST RANGE

To resolve fully the building history of this part of the palace, at least some sections of its standing walls would have to be dismantled – and this is unlikely ever to be permitted. Nevertheless, significant amounts of information were retrieved from this area and it has proved possible to interpret at least some aspects of its complex building history, as well as to assess how the range might have functioned for some of the time that it was in use. However, these tasks were hampered somewhat by the damage inflicted by tree roots and burrowing animals and the consequent unreliability of the artefactual evidence.

The only attempt to level the steep slope in this corner of the enclosure appears to have been carried out in tandem with the construction of the N and W curtain walls. Unfortunately, the northernmost 12m of the W curtain had been demolished at some stage after the palace was abandoned, leaving only traces of its foundations and the deposits that had built up behind them to be uncovered. Small quantities of materials deposited in the area on earlier occasions were probably the discarded debris from building operations elsewhere in the palace.

Most of the known evidence about the Period 4 levelling operation was retrieved by cutting a section across the S side of the range, a process that effectively consisted of cleaning an already badly disturbed and eroded area. Otherwise, the levelling deposits, which reached their maximum depth of about 3m against the N curtain wall, were left intact. They comprised sands, gravels and small pebbles with occasional lenses of rubble, much of these materials perhaps taken from demolished ramparts associated with the Period 2 and 3 defences. These

deposits overlay compressed topsoil and a thin layer of mortar, perhaps from the construction of the adjacent curtain walls. From that time until the abandonment of the palace, this part of the enclosure was occupied by domestic offices, the layout and functions of which were adapted to the changing needs of the palace over at least three centuries of occupation. The NW range was defined on its N and W sides by the curtain walls whereas its S wall was completely demolished, the probable victim of post-abandonment robbing and later landscaping.

At first glance, it could be assumed that the range ended at the watergate passage, but the excavated evidence suggests otherwise. The earliest surviving feature to post-date the massive levelling operation that heralded the start of Period 4 was an oven or kiln (Kiln 2) (illus 28) whose flue was truncated in Period 5 by the construction of the original west wall (F1311) of the watergate passage. This was to serve as a retaining wall for the made-up ground to its west. Because Kiln 2 had been truncated by this wall, it is reasonable to suggest that the platform of madeup ground had once extended further east, perhaps as far as what became the west wall (F1303) of the north range. This eastern part of the range was subsequently removed with the insertion of the watergate passage. The only walls that were integral with the Period 4 north curtain were F1303 and F1334, the latter dividing the NW range into two separate areas.

The NW range measured 16.8m E/W but, as no trace of its S wall survived, its width remains unknown. Wall F1334 was not a good indicator of the building's width because it had been truncated at its

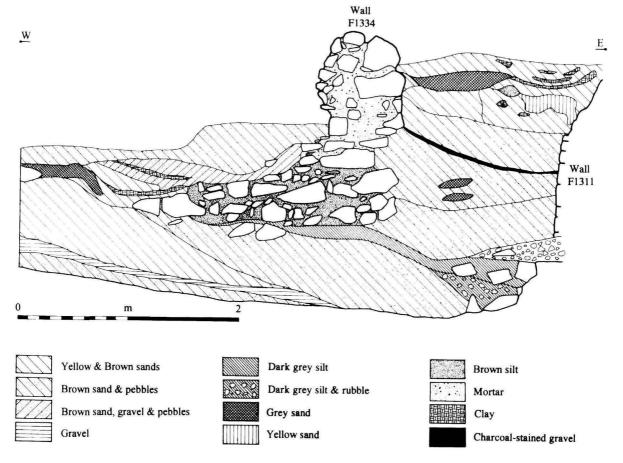


illus 28 Plan of the Period 4 features in the east chamber of the north-west range. Later structures are shown as faint lines.

S end. Assuming that wall F1303 was not altered in length when the N range was built against it in Period 5 (although it appeared to have been thickened at that time), then this range measured between 7m and 9m N/S, the higher measurement perhaps being the more likely.

At its junction with the N curtain, wall F1334 survived only as tusking to a height of 2.6m. The rest of it had been demolished to ground level and, in places, to its foundations. It was 1.1m thick at its north end but widened to a massive 2.3m, some 3m from the N curtain, and continued as such for the remainder of its surviving length of 6.8m. The reason for this thickening is not known, no obvious

clues coming to light through excavation, although the wall would have been sufficiently wide to have supported a stair, perhaps to a loft. The E chamber was 7m wide; the western area, sub-divided into two equal-sized chambers (although the partition had been removed at a later date), was somewhat larger, at almost 9m wide. Several kilns, or ovens, were identified in the E chamber but there was no trace of a large fireplace or any other features to suggest that this was a kitchen during Period 4. The same was true of later phases of this room although, on the evidence of an inventory of 1607 (Appendix 1, no 1), this chamber was almost certainly a kitchen during Period 5 (see below 3.6.8). Although three phases of stone floors were uncovered in the E



illus 29 Section across part of the east chamber of the north-west range. The position of the section is shown in illus 28.

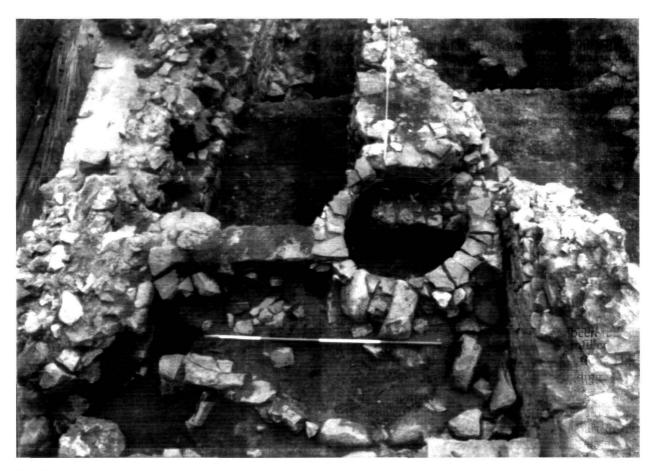
chamber, they all appeared to date from Periods 5 and 6; in Period 4 this range seems to have been floored simply with levelling deposits of sand and gravel.

THE EAST CHAMBER (illus 28-30)

The earliest feature uncovered was Kiln 2, which had been truncated by the Period 5 W wall of the watergate passage. Its bowl measured approximately 1.6m in diameter (its S side having been damaged during the insertion of another kiln later in Period 4) and its flue, which lay to the E of the bowl, was 0.8m wide internally. The kiln wall survived as a single course of granite boulders and sandstone rubble, the latter burnt red. Both the bowl and the flue were floored with rough sandstone flags, some of them very thick, whose surfaces were burnt red. Burnt silty clay, sand and rubble, presumably from its collapsed walls, filled the kiln whilst burnt peat ash (from the only fuel of which any trace remained) covered the surrounding area. Large quantities of peat ash also lay below the kiln, suggesting that this was not the first such feature to be built in the NW range.

Nothing contemporary with Kiln 2 survived in the E chamber although another kiln had been built over its demolished remains, later in Period 4. The 0.4m-wide flue of Kiln 3 had been forced through wall F1334 at an angle of about 45° and its bowl, measuring 1.1m diameter internally, protruded into the E chamber. The walls of Kiln 3 had been set into the debris and waste from the earlier kiln(s) and its N side incorporated part of the S wall of Kiln 2. Its walls, which stood to a maximum height of 0.6m, comprised small sandstone rubble and a few large granite boulders, all bonded with clay. Both the sandstone and the clay were burnt red whereas the granite was relatively unaffected by heat. Its flue and those parts of the bowl adjacent to it were lined mainly with quite small, thin pieces of sandstone (up to ten courses high) which resembled small bricks.

No trace of a floor survived in Kiln 3. At its base was 0.2m of pale brown silt whose upper surface was burnt, indicating that this was the material upon which the floor had sat. It can probably be assumed that the flooring material (probably sandstone flags)



illus 30
The east chamber of the north-west range, showing Kiln 3 overlying the remains of Kiln 2. The Period 5 watergate passage is on the extreme left. Viewed from the north.

had been sufficiently intact to be reused elsewhere. The kiln was infilled with peat ash and rubble (waste from the last firing) and debris from its collapsed walls and perhaps those of other structures near by.

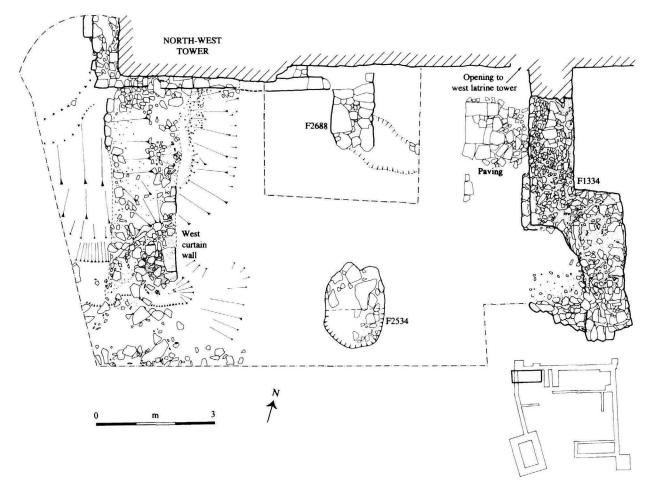
The functions of Kilns 2 and 3 remain unknown. Both structures were badly damaged and their environs had suffered extensive disruption when the building was remodelled in Periods 5 and 6, and later from animal burrows and tree roots. There was no trace of carbonized grains or industrial debris within or near either kiln, to suggest that they had been used for brewing or baking. However, Kiln 2 might well have been used for malting or to support a metal cauldron whilst Kiln 3 certainly resembled a bread oven although its position, barely above floor level, might argue for a different function.

THE WEST CHAMBERS (illus 31)

The archaeological record within the two W chambers was scant compared with that in the rest of the building. Three kilns were identified but all appear to date to Period 6. It would be easy to

conclude that the W half of this range saw little service during Period 4 but the paucity of features is more likely the result of comprehensive demolition, stone-robbing and landscaping following the destruction of the W curtain wall. Excavation was not completed in the NW range and there may still be Period 4 features awaiting discovery, particularly in the W part of the building.

The two W chambers, each 4m wide, were divided by a partition wall (F2688) whose remains comprised one course of mortar-bonded rubble masonry, 1.1m wide and extending only about 2m from the curtain wall. The wall was revealed when a Period 6 kiln was removed in 1994, prior to the installation of the foundations for a new stair giving visitors access to the upper levels of the NW tower. It was interesting to note that, whilst its single surviving course was continuous with the masonry thickening on the S face of the NW tower, wall F2688 was not tied into the curtain wall above this level. This could be explained by the curtain wall having been refaced after the partition was demolished. Towards the S side of the range was a pit containing well-compacted mortared rubble



illus 31
Plan of Period 4 features in the west chambers of the north-west range, showing the remnants of partition wall F2688 and the paving in front of the west latrine tower.

(F2534), perhaps an element of the partition wall or demolition debris from it.

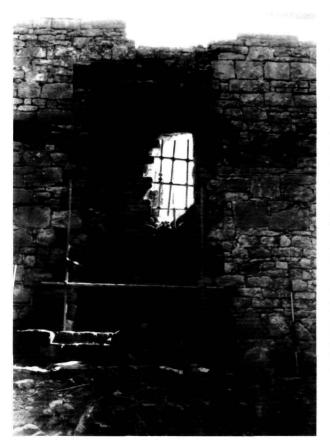
The only other feature that can be definitely ascribed to Period 4 was an area of paving in front of the entrance into the W latrine tower. Its sandstone flags covered an area of about 1.5m square, together with a few more flags a short distance S of the main group. Most of these flags had been badly damaged by heat, as had the clay in which they were bedded. The source of heat was probably a kiln, built over the flags in Period 6 but whose remains were very scant.

THE WEST LATRINE TOWER (illus 32)

Some 4.6m east of the NW tower, the W latrine tower projected 1.2m from the N curtain wall. It measured 2.4m by 2.0m within walls 0.5-0.6m thick and had served both the NW range at courtyard level (and perhaps from a loft), as well as the wall-walk of the N curtain. Its two chutes were both demolished:

at courtyard level, only a few sandstone slabs remained from the latrine roof, and only tusking survived from the chute above.

Lack of time prevented excavation being completed beyond the N wall of the palace and it is not clear whether the latrine tower's foundations had cut into the deposits that lay against its walls or whether those materials had built up after its construction. The base of the tower was relatively level although there was no floor surface within it, only beach sands and gravels. It can only be assumed from this that waste was removed manually through the rectangular, lintelled opening on its north side, nearly 2m below the present ground level. All of the deposits excavated from within the tower post-dated its use as a latrine. On the evidence of masonry debris at its base (perhaps from the collapsed parapet above), those materials had been deposited after the tower was abandoned, probably in Period 6.



illus 32 View, from the north, of the west latrine tower.

3.5.7 THE NORTH-WEST TOWER (illus 24, 33)

The NW tower was four storeys high. It measured some 4.5m wide E/W and, although flush with the W curtain, it projected 3.4m beyond the N curtain wall. Although it is often considered to belong to the late 15th or early 16th century, the continuity of its masonry with that of the N curtain wall suggests that it is more likely to be a 14th-century structure in origin.

The tower was originally entered from the courtyard at ground-floor level, through an opening at most 1.16m wide in its S wall; however, this was blocked and its facing removed, probably in the 19th century when the tower was converted into a dovecot. The slapping of a door through its W wall, done at the time of this conversion, has also cut through a latrine recess of which only the lintelled head and sloping chute outlet now survive. A wide-mouthed shot-hole in the E wall represents a 16th-century insertion (see below 3.6.9); but a small slit window higher up the same wall, just below the ceiling, is an original feature.

It is uncertain what form of access, if any, there was between the ground floor and the upper floors of the tower. The main entrance to the upper levels was from the N curtain wall-walk, through a narrow, first-floor doorway with a check for an outer door. This door is similar to those that gave access to the same wall-walk from David's tower. It opened outwards because immediately inside it was a narrow stair, set within the thickness of the S wall. This stair ascended to the upper floors of the tower and to a door (now blocked) which opened on to the W curtain wall-walk. From there a cantilevered external stair led up to another door (now represented only by its left-hand jamb) giving access to the third floor. A single corbel remains to indicate that the W curtain had had a corbelled parapet.

To judge by their size (some 2m by 2.5m) and location, it seems likely that the chambers within this tower housed senior domestic staff. Each chamber had a narrow slit window in its E and W walls and the ground- and third-floor rooms each had a latrine served by a chute in the W wall. In 1607, the NW



illus 33
The north-west tower, viewed from the south. Note the stump of the demolished west curtain wall projecting from its south face.

tower (referred to as the 'water tower') seems to have contained the 'parssonnis houis' on the first floor, with a caphouse above and the 'laich chalmer' below (see Appendix 1, no 1).

3.5.8 OUTSIDE THE NORTH CURTAIN WALL

Exploratory trenching along the outer face of the N curtain wall in 1986 was succeeded by more extensive excavation the following year within a trench extending from a point 8.3m E of the watergate to 5.3m W of it, midway along the outer face of the latrine tower. This trench was approximately 4m wide although it varied somewhat, partly because of the slope down to the former loch side but mostly to avoid some of the substantial trees in this heavily wooded area. Many of the features and deposits uncovered within this trench had been badly disturbed by the dense mat of tree roots. As a result, far less was achieved than was hoped in this, the most northerly area of excavation and several important relationships remain unresolved. That notwithstanding, some interesting features were uncovered, many of them associated with a range of lean-to timber buildings that had stood against the curtain wall, some of which had been linked with activities inside the palace enclosure.

THE LEAN-TO BUILDINGS

Below topsoil, much of the excavated area was covered with a crude, flagged floor comprising medium-sized, angular stones and some reused tile fragments. To the E of the watergate, the flags were bedded in clay whereas further W they were set in sandy soil over levelling deposits of sand and gravel. The flags seemed to be associated with a line of evenly spaced beam-sockets in the face of the N curtain, about 4m above the floor level. The seven sockets that lay to the E of the latrine tower were square in section and continued beyond the

watergate. The five sockets to the W of the tower were somewhat larger and were rectangular in section; they extended as far as the NW tower. The differences between these two groups of openings indicate that there were probably two separate leanto buildings, divided by the latrine tower and not one continuous structure as Simpson argues (1927, 12). There may have been buildings extending much further along the curtain wall although any such evidence would have been destroyed when the eastern stretch of the wall was rebuilt in Period 5 (see below 3.6.6). There was no trace of a roof raggle in the E wall of the NW tower; although the insertion of a wide-mouth gun-loop in that wall during the mid-16th century may well have removed all evidence of such a feature. No trace was found of the N or E walls of this range, nor any evidence of partitions within it, although the difference in the materials below the flagged floor may be a reflection of separate chambers. It is also unclear how these buildings could have co-existed with the W latrine tower, although the dating sequences in this part of the site suggest that they did.

Because of severe damage caused by tree roots, it was not possible to link the finds retrieved from this area to the features within it. However, the complete absence of post-medieval artefacts, such as clay tobacco pipes, below recently disturbed levels suggests that the pottery (all local, medieval wares) and the bones (mainly cattle and sheep with some deer, domestic fowl and line-caught fish) were associated with the lean-to building(s) and had not been redeposited from elsewhere.

3.5.9 THE EAST SIDE OF THE PALACE ENCLOSURE

The E curtain wall stood to no more than 2m inside the courtyard although it was somewhat higher on the outside where the ground level was lower. It was 2.5m wide at its base, narrowing to 1.8m above the three-course chamfered plinth which continued around the SE corner tower and the S range. Above the chamfered courses, its masonry was of random rubble which had been repaired in several places, both during later developments within the palace and during 20th-century programmes of repair.

No evidence of any other structure pre-dating Period 5 was uncovered on the E side of the site, either within or outside the curtain wall, possibly indicating a dearth of activity in that area before the late 15th century. It is perhaps more likely, however, that all evidence of early buildings was destroyed when the E range was constructed in Period 5 and/or during subsequent programmes of alteration.



illus 34
The excavated remains of the cobbled road which may have linked the palace with the Holy Trinity Church. The Period 5 David's tower is in the background. Viewed from the south.

3.5.10 OUTSIDE THE SOUTH SIDE OF THE PALACE

Several trenches were opened within the field to the immediate S of the palace before a new power supply for the palace was run across it. Most of the features uncovered within those trenches date from Period 5 and are described in detail below (3.6.13). However, within one of those trenches were traces of industrial and domestic activities, probably dating to the 14th century, or perhaps earlier. In addition, exploratory trenching in 1986 exposed part of a road – another likely Period 4 feature – in the NW corner of the same field.

INDUSTRIAL AND DOMESTIC ACTIVITIES

In the NE corner of the field were spreads of iron slag and associated deposits of burnt sand and charcoal. The burning had not been *in situ*, indicating that these materials, identified as being

associated with smithying (see Chapter 4.12), had been deposited from elsewhere. Overlying the slag and charcoal was 0.2m of fine silt containing animal bones and oyster shells, evidently midden material and again redeposited from elsewhere, perhaps refuse from the palace or from other buildings close by.

THE ROAD (illus 34)

In a trench located some 17m SW of David's tower and measuring 4m north/south by 2m wide, was found part of a well-constructed road that appeared to be aligned NE/SW. It comprised mainly flat sandstone cobbles and had a pronounced camber sloping down to its SE edge (on the only side exposed) which had no kerb. Its position and alignment suggest that the road linked the palace to the Holy

Trinity Church, some 400m to the SW, perhaps from the door in the outside wall of the S range. Lack of wear on its surface may be an indication that traffic was light along the road or that it was regularly repaired.

3.6 PERIOD 5: UPGRADING THE PALACE (15th-16th century)

3.6.1 INTRODUCTION

The 15th century marked the beginning of another wholesale programme of reorganization within the palace, one that continued well into the following century. This included the construction of several new buildings - two of them impressive enough to rival contemporary developments at any other Scottish site – as well as the remodelling of existing ones. This period was marked by the construction of the massive SW corner tower, built at the behest of Bishop David Stewart (1462-76) (hence its traditional name of 'David's tower'), although he did not live to see his plan fulfilled. The second imposing structure was the two-storey N range, which housed a banqueting hall in its upper level. Other modifications included foreshortening the NW range to accommodate a passage from the watergate in the N curtain wall and the reorganization of its interior to adjacent banqueting hall. Further alterations to this building appear to have continued through the 16th and 17th centuries. In addition, a new entrance into the palace enclosure was forced through the E curtain wall (this may have signalled the start of the period of remodelling); the E range was built; the SE tower was rebuilt over the lower

two storeys of the original 14th-century tower; and the S range was remodelled. The W range was radically altered on two occasions within this period. First, its upper storey was divided into two levels and, as a consequence, its windows were partially blocked. A fireplace and slop drain were inserted at first-floor level and a window seat was added to the S window on the second floor. Later, with the exception of the curtain wall, the W range was completely demolished and replaced by two new buildings. Less obvious alterations were probably carried out to other buildings, the general impression being one of sweeping changes throughout the palace.

Some later works, probably dating from the episcopate of Patrick Hepburn (1538-73), include the insertion of wide-mouthed gun-loops into the curtain walls and towers of the palace and some modifications to David's tower and to the E gable and dais chamber of the N range. These are included in Period 5 for ease of description but are distinguished as Period 5A on the site plan.

3.6.2 THE SOUTH-WEST TOWER ('DAVID'S TOWER')

The SW tower is one of the largest medieval towers in Scotland (certainly the largest by volume) and measures 19m by 13.5m and 22m high. It has a vaulted basement, sunk about 1.5m below courtvard level, with five more storeys and a garret above, the fifth storey also being carried on a vault. Work on this massive building began during the episcopate of Bishop David Stewart (1462-76) but was not finished until his successor, William Tulloch (1477-82), was in office. Stewart's arms, along with those of the Crown and Patrick Hepburn (Spynie's last Roman Catholic bishop) were inserted between ground- and first-floor levels on the S face of the tower (illus 35). This was carried out by Hepburn when he remodelled the S façade and enlarged the windows (Period 5A). Tulloch's arms sit at a much higher level, on the turret at the SE angle of the tower, perhaps to signify that it was he who

completed the building (Macdonald 1900, 392-5, figs 46-7; Zeune 1992, 46).

The construction of the tower appears to have destroyed some of the material evidence of the Period 4 palace – as it did for earlier phases. It was built around the Period 4 curtain wall and appears to have been cut into the infilled Period 2 ditch on its N, W and S sides and into the subsoil on its east. Exploratory excavation against the west wall of the building revealed its foundation trench, which extended less than 1m from the wall face but clearly cut into the backfill of the ditch. Within the wall trench were a fragment of a coin and 33 jetons, almost all of them French and of 15th-century date. They lay in a column, suggesting they had been contained within a tight bag, probably of leather, of which no trace survived. There was nothing to



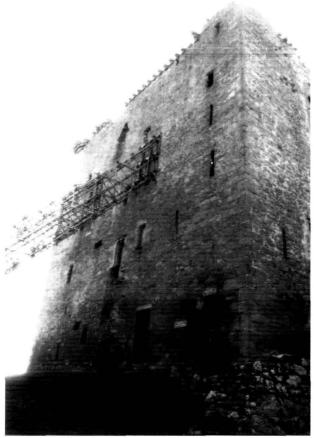
illus 35 David's tower viewed from the south.

suggest that the backfill of the foundation trench had been disturbed, making it likely that the jetons were dropped during construction work on the tower.

The exterior of the tower is plain and for most of its height rather austere (illus 36), relieved by numerous small windows and, in its first to fourth storeys, larger windows on its unprotected S side. Curiously, part of the N wall face is set back above first-floor level, providing some relief to an otherwise plain elevation. A double-splayed base extends around the building, except for those stretches of its walls enclosed within the curtain wall. There the lower reaches of the walls are finished in crude rubble projecting some 0.8m beyond the face of the tower. The contrast between this rubble, which extends for at least 1.5m above the estimated courtyard level, and the finely executed masonry that extends around the rest of the tower is a marked one. Clearly, it was not meant to be seen and its partial facing is undoubtedly secondary. It is unlikely to have been a structural device because the tower appears to stand on bedrock. Instead, it may represent a foundation originally below ground or the remains of walling associated with the putative Period 4 round tower (see above 3.5.3). Another possibility is that it was

associated in some way with a high-level passage leading from the W range to the first-floor entrance into the tower; although just how it might have worked is unclear.

The outside face of the tower is almost devoid of architectural details although the parapet is carried on large triple corbels, which may be compared with those on the 15th-century addition to Clackmannan Tower (RCAHMS 1933, 318). Early engravings and, more importantly, old photographs show that its wall faces were coated with render, substantial traces of which are still visible on the south facade. Internally, there is some ornament which tends to confirm a late 15th-century date for the tower's construction. This includes the simple quirked, roll-moulded decoration on the doorways at the S end of the mural chambers within the building's E wall (Zeune 1992, 29). However, there is clear evidence for later alterations such as the widening of the windows in the S façade and the insertion of wide-mouthed gun-loops in the building's S and W walls. The latter, at least, are almost certainly the work of the last Catholic bishop, Patrick Hepburn (1538-73). Similar gun-loops in the NW and SE



illus 36 David's tower viewed from the north-east.

towers and one in the E curtain wall are probably also Hepburn's work (Phase 5A).

The basement is entered through a low door on the north, next to the curtain wall (illus 37). This opening has been restored recently but enough of the original survives to show that, as well as an inward-opening timber door, it had a check cut into its surrounds for an external iron yett. The door led into an irregularly shaped lobby, from which two more doors gave independent access to passages leading to two separate cellars.

The right-hand door leads down a few steps into the northern part of the basement, which comprises a circular cellar, 5.3m in diameter and with a low, domed ceiling and a narrow opening, some 4m long, to the south-west. Traces of two other openings facing NW and SE respectively do not register externally and may relate to an earlier time when the cellar formed the basement of a free-standing round tower (see Period 4 above, 3.5.3). Although interpreted by MacGibbon & Ross (1887, I, 441) as a prison, in 1607 the circular cellar was being used as a 'salthouse' or larder for storing meat (Appendix 1, no 1); this may also have been its function earlier. The other cellar, identified in the 1607 inventory as a wine cellar, is rectangular and measured 7.0m by 5.5m. It was reached along a curving passage from the left-hand door in the entrance lobby; it also communicated with the storey above through a trap-door set in the rear-arch of a small window in its SE corner. Other, probably similar, windows in the S and W walls were converted into wide-mouthed shot-holes in the mid-16th century. The unusual arrangement of these two cellars may well be a legacy of retaining the basement of an earlier round tower from Period 4 (see above 3.5.3).

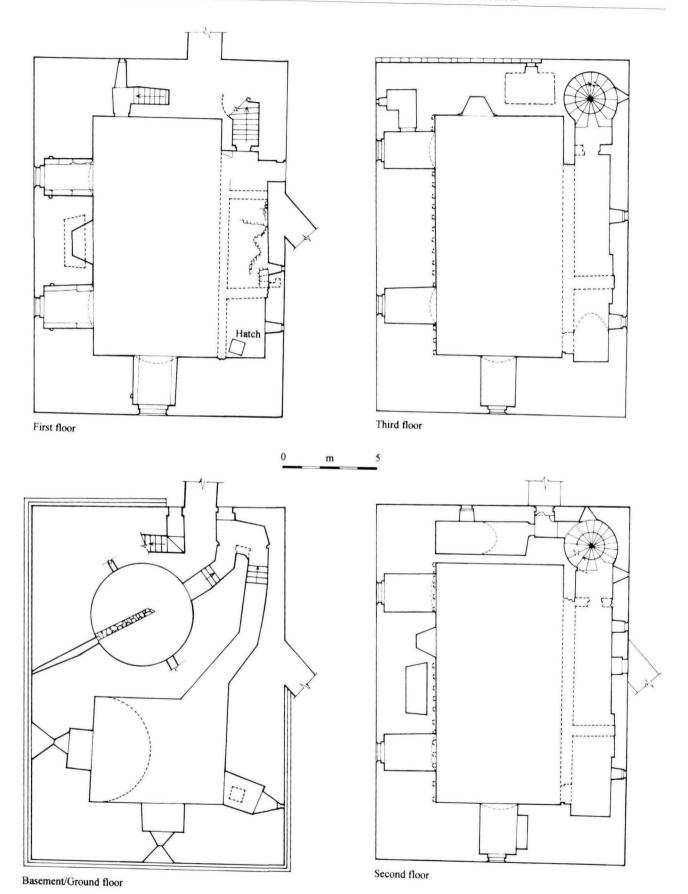
The principal entrance into the tower is at first-floor level, on the E side of the building. It now consists of a very modest doorway with no decoration. However, only the right-hand jamb and threshold are original, as the door was widened at some stage, probably in the 19th or 20th century. The original door appears to have been lintelled and was about 0.86m wide, opening into a lobby or passage, 0.92m wide. Like the basement door, the surviving jamb also has a check for an external iron vett. By the mid-19th century, a mound of rubble and other debris, most of it collapsed material cleared out of the tower, had started to collect against its east wall, outside this door (illus 108). Contemporary artefacts were retrieved from this material. Whether the door was originally approached up a grassy bank, as today, or through some masonry structure attached to it is uncertain. However, the unfaced rubble exposed at its NE corner was clearly not intended to be seen, suggesting that the first-floor door would have appeared as if at ground level when seen from inside the palace compound.

Above basement level, the main accommodation in each storey of the tower comprised a single room, measuring about 12.5m by 6.8m. In addition, on each storey there were mural chambers in the E wall of the building although the floor levels of these did not always quite correspond with those of the main rooms. At each level other than the basement, there were also latrines emptying into a chute which disgorged at the base of the E wall, just outside the curtain wall. The inherent weakness of such an arrangement (the inner walls being only 0.6m thick), exacerbated by the construction of a vault over the main fourth-floor room, had eventually resulted in the collapse of all the mural chambers at each level, leaving only the external face of the wall standing (illus 38).

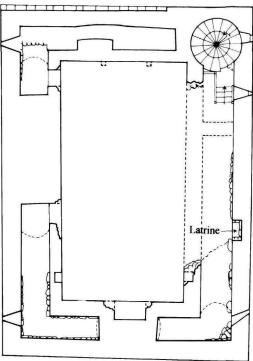
A spiral stair in the NE corner of the tower led from the entrance level on the first floor to its upper storeys. Most of the stair had disintegrated, probably at the same time as the E mural chambers collapsed. During the 19th century, replacement steps, accessed through a new doorway which included reused roll-moulded jamb and lintel stones, were inserted at the base of the stair, and these too were derelict by the 1970s. As part of the recent consolidation work, a new concrete stair was built, both to allow visitors access to the upper floors and to stabilize the NE corner of the tower. In addition, a reinforced concrete gallery has been inserted at the level of the barrel-vaults over the second-floor mural chambers and another at fifth-floor level, to reinforce the surviving outer skin of the E wall.

The principal door to the tower opened into a small lobby, which gave access to the principal room at this level (illus 37). To the right of the lobby was a turnpike stair leading to the upper levels of the tower. To the left, presumably through a door in a now-demolished wall, lay a barrel-vaulted guard chamber, measuring 5.3m by 2.1m and set within the thickness of the E wall of the tower. This had a small window and a latrine in its SE corner. Beyond it, in the SE corner of the tower, lay a smaller mural chamber (about 3m by 2m), entered from the main room through a door with a roll-moulding on its jambs and lintel. A trap door in the floor of this chamber communicated directly with the wine cellar below.

The main room at first-floor level was described in the 1607 inventory (Appendix 1, no 1) as the hall.

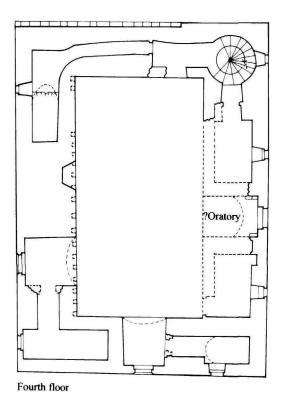


illus 37 Plans of the basement/ground floor, first floor, second floor and third floor of David's tower.

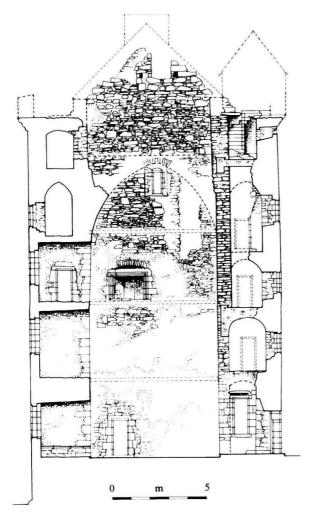


Fifth floor





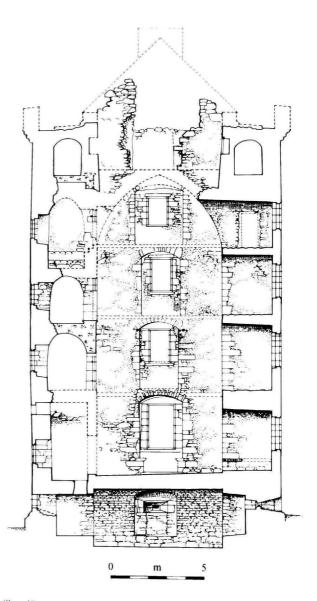
illus 38 Plans of the fourth and fifth floors of David's tower.



illus 39 Sectional elevation of the north side of David's tower.

Whatever its original designation may have been, it seems that this room would always have had a more public function that the suite of large chambers on the floors above. It had large windows on its S and W sides with bench seats in their reveals; in its W wall was a substantial fireplace whose moulded surrounds have been robbed and replaced recently by a plain and somewhat misleading reconstruction. In the N wall of the room was a narrow door whose surrounds have been robbed but since restored with a roll moulding to match the others in the tower. This opening gave access to a steep, narrow stair, which led down to an outer door in the angle between the tower and the outside face of the curtain wall. No trace remains of any timber screens or other internal partitions within the hall although it is likely that there were some originally.

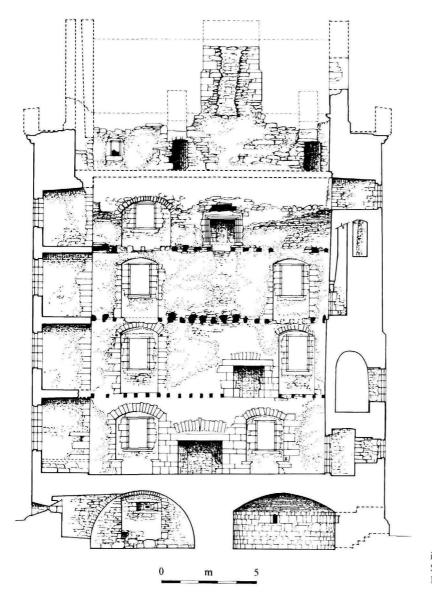
From the tower's entrance lobby, the stair to the upper floors rose steeply – more so than the modern, concrete replacement. At the point where it starts to



illus 40 Sectional elevation of the south side of David's tower.

turn at the bottom of the turnpike, a passage opens to the left. This leads to a low narrow door, checked for an external iron yett, which leads out on to the W curtain wall. Beyond that point another door opened into a narrow barrel-vaulted mural chamber, measuring 2.1m by 0.85m with a window in its N wall.

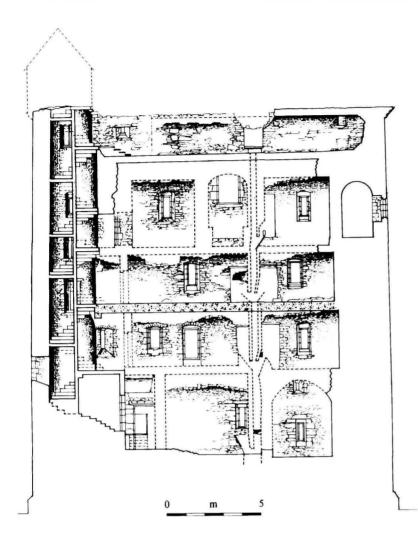
At second-floor level the stair gives on to a landing, lit by a splayed slit window, from which a door probably gave directly into the main room although a modern masonry buttress now obscures the evidence. This room has three large windows, similar to those of the first-floor hall, two in its W wall and one in its south. A small fireplace in the W wall has had its surrounds robbed and replaced by a plain modern restoration, as on the floor below. Within the



illus 41
Sectional elevation of the west side of David's tower.

E wall there were two mural chambers, 7.2m and 3.5m long, the larger one perhaps having been subdivided. Both contained latrines which were evacuated down chutes in the wall separating them. The larger chamber gave access to the SW curtain wall through a narrow door in the centre of its E wall. Like the door to the W curtain, it was protected by an external iron yett, evidenced by a check in the outer arris of the door surrounds. It is unclear how the larger chamber was entered from inside the tower, for its internal walls are all gone. The smaller chamber, however, had a door with roll-moulded surrounds, which opened from the SE corner of the main room.

The floor plan of the third storey seems to have been broadly similar to that of the second, with a principal room (the 'mid chalmer' of the 1607 inventory) lit by three large windows and two mural chambers inside the E wall. These chambers were 7.0m and 3.9m respectively, with back-to-back latrines emptying into the same chute in the wall between them. There is some indication at this level that the larger of the two mural chambers was entered from the stair landing. The smaller closet was entered from the main room by a door in the same position as those on the floors below, although at this level there was a step down into it. In the main room, the fireplace was set in the N wall. It still retains its richly moulded surrounds, giving an impression of what may have been lost by robbing from the lower levels. To its right a door, now completely blocked, opened into another mural closet which is now inaccessible and its dimensions unknown. It appears to have been entered at a later date from a crude opening in the wall of the turnpike stair, but this too has been walled up. The only remaining indication of its existence is a window in the outer wall of the tower. A second



Illus 42
Sectional elevation of the east side of David's tower.

mural chamber in this wall, perhaps for a dry stool closet, was accessed from the right-hand reveal of the NW window.

On the fourth floor, the landing between the stair and the door into the principal room was situated in the N, rather than the E, wall. The door jambs were robbed at some stage and the vault above the landing area also shows signs of modification. From this landing, a narrow door with plain chamfered surrounds opened into a narrow curving passage, which led to a barrel-vaulted mural closet in the west wall. This measured 3.36m by 1.4m and was lit by a single window, 0.42m wide, on the west. Its walls are unplastered, suggesting that, whatever its original intended function was, it was never completed and put into service. In contrast to the other levels, the principal room at fourth-floor level was covered by a barrel-vault that has now almost totally collapsed. It was lit by three large windows, similar to those on the other floors, set in the E, S and W walls, the reararches of those on the E and W sides partly intersecting the main vault of the room. There was also a smaller window high in the N wall, its rear-arch continuing the profile of the main vault. At

some stage, the lower part of the E window was blocked and the window itself modified. This suggests that it was a private oratory, in which the blocking supported a retable or altarpiece set in front of the window. Such an arrangement, with the oratory accommodated in a recess partitioned off from a large room, is not unusual in Scottish towerhouses. Other examples are found in the castles of Doune (Simpson 1982, 14; Pringle 1987, 20-21), Niddry (Proudfoot & Aliaga-Kelly 1997, 792), Carrick (RCAHMS 1992, 233) and Borthwick (MacGibbon & Ross 1887, I, 404-6, fig 349). It was equally adaptable for private prayer and for the private or more public celebration of Mass, with members of the household in attendance in the main body of the room. The oratory recess was set between two further mural chambers inside the E wall. The S chamber was entered directly from the main room and contained a latrine, the chute for which was built into the wall separating it from the oratory. Although this arrangement seems a little incongruous, the oratory's piscina may have drained into the latrine chute (evidence of such, however, is entirely lacking). The N mural chamber was entered from the turnpike stair, through a door with a plain

chamfered jamb. It is not known whether it had any other doors, although this is unlikely. There were two further mural closets at this level, accommodated within the thickness of the S wall and entered from doors set in the left-hand reveals of the S and W windows. Each closet was barrel-vaulted and lit by a narrow window.

At fifth-floor level, the turnpike stair gave into a barrel-vaulted passage, some 1.4-1.7m wide, which extended the whole length of the E wall within its thickness, before returning a short distance into the S wall. It may be assumed that a door in its W side gave access to the main room at this level. This room, described as the 'umost (uppermost) chalmer' in the 1607 inventory, would have partly occupied the roof space and was probably lit by dormer windows of some kind. Remains of a fireplace survive in the S gable wall. Two further openings in the west wall led into low barrel-vaulted mural passages occupying the NE and SE corners of the building, each lit by a narrow splayed window in the external wall. The eastern gallery also had two windows, the larger and more southerly of which was associated with a latrine at the head of the main chute.

The roof space also appears to have accommodated a garret, the sole evidence for which consists of a pair of corbels (one of them a reused gargoyle with a grotesque face) and a plain, window opening in the N gable. Access to it appears to have been internal, from within the main fifth-floor room.

From the fifth floor, the main staircase continued up to the wall-walk surrounding the roof. It would have been some 2m wide on the E and W sides of the tower and 1.5m wide on its N and S sides to accommodate the gables. The paving that survives at the SE corner consists of large slabs arranged in saddle-and-trough fashion. The parapet (of which

nothing now survives) was carried forward on a row of corbels. At the corners these formed rounds, partly set back within the angles. The turnpike stair appears to have terminated in a caphouse or lookout platform, reached by means of a crude and highly dangerous stair corbelled out from the outer face of the N gable.

Given the lack of detailed contemporary documentation relating to David's tower, it is wellnigh impossible to assign specific functions to the principal chambers on its four main floors. In any case, their usage would probably have changed over time, in accordance with the particular needs and preferences of the bishop of the day. Indeed, the room functions deduced from the 1607 inventory may not necessarily have corresponded with those intended by the original builders. Nevertheless, it would be reasonable to assume that the first-floor room, which the inventory designates a 'hall', would have served as a general reception area, while the bishop's principal chamber(s) and his bed-chamber would have been located in ascending order on the floors above. On the evidence of the relatively large number of wall closets and traces of what may have been an oratory attached to it, the barrel-vaulted room on the fourth floor was probably intended as the bishop's bed-chamber. Servants, including watchmen, were perhaps accommodated on the floor above. Some of the wall closets that are distributed so liberally throughout the tower would have served as latrines, whilst others would have been used to store furnishings, books and papers and as sleeping quarters for domestic servants. At second-floor level two of these closets and the turnpike stair between them also formed a route connecting the wall-heads of the palace's west and south-west curtains which, in times of insecurity, would have become a thoroughfare of some military importance.

3.6.3 EXCAVATIONS IN DAVID'S TOWER (illus 43)

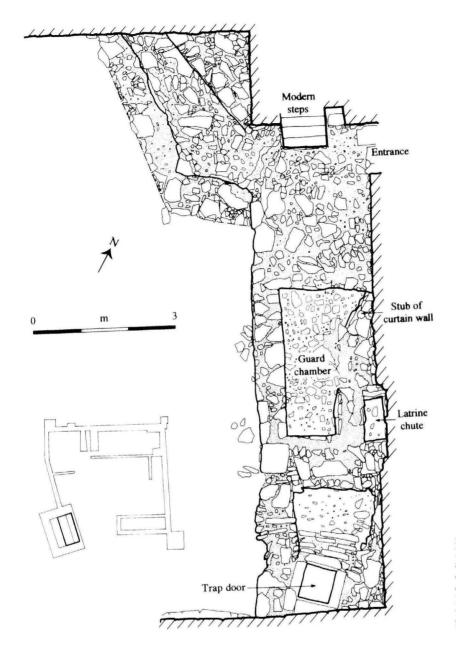
Excavation inside the tower was restricted to its ground floor, where up to 0.3m of recent deposits (mainly rubble from masonry consolidation and humic soils derived from wind-blown debris, mortar and avian excreta) were removed.

THE ENTRANCE LOBBY AND STAIR

Although the floor surface of the entrance lobby had been robbed, parts of the original stairway, which had been masked by the 19th-century insertion, were uncovered by excavation. Its foundations comprised large mortar-bonded rubble, extending more than 2m beyond the stair itself on its W side but somewhat less to its south. This masonry was not evident within the circular cellar below and must have been supported on the cellar's vaulted roof.

THE CELLAR ROOFS

The arched roof of the south (rectangular) cellar had been partially exposed on an earlier occasion



illus 43 Plan of the east side of David's tower, at hall level, showing the mural chambers and features revealed by excavation, including a remnant of the Period 4 curtain wall and the foundations of the original stair in the building's north-east corner.

(probably in the 1970s) in two trenches against the W wall of the tower. These trenches were reexcavated in 1993 but, to avoid disturbing the roof of the adjacent circular cellar, they were not extended northwards.

The vault of the south cellar sprang from its N and S walls, its extrados being sealed by a thin deposit of grey-green, clayey sand over which was a levelling deposit of voided rubble, much of it massive. As expected, the depth of this rubble increased towards the sides of the vault. Above the rubble was a thin layer of loose mortar, upon which the hall floor had been set. The only surviving remnants of this floor were a few broken flagstones projecting from the tower walls. There was no evidence to confirm that the two cellars belonged to different phases of

construction, although such evidence may lie within the fabric of the building at a lower level. Curiously, the roof of the window recess in the SE corner of the basement was vaulted at a slightly different angle from that of the adjacent rectangular cellar, and this is reflected in the alignment of its trap-door.

THE MURAL CHAMBERS

There had been some trenching in the guard chamber on an earlier occasion when the mortar and rubble upon which the floor rested had been disturbed. The only surviving remains of the floor were a few broken flags protruding from the E wall. These were set slightly above the level of the threshold into the tower but some 0.7m below the

aperture for the latrine chute in the E wall, and, presumably, steps had led up to it. The chute, which had been partially emptied at this level in recent times (but not under archaeological supervision), measured 0.9m by 0.5m across at this level and had extended the whole height of the building. It disgorged through an opening (1.0m wide and 0.7m high) in the E wall of the tower into an irregular pit, 0.5m deep. Given the numbers that would have been housed in David's tower, the pit would have required

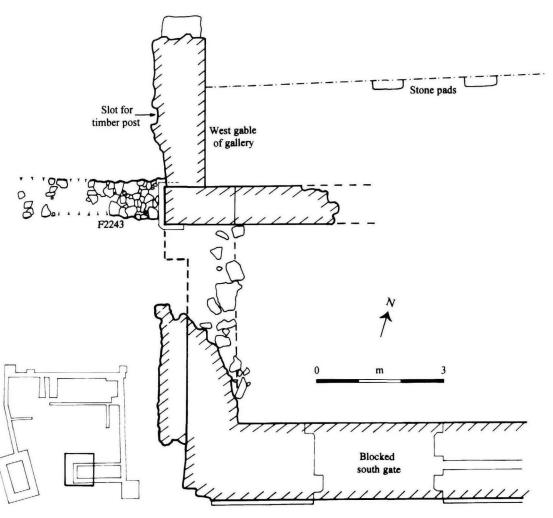
frequent emptying. The fill of the pit, deposited after the tower was abandoned, contained several artefacts including a silver pin, a stone cannonball and a fragment of textile, as well as mammal and fish bones and shells.

A stub of the truncated Period 4 south-west curtain wall was visible in the E wall of the N mural chamber although it could not be traced elsewhere in the tower.

3.6.4 THE SOUTH SIDE OF THE PALACE ENCLOSURE

The S range and SE tower underwent significant alterations during Period 5. The doorway and at least one of the windows in the outside wall of the S range were completely blocked whilst the other two windows were reduced in size, probably for security

reasons. In addition, the range was extended with a gallery on its N side and another structure was added to its W; the remains of the latter, however, were very fragmentary. The SE tower was also completely rebuilt above first-floor level during this period.



illus 44 Plan of the west end of the south range, showing the west gable of the Period 5 gallery and the fragmentary remains of wall F2243.

THE SOUTH RANGE (illus 44)

The doorway in the S range was blocked with rubble bonded with a very strong, hard mortar; only a small portion of this masonry was removed during the excavation. The inside face of the new stonework was reasonably well finished whereas its external face was much cruder. The principal entrance into the palace during Period 5 was a new and more heavily fortified door in the E curtain wall (see below, 3.6.11).

Of the three Period 4 windows visible in the S wall, the central one was completely sealed with coursed sandstone and the other two narrowed by the insertion of partial masonry blockings. The central window might have been blocked soon after the construction of the S range, for otherwise the S wall the building would have been structurally unsound. Most of the original jamb stones from the west windows were removed, central and presumably for reuse elsewhere. The remodelled W window, which was 2.3m high and 0.45m wide, became a plain opening with a finely carved, ogeearched head of perpendicular type, set in a rectangular frame. It was splayed internally but retained the segmental rear-arch from Period 4. In contrast, the E window, which was 2.6m high and narrowing from 1.55m on the inner face to 0.80m on its exterior, has lost any decoration that it once had. A small trefoil-headed piscina, set into the blocking on its E side and facing into the room serves to identify this room as the chapel that is mentioned in the later inventories (see Appendix 1). To its east, behind the position of the altar, there appears to have been a timber partition separating the chapel from the passage leading to the SE tower, for its position is evident in the plaster surviving on the N face of the S wall. The splayed eastern reveal of a fourth window may also be seen in the S wall, roughly above the position of the former gate. This window must post-date the blocking of the gateway, because it occupies part of the space needed for the gate's arch. In its design it appears similar to the modified E window and its reveal is plastered in conformity with the Period 5 chapel wall. On this evidence, it appears that the first-floor chapel was extended westwards by another bay, occupying the space where the gateway had been.

At some stage (probably during Period 5), the S range was also extended northwards. Most of this extension appears to have been in timber, which has now completely gone, although two stone pads, presumably for timber uprights, were partially exposed at the N edge of the excavation trench.

These pads, which were 0.7m wide and spaced 2.2m apart, were located some 2m from the N wall of the S range. The principal surviving evidence for the extension, however, is visible in its masonry W gable, which is still largely intact to a height of 6m, and in some features that have survived the recent consolidation of the inner face of the E curtain wall.

The extension seems to have formed a two-level gallery, or transe, running along the N side of the range and facing on to the inner courtyard of the palace. In the W gable the raggle and two weather stones for a pentice roof, inclined at an angle of 40° from horizontal, are still visible. Also in the E face of this wall, about 0.4m above floor level, was the socket for a strut, 0.2m square, angled upwards support apparently to the gallery floor Unfortunately most of the N edge of the wall is heavily eroded, making it difficult to discern the sockets for the beam ends of the gallery itself and the pentice roof. At the E end of the transe, however, a beam socket and two corbels are plainly visible, just to the S of the palace gate. Although the principal function of these seems to have been to support the inner (W) wall of the guard chamber above the gate (again perhaps of timber), it also seems likely to have been connected in some way with the E end of the probably supporting the beam transe. represented the bottom edge of the pentice roof. Below this, most of the wall-face at gallery floor level had already been robbed before the extensive rebuilding work of the 1960s. Evidence for the gallery floor, however, is preserved in two sandstone jamb stones for a door that gave access from it into the passage behind the E end of the chapel.

At some stage, the S range was also extended westwards, or perhaps another structure was built against its W gable. The evidence for this consisted of a single fragmentary course of drystone rubble wall foundations (F2243), 0.8m wide, which extended about 5m W from the N wall of the range (illus 44). This wall had been truncated by recent disturbances and its full extent and relationships with other structures remain unclear. However, it appears to have been part of a structure contemporary with the gallery extension, which is also evident from features surviving on the outside face of the gallery's W gable. These features include a vertical slot, at ground level, for a timber post perhaps representing the side of a door, and, immediately above it, the abutment of a wall, some 0.5m thick, running W from the gable. As nothing remains of this wall apart from its abutment, it is uncertain whether it was carried over the door opening on an arch or on a stone or timber lintel.

THE SOUTH-EAST TOWER

Although the lower two storeys of this tower appear to be contemporary with the Period 4 south range and curtain wall, the rest of the building is clearly later in date. The N and E walls of the Period 5 tower still stand to their full height of four storeys, whilst the S and W walls have been demolished to ground-floor level.

At basement level in the S wall, an existing embrasure of unknown design was converted into a wide-mouthed shot-hole, probably in the mid-16th century (Period 5A), and a corresponding one was slapped through the N wall, presumably to cover the new E gate to the palace. At first-floor level, the insertion of a sub-rectangular shot-hole into the lower part of an existing arrow-slit may also date to this time although, as mentioned above, the rounded shot-hole inserted into the corresponding arrow-slit in the E wall might date to any time after *c* 1480.

In Period 4, the first floor of the tower had been covered by a vault. In Period 5 this was demolished and the tower rebuilt above this level, a timber floor replacing the vault. The NE and NW quoins were also replaced as part of this rebuilding. The new second-floor room had a fireplace in the eastern part of its S wall, with an aumbry in its left-hand side and a flue in the wall above rising the full height of the tower. In the E wall was a rectangular window, set in a lintelled recess with parallel sides, flanked by a wall-press with a door to its right and a smaller

rectangular recess to its left. The third and fourth floors were broadly similar, with a timber floor carried on stone corbels and joist-pockets and a rectangular window in the centre of the E wall. On the third floor there is also a rectangular recess to the right of the window.

The rooms on the first, second and third floors of the tower were entered independently from the S range by means of corbelled passages set diagonally, one above the other, in the NW corner of the tower. On the first and second floors, this passage communicated with another behind the E end of the chapel in the S range, whilst on the third floor it led out on to the wall-head of the curtain wall. There is no evidence for any internal communication between these three floors, although there may have been a stair in the now-missing S or W wall. Indeed, such a stair could have contributed to the partial collapse of the tower. Whether or not there had been a stair at the lower levels, there must have been some form of access for the fourth floor, from which a spiral stair in the NW corner appears to have led up to the roof.

The form of the roof is unknown although it may well have been relatively flat, with a cap-house over the stair. Remains of a corbelled parapet and a slightly recessed, rounded turret at the SE corner support the dating of the rebuilt tower to the same period as the completion of David's tower, in the late 15th century. As in Period 4, the SE tower probably housed a palace official, one perhaps who required ready access to the chapel in the adjacent S range.

3.6.5 THE WEST RANGE

The west range was remodelled on two occasions, both probably in Period 5 although the dates could not be confirmed. The first occasion saw the restructuring of the first-floor hall, while the second involved the demolition of the range (apart from the curtain wall) and its replacement by two new buildings.

THE FIRST PROGRAMME OF CHANGE

At some stage, the first storey of the W range was divided into two levels, perhaps to form a new kitchen with residential accommodation above. The bottom half of the S window was blocked up and, to judge from the evidence of badly heat-affected stonework, a fireplace was inserted into this blocking. The upper part of the window was reduced to a plain rectangular opening with a chamfered external arris,

lighting the new floor above, and the flue for the underlying fireplace was fashioned to the side of it. Immediately below the reduced opening, on the inside, was the remnant of what appeared to be the floor of the window recess. The upper portion of the central window was also blocked and some form of reduced opening retained below the blocking. A rectangular recess below the S reveal of this window was also reduced in size and converted (perhaps from a small cupboard) into a slop drain which debouched through the curtain wall. Excavation was not able to determine whether any changes were wrought within the ground floor of the range at this time.

The above changes are difficult to date. If they pre-dated the construction of David's tower – and hence the N range – then the palace might have been deprived of its principal hall for a while. However, if



illus 45 View, from the south, of Structure 3 during the excavation. To its north-west are the remains of the Period 4 Kiln 1, overlain by the cobbled path in Period 5. Structure 4 lies to the north of Structure 3.

they were carried out after the tower was built, the W range must have been completely restructured, and its S wall (perhaps wall F3783) (illus 26) was probably demolished to accommodate the new building. Indeed, the latter scenario seems the more likely, since the changes to the W wall also entailed reducing both its height and that of its tall traceried windows, in order to accommodate the wall-walk that was now accessed from the second floor of David's tower.

THE SECOND PROGRAMME OF CHANGE

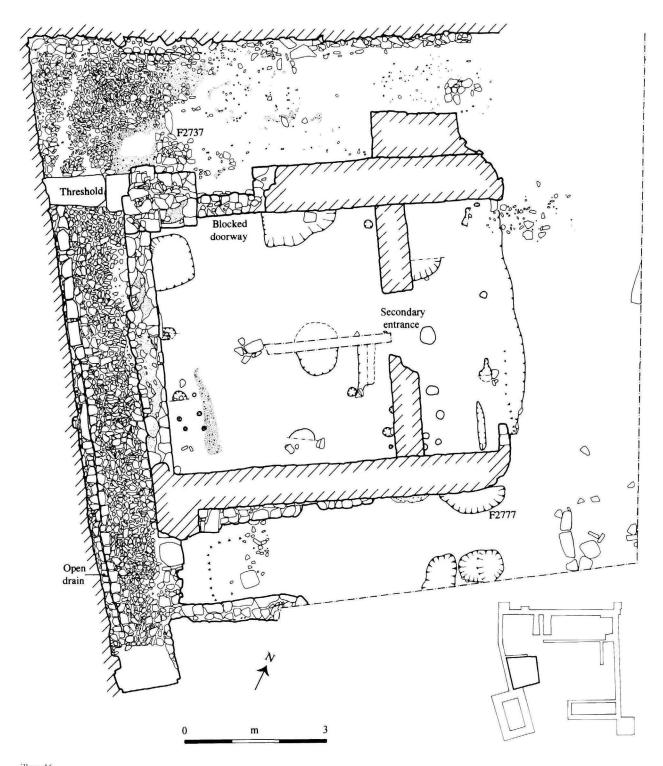
Eventually, the old west range was demolished, leaving the west curtain wall as its only surviving remnant. It was replaced by two entirely new buildings, Structures 3 and 4, which were separated by a narrow passage.

Structure 3 (illus 45-47)

Structure 3 survived as the remnants of a barrel-vaulted cellar sunk 0.5m below courtyard level and measuring 7.30m E/W by 5.30m wide. Its N and

S walls stood over 2m high whereas its gables were practically non-existent, the only surviving evidence for the E wall being its foundation trench. The walls of Structure 3 were built mainly of coursed cherty rubble whereas the roof of its vault, which had collapsed by the time of the excavation, was of roughly dressed sandstone. All of the masonry of this building was bonded with pale grey, gritty mortar. The load-bearing N and S walls were 1.2m thick whilst the W, and presumably the E, gable were about half that width. A pen and ink drawing by John Nattes (illus 47) shows that the vault was still intact in the late 18th century, as was a door through a secondary wall across the building's E end.

Abutting the E end of the N wall of Structure 3 was a block of mortar-bonded masonry, 2.2m long and 1.0m thick, which survived to a height of 1.35m but whose function is unknown (a problem compounded by recent masonry consolidation). It could have been a buttress (although there was nothing to suggest that one had been needed), part of an external stair, or an element of a building or chamber demolished when Structure 4 was built to its north.



illus 46 Plan of Structure 3 and the cobbled path around its west and north sides.

Piercing the base of the W wall of Structure 3, midway along its length and below the level of an adjacent cobbled passage (see below), was a box drain built of large flags. Towards the W end of the N wall was a doorway, 1.25m wide, which had been blocked at a later stage. Against this wall were three stone slabs, bedded in compact sand and gravel,

perhaps the only surviving remains of the cellar floor. A large post-pit in the centre of this chamber may have held one of the uprights for the shuttering used in the construction of the vault.

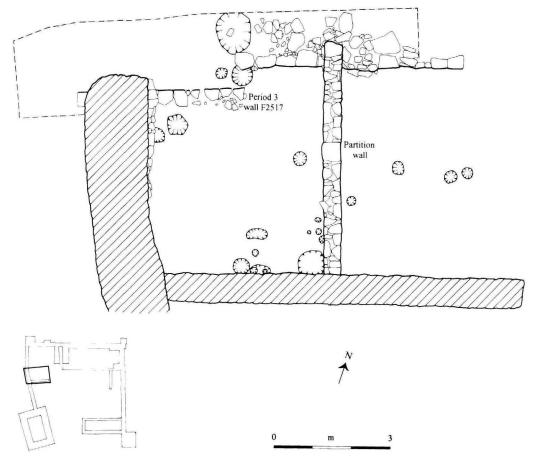
There was no trace of a fireplace within Structure 3 and the cellar is unlikely to have been a kitchen



illus 47
John Nattes' pen and wash drawing of 1799, showing the basement of Structure 3 with its vaulted roof still intact. Note the door in the secondary east wall of the building.



illus 48
Structure 4, from the north, showing the windows in the upper floors of the extant section of its south wall, and the partition wall across the building's vaulted basement.



illus 49 Plan of Structure 4 and the fragmentary remains of the ?Period 3 wall F2517 overlain by the west curtain wall.

although, on the evidence of the drain through its W wall, it appears to have had some domestic function. Access between Structure 3 and the bishop's apartments could only have been through the tower's main first-floor entrance, for the basement-level doorway led only to the cellars.

Structure 3 was separated from Structure 4 and from the W curtain wall by a narrow passage on its N and W sides respectively. Its floor comprised tightly packed cobbles of oval and sub-rectangular pieces of sandstone, some of which covered the Period 4 Kiln 1. The passage ran slightly downhill from the tower to a doorway which survived only as a threshold of two sandstone flags, in line with the N wall of Structure 3. There were more cobbles beyond this doorway although they did not extend far along the N side of the building and may have been a Period 5A feature. Along the side of the curtain wall was a V-shaped, open drain, which seems to have debouched at the same point as the slop drain in the cellar of Structure 3. On the evidence of what appeared to be a door jamb outside the SW corner of Structure 3, there would also have been a passage between that building and David's tower. Unfortunately, recent disturbance had removed any floor surface there may have been within this passage.

At some stage, a narrow clay-bonded rubble wall was built across the E end of the building, some 1.5m in from the primary E wall. Although this wall was almost completely demolished, the remnant of a doorway was still visible midway along it; the doorway in the N wall may well have been blocked at the same time. Nattes' drawing depicts the secondary wall but, by the time that the drawing was executed, the original E wall had been demolished. It is not known whether this happened before or after the palace was abandoned.

The S wall of Building 3 overlay a sub-rectangular pit (F2777), measuring 1.4m E/W and at least 1.3m deep. As the wall could not be removed, the pit could

not be fully excavated, but a complete ceramic jug in a local fabric but of indeterminate medieval date was retrieved from its infill (see Chapter 4.4).

Structure 4 (illus 48-49)

This three-storey building had been built against the W curtain wall and was set 1.4m deeper into Period 4 levelling deposits than was Structure 3 which lay some 3m to its south. It measured 10m E/W by 6.2m wide. Its S wall was less than 1m wide but stood to its full height of 6.4m where it abutted the curtain wall; its eastern half was almost totally demolished. Of its N wall, only fragmentary, 0.8m-wide foundations survived and its E wall could be traced only by the course of its rather indistinct bedding trench. The passage between Structures 3 and 4 was an open one, at least on the evidence of the windows in the S wall of Structure 4. Indeed, it is possible that Structure 3 had been partially demolished by the time that its neighbour was built.

The bottom storey of Structure 4 comprised a barrel-vaulted cellar, aligned E/W; it contained no surviving floor surface, only deposits of clay, charcoal and ash, perhaps refuse from kilns or ovens in the NW range. These materials - and presumably the basement floor of Structure 4 - also overlay the remains of wall F2517, a remnant of the Period 3 arrangement (see above 3.4.3). Numerous post-pits were uncovered within the cellar, most (if not all) of them probably associated with the building's construction. The cellar was divided into two spaces of roughly equal size by a partition wall of claybonded rubble, 0.4m wide and surviving to a maximum height of 1.8m, its lower courses keyed into the masonry of the building's N wall. On the first and second floors the rooms were lit in the S wall by vertical windows with plain chamfered surrounds and segmental rear-arches; two survived on each storey although almost certainly there had been four originally.

3.6.6 THE NORTH RANGE

The north range was arguably the most impressive building ever to stand within the palace enclosure. In area, it was the largest of the palace buildings but, along most of its length, it comprised only two main storeys: a basement sunk into the sloping N side of the enclosure, and above it, at courtyard level, a large hall and a smaller room (dais chamber), both supported by a suspended timber floor, now missing. However, there was a further storey above the dais

chamber at the E end of the range. The standing remains that now greet the visitor do not date wholly from Period 5, the E end of the range having been remodelled, probably in the mid-16th century (see below). Its basic plan, however, changed little over two centuries of use.

For some reason, the original curtain wall was not used as the N wall of this building but was



illus 50 The north range, viewed from the west, prior to excavation.



illus 51
The north range, viewed from the west, following reinstatement of the basement floor level. The well can be seen at the east end of the building, and the watergate passage is in the foreground, between the north and north-west ranges.



illus 52
The retaining wall against the north end of the courtyard, forming the south side of the passage in the basement of the north range.

demolished almost to ground level. The reasoning behind this is not altogether clear although it may have been easier to rebuild part of the wall completely rather than insert recesses for windows and a latrine chute into its existing stonework. Certainly there was no need to sink new foundations, because the demolished Period 4 curtain provided more than adequate footings.

At the start of the excavation, the building was roofless, its floors were missing and only its N and E walls (also the curtain walls) stood above courtyard level (illus 50). Its W wall just reached to that level whereas only a stump of its S wall and minimal evidence of an internal partition could be seen. Evidence for the roof survives in the E gable and is discussed in detail below. The interior of the range contained huge quantities of rubble and other debris, up to 2m deep against both gables but less so towards the centre of the building. Although some of this material may have resulted from wall collapse and stone-robbing, much of it was probably dumped during clearance work and masonry consolidation in recent decades. Amongst this rubble were several ornate architectural fragments and door and window surrounds but little other worked stone such as voussoirs or even ashlar blocks. Most probably, such masonry was removed for reuse elsewhere. It was

difficult to distinguish this post-abandonment rubble from construction debris, for there was almost no trace of the floor that would have separated them (see below). Nor were there any post-pits or sleeperbeam trenches associated with builders' scaffolding within the range.

Internally, the basement area of the range measured some 26m long (E/W) and about 10m wide (illus 51). If the passage along the S side of the basement and the gallery that probably lay above it are excluded, the first-floor hall and the undercroft beneath were about 7m wide.

BUILDING THE RANGE

The N range was built on sloping ground near to the edge of the former loch, and its outer wall stood on the demolished remains of the Period 4 north curtain. Its basement was cut into the slope to a depth of 3m on the S side of the building, and the excavated sand and gravel was used to level up its N side. These redeposited materials extended about 4m from the N wall of the range and were uncovered within a 1.0m-wide sondage located some 8m from its E end. The near-vertical cut on the S side of the building was stabilized by a retaining wall, which also



illus 53 Section through the levelling deposits on the north side of the north range. The remains of the Period 4 curtain wall can be seen acting as foundations for the Period 5 north wall of the north range.

served as the S wall of the basement passage (illus 52). This wall was only 1m wide at its base, thickening somewhat with the angle of the slope as it approached courtyard level. Very little of its facing masonry survived but what did remain was all rubble, including some massive cherty boulders at its base, bonded with yellow-green, clayey sand and pointed with similar material mixed with gritty mortar. There was nothing to suggest that the wall had been rendered or lime-washed. Clearly, this was not intended as a major visible element and it is unlikely to have stood above courtyard level. The gap between the rear of this wall and the slope behind it had been infilled systematically during construction, with deposits of soil thrown in after every few courses of masonry were laid. These deposits comprised alternate layers of redeposited sandy subsoil and silty humic loam with some rubble. No finds were retrieved from the sandy lenses whereas samples taken from the humic layers contained high concentrations of animal bones and pottery together with fragments of medieval glass and a few metal objects (see Chapter 4).

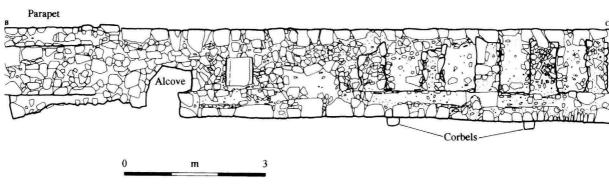
Most of the pottery was from jugs although some sherds were from cooking pots. Almost all of it was in local fabrics, the predominant one being a red gritty ware. There were four sherds from three glass vessels, one probably from a urinal, another from a jug handle and two from a rather thick rim. The pottery and glass is all thought to date from the 13th to the 15th century (see Chapter 4.4 and 4.6). There were many cattle and sheep bones, some from pig, red and roe deer and birds (red grouse, wood pigeon and domestic fowl), and larger quantities of fish bones from a variety of species including cod, haddock, gurnard and plaice. Because of the diversity of finds within these deposits, including many pre-dating the construction of the N range, it is assumed that the humic bands represent midden materials redeposited from elsewhere in the palace.

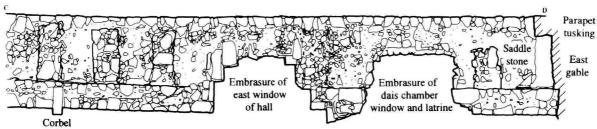
The N wall of the range was faced on its outside with random rubble, including squared sandstone blocks evidently reused from some demolished structure (illus 54-55). Although this might seem to have been the primary curtain wall, the stonework of its extant remains further W is of a very different character. Much of the inside face of this wall had disintegrated



illus 54
View, from the west, of the east (Period 5) section of the wall-head of the north curtain.

F1334





illus 55 Plan of the wall-head of the north curtain, showing the Period 4 (west) and Period 5 (east) arrangements of its paving.

by the 1960s and was rebuilt at that time. Whilst inhibiting masonry decay, this action is unlikely to have restored the wall to its original appearance. For example, two sculptured corbels, set into the wall face just below the tops of the hall's two windows, are not quite level with each other and one is almost certainly not in its correct position. Furthermore, of the nine sockets for the joists that supported the hall floor, eight had been replaced by holes that are far too small for the purpose. Only the westernmost of the original holes was still in evidence by the time of the excavation: subsequent masonry consolidation has all but masked this one too.

The S wall of the hall was almost completely missing. On the evidence of the roof line in the E gable, it had stood about 2.5m in from the retaining wall for the courtyard. There was no trace of this wall (not even its foundations or a robber trench), other than a stub of clay-bonded rubble masonry projecting 2m into the range through a skin of masonry that had been added to the inside face of the E gable in Period 5A. This wall survived only to the level of the hall floor.

The adjacent small vaulted passage (or lobby) that projected into the SE corner of the range appeared to have truncated the S face of the S wall, yet, paradoxically, its foundations seemed to lie beneath those of the wall. The precise relationships between various structures and features (both extant and demolished) at the junction between the N and E ranges have yet to be resolved in detail although it would seem that the two buildings are essentially contemporary. No evidence was found for the junction of the S wall with the W wall of the N range, perhaps because a doorway led into the westernmost cellar at this point.

Whatever existed in this part of the palace before Period 5 was swept away when the hall range was built. Earlier walls, tantalising glimpses of which survived within the W wall of the range, were simply absorbed into the new structure. It was not possible to dismantle this wall and its constructional sequence remains far from clear. However, the Period 5 wall comprised two skins of partly-coursed rubble masonry enclosing a core of rubble and clayey sand

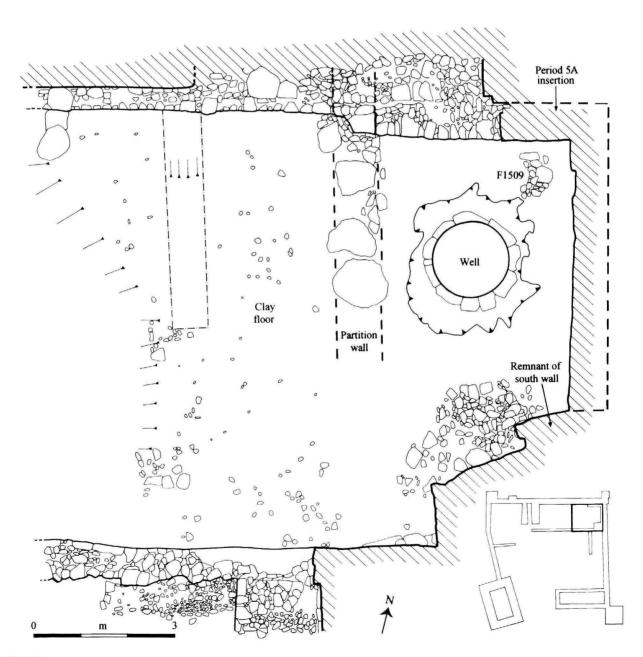
built around the remains of the earlier walls. Its overall width was 3.3m and it survived to a height of about 3m at its E face, level with the floor of the hall. At first sight, it is not obvious why such a massive gable was needed when the roof of the building was carried on its side walls. One possibility is that it supported a stair, perhaps to a minstrel's gallery.

The internal face of the E wall of the range was masked when a skin of masonry was built against it in Period 5A, probably as part of an attempt to strengthen that end of the range (see below). One small area of the wall-face remained exposed, serving as the back wall of a new fireplace although its

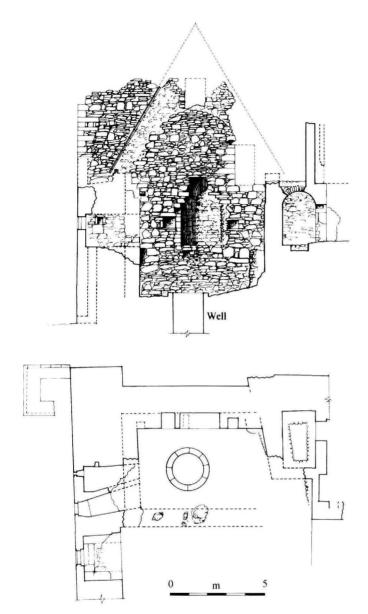
masonry was refaced during the 1960s programme of masonry consolidation.

THE INTERIOR OF THE BASEMENT

Although basement of the N range was the lowestlying area within the palace enclosure (3m below courtyard level), it did not need an elaborate drainage system because the underlying subsoil was of coarse sand. Remnants of only two drains were found. One was simply a weeper, issuing through the face of the retaining wall, midway along its length, the water soaking away through the substrate. The



illus 56
Plan of the east end of the north range basement, showing the remnants of the partition wall, the well and the Period 6 clay floor to the west.



illus 57 Sectional elevation of the east gable of the north range and courtyard-level plan of the withdrawing room.

other survived as a 2.5m-long stretch of a V-shaped, open drain, 0.45m wide and fashioned out of small sandstone flags set against the retaining wall, some 10m from the east end of the building. This short stretch of drain was badly preserved and it was not possible to tell in which direction it had flowed, let alone what it had served.

Entry to the basement was from the W, at the top end of the watergate passage. Presumably, the N range passage continued along the length of the building at this level although no trace of it survived, other than the sill of a window on its courtyard side (see below). The only indication of a partition wall within the basement was towards its E end, apparently dividing it into two unequal chambers. On the evidence of stonework projecting from the N wall both at basement and eaves levels, this wall

continued up through the first floor, separating the main hall from a dais chamber at the E end of the range. Within the basement, the partition survived as a single course of foundations built of large cherty boulders bonded with pink clayey sand. These foundations were approximately 1m wide (the width of the wall itself was difficult to determine from such fragmentary remains), but they petered out about 4m from the N wall of the building.

The west area of the basement

At nearly 20m long, this was by far the largest of the two chambers (although it may well have been subdivided by stone or timber partitions), but few features of interest survived within it. Set into the centre of its W wall, 1.0m above floor level, was an aumbry (0.50m wide, 0.60m high and 0.50m deep) which did not appear to have had a door. There was



illus 58 Section across the upper part of the well.

no trace of a flagged or clay floor in this huge area and no other features to help interpret its function – which may have been simply a store.

The east (well) chamber

Although considerably smaller than its neighbour, the E chamber was of much greater interest, because a well was set into its floor (illus 56-57). No other well has been found within the palace enclosure, nor within its immediate environs, and it seems likely that the one in the N range was in use long before the palace was remodelled in Period 5. However, because there was nothing to help date its construction, it is described here.

The well had been cut through the subsoil and bedrock to a total depth of 8.0m (illus 58). Its top 3m had been lined with curved ashlar blocks (illus 59) although only the bottom four or five courses survived *in situ*, the lowest of them resting on two large sandstone lintels spanning fissures in the bedrock. Infilling the space between the lining and the bedrock were sand and small fragments of sandstone. The uppermost 1.8m of lining was missing although a few of the stones were retrieved



illus 59
View of the top of the well, showing the lintel supporting the well's ashlar lining, of which three to four courses remain. Below the lintel, the sides of the well comprise bedrock.

from the well infill. Also recovered were two of its coping stones, each with a rounded chamfer on its upper arris and a socket for a metal cramp at either end of its upper surface. These stones, along with copies of them, have been used in the reconstructed well-head. The remaining 5m of the shaft was unlined and had a maximum diameter of 2.6m (compared to 1.6m where it was lined), although it narrowed again towards the base of the shaft. When the contents of the well were removed, it filled up with water to a depth of 1.0m. This occurred during an exceptionally dry period when the water table was low, which suggests that the well was a reliable source of water during most, if not all, of the time that the palace was occupied.

Little else dating from Period 5 was uncovered within the well chamber other than a few flattish stones (F1509) covering an area of 1.0m by 0.5m in its NE corner, probably a remnant of its floor surface. These stones were set into disturbed sand containing patches of charcoal and burnt clay, which overlay the subsoil and, in places, the bedrock. None of these deposits yielded any artefacts. Traces of burning were also found at the base of the vaulted passage connecting the N and E ranges although this is thought to be a post-abandonment feature.

On the N side of this chamber was a single post-pit, 0.5m in diameter, probably marking the position of a scaffold upright associated with the remodelled E gable. It seems likely, therefore, that this is a Period 5A feature.

The basement passage

The physical evidence for this passage was slight, because its N wall, representing the foundations of the S wall of the hall range, had been entirely removed. The passage would have been about 2m wide and at least 25m long. It probably gave access to the basement chambers although there may also have been doors linking adjacent rooms.

The S wall of the passage (ie the retaining wall) had lost most of its facing masonry, leaving its rubble core exposed. Although there may have been several windows in the upper part of this wall, only one could be identified with certainty. It was located 3.5m from the W end of the building, and its only surviving remains were a two-light sill which sloped down from courtyard level. About 4m further E was the start of a 0.20m-wide open drain which ran westwards, 1.5m above floor level and set against the external wall face, as far as the point at which the wall itself was almost totally demolished (illus 60). This drain had probably extended as far as a 0.15m-wide vertical slot at the base of the wall, directly in



illus 60
The retaining wall at the north end of the courtyard, showing the mural drain. Viewed from the west.

line with the open drain on the E side of the watergate passage (see below). Its function appears to have been to drain rainwater from the courtyard and the roof of the N range. Beyond the vertical slot, the retaining wall was recessed for some unknown reason.

Towards the W end of the passage were a few fragments of what appeared to be flooring, comprising two large flags and several fragments of flags bedded into a layer of redeposited sand. Nowhere else in the N range was there flooring that could be dated to Period 5. As the passage (or crypto-porticus) was below ground level and had windows, it must have been enclosed in some way, either by a vault or perhaps a timber ceiling. In either case, there is likely to have been a corresponding gallery, or transe, against the S wall of the hall range, above it at courtyard level. It was probably of timber construction, open on its south side and with a pentice roof. Indeed, the possible abutment of such a roof may be seen at the NW corner of the E range where the quoins are missing at a level where the roof should have been. A corresponding example of such a gallery, albeit grander in scale, is the

two-tiered transe built against the courtyard side of James IV's great hall at Stirling Castle (RCAHMS 1963, 210).

THE FIRST FLOOR OF THE RANGE

The principal function of the N range was clearly to house the great hall, which may have replaced one located elsewhere in the palace, perhaps in the W or S range (see above). The first storey of the range, which was level with the courtyard, was partitioned along the same lines as the basement. At this upper level, the larger space contained the great hall whilst the smaller chamber to its east probably served as a withdrawing room or dais chamber. At some stage, probably during Period 5A, the latter was altered significantly.

The great hall

Internally the hall would have measured some 20m long and 6.3-7.1m wide although only its N wall stands to any height at this level. The E wall, which separated it from the dais chamber, rested on top of the cross-wall whose remains survive at basement level. The position of the S wall is suggested by the roof-profile evident in the E gable and by a stub of wall surviving at the base of the same gable. However, there is a discrepancy of some 0.8m between the two, and, since no further trace remains of this wall at any level, its precise position and thickness remain uncertain.

The roof itself had a high pitch, rising to some 15m or more above the hall's floor level. The N face of its external profile is preserved in the E gable by a steeply-pitched raggle overlain by a line of stone slabs forming a weather course set into the wall. Although this part of the gable belongs to Phase 5A, when an inner skin was added to the wall in order to accommodate an inserted fireplace and flue (see below), it seems to have retained the profile of the original roof.

A further clue as to the nature of the roof structure can be seen in the N wall and comprises a row of four stone corbels, spaced at intervals of about 3m, just below the level of the wall-head. A larger fifth corbel, carved with the representation of a male crowned head, also survives some 3m E of these at a level some 0.75m below them. Another, better preserved, corbel of similar type was found during site clearance in the 1960s and has been built into the wall a further 4m to the W; however, this is clearly not its original position which was probably in the S wall, facing its royal relative.

It seems likely that the corbels carried the wall-posts of the main roof trusses, the larger decorative ones supporting a particularly finely wrought main truss framing the dais end of the hall. In all, the hall would have had six bays and the dais chamber a further two. The form of the main trusses is of course unknown but they could have been collared, with a crown-post and collar-purlin assembly to provide lateral stability. The rafter couples between the main trusses would have been carried on a wall-plate, set on the low stone plinth that survives on the inner edge of the wall-head (illus 55). A roof structure of this general type might have been constructed at any time between the 1330s and the 1460s (Hewett 1980, 156, 159-60, 179-80, 182, 206-7). A more elaborate one with false hammer beams covering a 10.7m span survives 30km away in the great hall of Darnaway Castle. Although this was rebuilt between 1887 and 1891, dendrochronological analysis has shown that its timbers were from oak trees felled in the summer of 1387, allowing its builder to be identified as John Dunbar, Earl of Moray (1372-92) (Stell & Baillie 1993). The opposed hammer-beam ends of the third truss of this roof are also decorated with crowned male heads, one of which is not unlike those represented on the larger stone corbels at Spynie (Stell & Baillie 1993, 172-3, fig 9.8). Indeed, it is not unlikely that the Spynie timbers came from the royal forest of Darnaway which supplied roof timbers for a number of major buildings throughout Scotland from the 13th century onwards (Stell & Baillie 1993, 163; Crone & Fawcett 1998, 83-4). The crowned heads displayed in both halls no doubt reflected the use to which both were put in providing occasional accommodation and hospitality for royal visitors.

The hall would have been entered from the level of the courtyard, through the transe, somewhere towards its W end. It was usual for one end of a hall to be partitioned off by a timber screen (or screens), enclosing a lateral passage and possibly a servery, with a gallery above. At Spynie, a reused window mullion set in the N wall, just below the westernmost roof corbel, probably marks the location of such a partition and indicates that the screens passage occupied the entire western bay of the hall. A rounded alcove, 1.2m wide and 1.3m deep, set into the W end of the N wall may originally have contained a narrow timber stair leading to a gallery; indeed, it may have continued up to the wall-head. Latterly, however, it appears to have been blocked or at least reduced in size, perhaps to be used as a cupboard or dry stool closet (cf Zeune 1992, 211-12, fig 132). Alternatively, a stair could have been accommodated within the thickness of the W wall of the range. The servery proper seems to have



illus 61
The west wall of the north range, viewed from the north. In the foreground is the threshold of the doorway that led into the hall and the single surviving stone of its left door jamb. The remnants of earlier structures, such as walls F1371, F1390 and F1883, can be seen buried within the Period 5 wall.

been located between the hall and the kitchens, in the area above the watergate passage. In the W wall of the hall, hard against its N wall, are the remains of the door into the servery (illus 61). These comprise the lower N jamb stone and the threshold, 1.3m wide. A check on the jamb indicates that the door was hinged on its S side and opened into the hall.

Two windows pierced the N wall of the hall. One of these, located in the easternmost bay and lighting the dais and high table, had a cusped segmental-arched head, enclosed on the outside face by a rectangular label moulding which continued to the jambs in a simplified form. Internally, this window was set in a broad segmental-arched recess with seats flanking the sides. Roughly midway along the hall and some 2m above floor level, the other window consisted of a plain rectangular opening within a splayed, shouldered rear-arch. It may be assumed that there had been other windows, possibly more amply proportioned, in the S wall facing the courtyard.

The east chamber

The east (dais) chamber measured about 7m N/S by 5m E/W. Towards the W end of its N wall was a small window, set in a lintelled recess with plain chamfered surrounds and with evidence for an external grill although it lacks its head. Immediately E of this recess was another forming a latrine closet, lit by a smaller rectangular slit window. The latrine discharged down a chute to the base of the curtain wall.

The dais chamber was adjoined on its S side by a barrel-vaulted passage or lobby, some 2.8m by 1.8m, which communicated by a door with the E range, in effect marking the eastern termination of the courtyard-level transe (illus 62). Unfortunately most of its W wall and half of its N wall are missing. It is therefore not certain whether it communicated with the dais chamber or the transe, or both. Its function, however, seems almost certainly to have been that of a passageway linking the two ranges.

Above the dais chamber there appears to have been another room with the same floor plan but constricted vertically by the roof structure. The only direct evidence for this room consists of part of the N jamb of a door in the E wall, which was retained in Period 5A when the wall was thickened internally. This door probably led to a latrine closet, which discharged into the chute excavated at the base of the E wall (see below). Access to the upper dais chamber was probably through an upper storey of the lobby that linked the N and E ranges at courtvard level.

Modifications to the east gable and dais chamber: Period 5A

A number of modifications were made to the E gable and dais chamber of the N range, probably in the mid-16th century. The most noticeable was the thickening of the E gable by the addition of a skin of sandstone rubble, about 0.80m thick, to its inner face. This thickening also extended westwards along the inside of the N wall up to the line of the cross-wall at basement and first-floor level, and possibly along the S wall at basement level only.

Perhaps the principal reason for this alteration was to stabilize the NE corner of the palace, which shows signs of having been rebuilt at this time. The rebuilt section, which is particularly obvious where it meets the N face of the N curtain wall, extended almost to the full height of the wall and incorporated a buttress, 2.6m wide and projecting 1m on the east. This new work partly overlies the remains of the earlier E latrine tower, which may well have been



illus 62
The vaulted chamber linking the north and cast ranges, viewed from the north-west. To its left is the surviving remnant of the south wall of the north range.

demolished down to its plinth course as part of this operation.

Thickening the E gable also allowed a fireplace and flue to be incorporated into the dais chamber, in the centre of its E wall. The right-hand jamb stones and lintel of the fireplace have since been removed and its back (the inside face of the original wall) was refaced in the 1960s, leaving no distinguishing features. To each side of it is a square niche whose functions remain unknown. In view of the plainness of these features, the room may have been panelled originally although no trace of such now remains. As in Period 5, the floor of the dais chamber was of timber, its joists resting in large sockets, two of which still remain unblocked in the E gable. A short length of one of the joists, preserved by desiccation, survived in situ until the start of the excavation, when it was removed. Dendrochronological analysis demonstrated that this timber came from an oak tree felled in the late 13th or 14th century (see Chapter 4.14)). This date is well before the range was built, let alone altered, indicating that the timber had been reused, although there were no clues at to its primary location. It is quite conceivable, however, that the joists had simply been left *in situ* from Phase 5, the new walling being built around them.

As in Period 5, there was a first-floor room, albeit now reduced in size, above the dais chamber. It was entered through a door at the S end of its E wall. This room was enclosed by a masonry barrel-vault, now fallen, the rounded intrados of which is preserved as a ghost in the masonry of the E wall just below the pitched roofline. The vault would have sprung from the thickened N wall and existing S wall of the chamber and would have had a span of some 6.6m. The upper part of the gable itself also seems to have been rebuilt in this phase of work although it seems likely that the roof pitch (and possibly its structure) remained essentially unaltered. In its rebuilding, however, the W face of the gable was moved some 0.5m or more westwards, thereby allowing space for the insertion behind it of a wallwalk, which terminated in a high-level parapeted turret at the NE corner of the palace enclosure.

Although the changes made to the E gable and dais chamber evidently post-date the initial phase of building of the N range, its style of construction may be compared in general terms with that of David's tower. This suggests that these modifications are unlikely to date much later than the completion of David's tower, and certainly no later than the time of Bishop Patrick Hepburn in the mid 16th century.

THE NORTH CURTAIN WALL-HEAD

The eastern stretch of the N curtain wall was 1.9-2.0m wide with a 0.5m-wide raised seating for the roof on its inner face. On its outer face there was a parapet wall which has now completely gone, except for the tusking at its E end where it met the Phase 5A

gable wall. The wall-walk had comprised alternate saddle and trough flagstones, which evidently shed rainwater over the N side of the wall through openings in the parapet. Only one saddle and one trough stone survived *in situ*, although their pattern was clearly recognizable in the surface of the exposed wall core. As part of the recent consolidation, the wall-walk has been restored in order to protect the wall itself from rainwater seeping into its core. This arrangement contrasts with that in the western part of the N curtain (built in Phase 4), where a single weeper carried rainwater away midway along that stretch (see above).

3.6.7 THE WATERGATE AND ITS PASSAGE

Although the extant watergate is contemporary with the N range, there may have been a doorway somewhere in the curtain wall long before that. The Period 5 watergate was set into an arched opening; this was partially filled in at a later date but its outline can still be traced. Its jambs and arch were removed when the opening was reduced and its original dimensions can only be estimated as 2m high and 1.8m wide.

Inserting the watergate passage meant removing large quantities of Period 4 levelling materials which, in turn, necessitated drastic changes within the E chamber of the NW range (see below 3.6.8). The Period 5 passage was about 3.0m wide, narrowing to 1.8m within the thickness of the curtain wall (illus 63). In order to provide access between the NW range and the hall, the passage must have been joisted over, for there was insufficient height for a vault, although there was a segmental arch at each end of it. Both passage walls had been demolished to a level below that of the joists, leaving no evidence of their sockets. Although its original west wall (F1311) was masked when the passage was narrowed in Period 5A, its east wall probably remained unchanged. It was built of random rubble, bedded in clayey sand with occasional patches of mortar.

The passage was floored with unworked flags, mainly sandstone, set on to a layer of silty loam, which was exposed where some of the flags were missing (illus 64). At the extreme N end of the passage were some very large flags, which had probably been relaid at some stage. Along the E side of the floor was a V-shaped drain, which cut across the N end of the passage, below the Period 5A west wall (F1304). From there it issued through the curtain wall into a stone-lined pit outside the water-

gate (see below). This drain is thought to have been a continuation of the mural drain within the S wall of the north range passage. On the evidence of a few capstones still *in situ* at its N end, the drain had probably been covered along its entire length.



illus 63
The watergate passage partially cleared of rubble. Viewed from the south

At some stage, probably as a security measure in Period 5A, the watergate was reduced to a rectangular opening, 0.77m wide and 1.72m high, with roll-moulded jambs and lintel (illus 66). There appeared to have been a double door, although the jambs for the outer one were badly eroded. The inner door had been secured by a bolt whose socket was cut into the E jamb.

At the same time, the passage was reduced in width by the addition of a skin of masonry (F1304), 0.8m thick and built of random rubble bonded with clayey sand, against the original W wall (illus 65). A pronounced bulge towards the S end of that stonework is an indication of just how much pressure has been exerted by the made-up ground upon which the NW range stood. On the evidence of the drain running below wall F1304, the passage floor had been retained from the original, Period 5 arrangement.

3.6.8 THE NORTH-WEST RANGE

The construction of the N range and the insertion of the watergate passage resulted in a reorganization of the NW range, at least at its E end, its new role being to serve the banqueting hall in the N range. The made-up ground beneath the range was retained thereafter by the W wall (F1311) of the watergate. There was nothing to suggest that wall F1311 had

illus 64
The watergate passage fully excavated, viewed from the north. Against its east wall is a drain, which crosses the passage at its north end before continuing below its secondary (Period 5A) west wall.

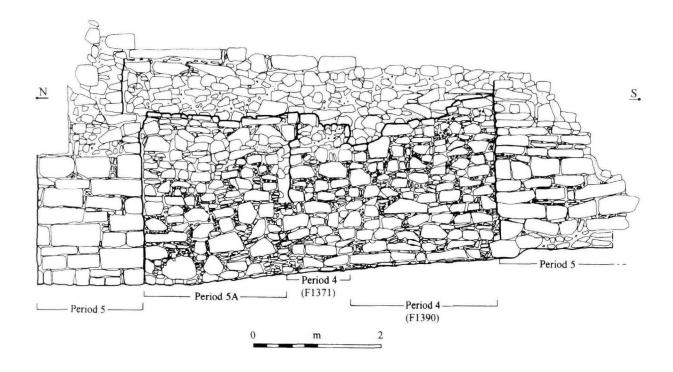
ever risen above the floor level of the range. Indeed, the top of this wall appeared to have formed part of the floor surface of its E chamber as, perhaps, did the roof of the watergate passage.

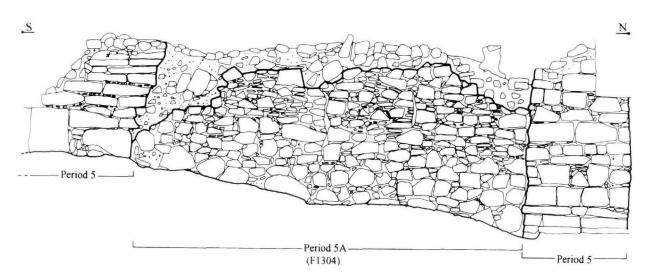
THE EAST CHAMBER (illus 67-69)

As part of the reorganization of this room, Kiln 3 was demolished and its flue, which ran through wall F1334, was blocked with loose drystone rubble. The interior of the room was levelled with rubble and peat ash upon which a floor of small masonry blocks, mostly sandstone, was laid. Included in the floor was the top course of F1311, the W wall of the watergate passage. The floor was repaired on at least one occasion when more stones were laid over some that had subsided. In places, areas of cobbling were missing, perhaps removed when another floor was laid over the whole surface (see below).

The cobbles terminated along a line 1.2m from the N curtain wall, beyond which were a few other features of interest. Against the N wall of the room was a sink, measuring 0.65m E/W, narrowing to 0.40m against the wall, and 0.43m wide. It was built of finely-worked (probably reused) sandstone slabs. The base of this sink, whose south side had slumped, comprised a single sandstone flag whose slightly concave surface may have been caused by wear. In the curtain wall, directly above the sink, was a square opening, 0.20m across, through which the sink's contents had probably been emptied into drain F1055 beyond the N wall.

To the immediate W of the sink, in the angle between the curtain wall and wall F1334, was a platform built of large squared rubble and measuring 1.05m by 0.75m and 0.7m high. Its proximity to the sink suggests that the two features were connected in some way. Perhaps also associated with the sink was



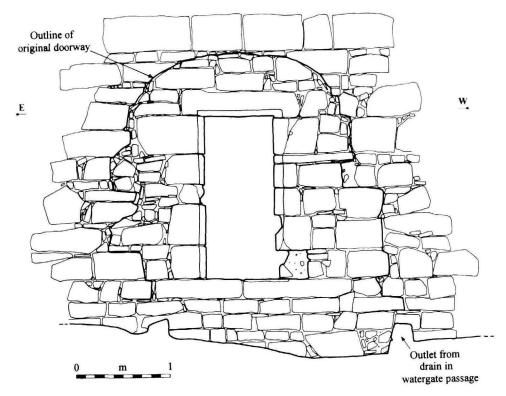


illus 65 Elevations of the east and west walls of the watergate passage, showing the various phases of construction.

a drain, 0.5m wide with a base of sandstone flags and walls of clay-bonded rubble, little of which survived. This drain appears to have run eastwards through wall F1311 and into the watergate passage. If so, then perhaps the drain within the floor of the passage was not covered at that point.

The sink's base was replaced at some stage, probably because of subsidence, and another flagstone laid directly over it. All that remained of the secondary sink was its base of sandstone flags and its W side, reused from the original one and therefore fore-

shortened. Perhaps at the same time as the new sink was installed, the cobbled floor was relaid, probably because of continual compaction of the sand and gravel beneath it. The new floor was of a different character from the original one, comprising mainly rounded cobbles with some flatter stones set into a matrix mainly of peat ash. There were several patches of burning on the surface of these cobbles, the charcoal imprints perhaps from burning timbers dropping from the roof or floor above. There was no trace of a fireplace within the E chamber but, given that this room was probably a kitchen (see



illus 66
Elevations of the outside face of the watergate, showing the outline of the original, arched opening surrounding the secondary doorway.



illus 67
The east chamber of the north-west range early in the excavation. The doorway into the west latrine tower is on the left, and the watergate passage is on the right. Viewed from the south.



View, from the north, of the east chamber of the north-west range, showing the first phase of the Period 5 floor. The remnant of the sink is in the foreground.

Appendix 1, no 1), the fireplace may have been in its S wall, which was swept away when the building was demolished.

THE WEST CHAMBERS

Other than the partition wall and the paving leading to the W latrine tower (both dating from Period 4), the few features (mostly kilns) uncovered in the W part of the building were impossible to date closely. However, at least two of these kilns appeared to date from a time when the range had undergone another major change (in Period 6) and are therefore described in 3.7.3.

3.6.9 THE NORTH-WEST TOWER

In the mid-16th century (Period 5A), a widemouthed gun-loop was inserted into the E wall of the NW tower at courtyard level. This entailed lowering

the mortar floor of the tower by about 0.2m, probably in order to accommodate a sleepermounted gun covering the N wall of the palace.

3.6.10 OUTSIDE THE NORTH CURTAIN WALL

The absence of beam sockets in the N wall of the Period 5 north range was an indication that, had the Period 4 lean-to buildings extended that far that the whole lean-to range had been abandoned by

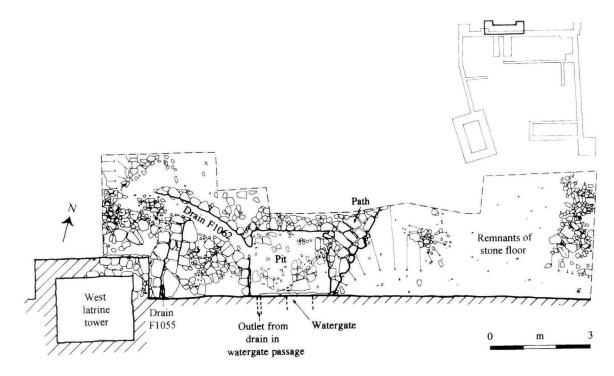
eastwards, at least part of them had been demolished by (or during) Period 5. Indeed, it is quite possible



illus 69
Plan of the east chamber of the north-west range, the watergate passage and the west wall of the north range, showing various Period 5 and 5A features.

this time: it would certainly have been removed when the shot-hole was inserted in the NW tower in the mid-16th century. The stone floor of the lean-to range was also disturbed by two drains (F1055 and F1062), at least one of which was contemporary with the Period 5 remodelling of the NW range (see above) (illus 70). Drain F1055, which lay adjacent to the W latrine tower, measured 0.40m wide internally and was built of crude flags although its capstones were missing. It extended northwards from a point directly below the outflow for the sink in the E

chamber of the NW range and ran for a length of 2.5m before emptying into drain F1062. The latter, which was unfloored and also lacking its capstones, was the overflow from a rectangular pit located immediately outside the watergate. Built of drystone masonry, the pit measured 2.4m by 2.0m but its infill of soils and rubble was not removed and its depth remains unknown. The drain that ran along the watergate passage issued into the pit through a 0.25m-wide opening below the west jamb of the doorway (see above). This suggests that the pit had



illus 70 Plan of the Period 5 features outside the north curtain wall. A few remnants of the floor of the Period 4 lean-to building(s) survive.

been water-filled and was probably a security device, perhaps with a retractable bridge across it although no trace of one survived.

On the E side of the pit were several substantial sandstone blocks, which may be interpreted as a path. Only a short stretch of this path was exposed although it appeared to lead to the loch side, perhaps to a harbour or a landing stage.

THE EAST LATRINE TOWER

This tower had been demolished almost to ground level, only to have had a few courses rebuilt in Period 6 or perhaps after the palace was abandoned as a residence (illus 79). Only the wall-head of the N curtain could have been served by this latrine, although no mark of the original structure could be

discerned further up the wall face. However, the E end of the wall had been refaced at some stage, probably during Period 5A, which would have obliterated any such evidence.

This structure was considerably smaller than the W latrine and measured only 1.40m N/S by 1.10m wide internally within walls 0.80m thick. It was built of sandstone, probably reused from elsewhere in the palace, on foundations of cherty rubble. A remnant of a chamfered plinth survived on its E wall. At the base of the tower, set at an angle against the curtain wall, was a large sandstone slab for deflecting waste towards an outlet, 0.90m high and 0.50m wide, at the base of its N wall. From there a stone-sided waste channel ran northwards towards the loch although it is difficult to understand how waste could have flowed along a base of bedrock and sand, unless its floor has been robbed.

3.6.11 THE EAST SIDE OF THE PALACE ENCLOSURE

THE EAST GATE (illus 71-74)

During Period 5 the principal entrance into the palace enclosure was moved. The gateway in the outer wall of the S range was blocked and a new one inserted into the E curtain, 10.5m N of the SE tower. This new E gate was 1.9m wide and some 2.5m high, with a flat outer arch whose voussoirs are now

largely missing. It was flanked by a pair of rectangular buttresses supporting semi-hexagonal projecting turrets, open at the wall-head. Grooves cut in the leading edges of the turrets suggest that, above this level, a timber superstructure was added at a later stage. Between the turrets the wall-head parapet was carried forward on a pair of depressed arches, supported on a central corbel. The soffits of

the arches contained murder holes protecting the entrance, whilst the arches themselves framed a pair of observation slits in the gatekeeper's room above the gate passage. Further security for the pair of wing doors that closed the entrance was provided by an iron portcullis, which would have been operated from the same room and was still *in situ* in the late 18th century (Cordiner 1795). The gatekeeper's room was reached from ground level by a spiral staircase in the angle between the gatehouse and the E range. The stair seems to have continued up to the wall-head but, like the back wall of the gatehouse itself (which may also have been of timber), it has now fallen away. There is no evidence that there had

ever been an inner gate. In the NE corner of the gatekeeper's room are the remains of a small fireplace.

Immediately above the gateway arch was set an armorial panel (at one time missing but now returned to its position), representing a shield bearing three stars on a fess between three keys paleways, with a bishop's crosier above it (Macdonald 1900, 392, fig 43; Simpson 1927, 7, fig 2). Although Lachlan Shaw (1882, III, 299) identified these arms as belonging to Bishop John Innes (1407–14), a more plausible suggestion made by Simpson (1927, 13-15), and followed by Fawcett

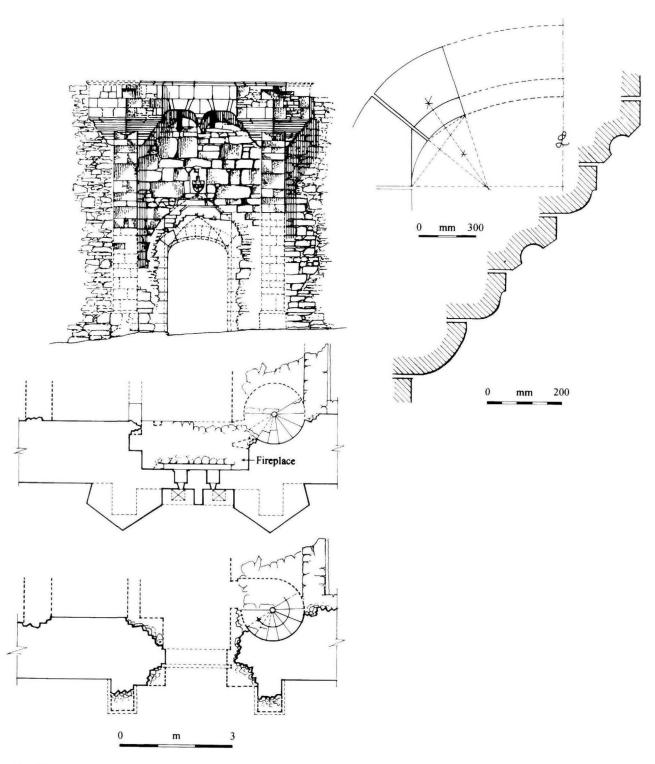


illus 71
The east gate viewed from within the courtyard.

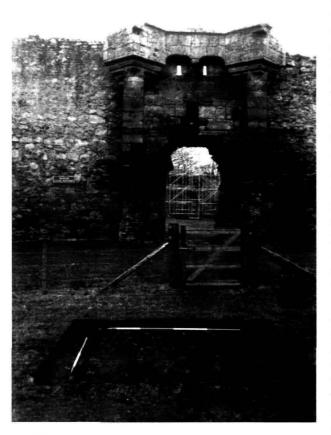
(1994, 277) is that they were the arms of Bishop John of Winchester (1435-60), the king's Master of Works, who was responsible for additions to Linlithgow Palace and to Urquhart and Inverness Castles. However, as Simpson (1927, 13, n 4) also points out, the arms of Bishops Alexander Bur (1362–97) and William of Spynic (1397–1406) have

not been identified, making them possible candidates for this work.

Architectural parallels suggest that the gateway was built towards the end of the 14th century or early in the 15th century. For example, a gateway flanked by tall cylindrical turrets set on thick rectangular



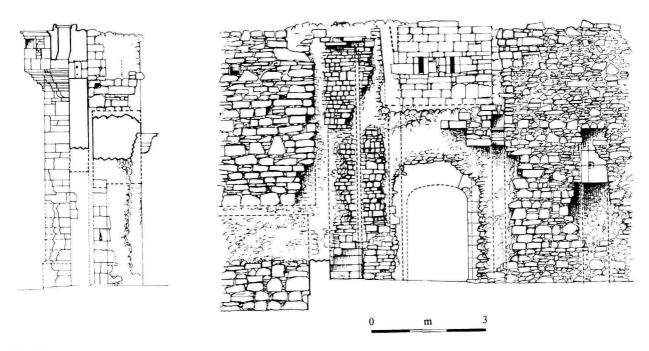
illus 72
The Period 5 east gate: east elevation, arch construction, profile of gateway buttress and plans at upper and ground levels.



illus 73 View, from the east, of the Period 5 east gate with cobbled road in the foreground.

buttresses adorns the façade of the castle built around this time at Chévenon, Nièvre, by the captain of Vincennes Castle. There the wall-head, four storeys high, was also provided with a row of corbelled machicolations (Salch 1979, 326-7, 529; Salch 1987, 78-9; Babelon 1986, pl III). A similar arrangement can be seen in the Porte du Croux that was added to the town walls of nearby Nevers between 1393 and 1398 by the master mason Jehan des Amognes (Salch 1979, 843-4). Such gates may be compared with the Porte des Champeaux in the papal palace in Avignon, forming the principal entrance through the west range which was built by Clement VI between 1345 and 1347. In this instance, however, the (now restored) slender turrets are polygonal in form and surmounted by sleek, pointed and crocketed caps, while between them a corbelled and crenellated gallery machicolation overhangs the gate passage below (Gagnière 1974, 65-70).

A closer architectural comparison for the new gateway at Spynie may be made with the three-storey gatehouse that was added to Middleham Castle, Yorkshire, by the Neville family some time in the late 14th century. At Middleham, the gateway was flanked by slender rectangular buttresses which supported square, corbelled corner turrets set diagonally upon them. Between the turrets, a row of corbels carried forward the wall-head parapet and provided a machicolation defending the gate (Peers 1943, 2-3; Platt 1982, 134-6, fig 124). In Langley



illus 74 West elevation of the east gate and profile through it.

Castle, Northumberland, the entrance to the tower house, as rebuilt around 1350, was also flanked by thin, rectangular buttresses capped with rounded, projecting bartizans (Grundy et al 1992, 371-2, pl 42). This may have been the inspiration for a series of gatehouse towers that were subsequently built in northern England, in which the gates were flanked by rectangular buttresses or turrets capped by octagonal, machicolated and crenellated bartizans. They include the late 14th-century gatehouse tower at Lumley Castle, County Durham, and those built at Hylton Castle, County Durham, around 1400 and at Bywell Castle, Northumberland, a little later (Morley 1976; Milner 1976; Platt 1982, 136, 177, figs 125 & 164; Rowland 1987, 86-8; Grundy et al 1992, 206). Of these, Lumley and possibly Hylton have been tentatively associated with the Bishop of Durham's master mason, John Lewyn, who was also responsible for building the gatehouses to the English castles of Roxburgh and Carlisle between 1378 and 1383 (Morley 1976, 130; Harvey 1954, 166-8; Colvin 1963, I, 186, 237-8; Colvin 1963, II, 599, 819-20). Although there is no reason to suppose that Lewyn was ever involved at Spynie, it seems possible that its new east gate owed something to northern English influence.

In contrast to the split boulders of limy Cherty Rock used in the face of the Period 4 east curtain, the masonry used to finish off the opening around the new entrance was all of sandstone. This disruption resulted in the loss of some of the chamfered plinth on the outer face of the curtain wall. The plinth was slightly lower than the threshold of the new doorway, the ground outside the entrance having to be raised to the same level as that inside the palace courtyard.

THE EAST RANGE (illus 75)

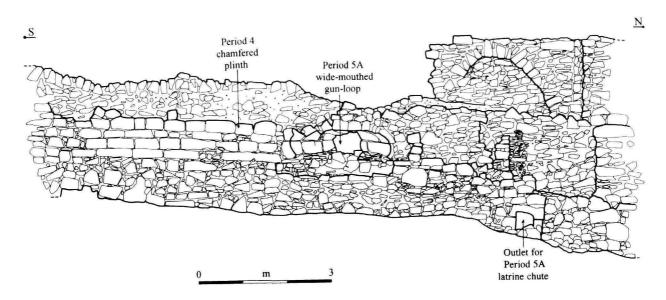
If the east range replaced an earlier building, no trace of it has been found, although the evidence could have been swept away during the construction of the Period 5 range or by later demolition, robbing and clearance work. Internally, the range measured 16.2m N/S by 4.3m wide and had at least two storeys, although its W and S walls had been demolished to ground level. Its fragmentary W wall (in places it was completely missing) included granite boulders and other glacial erratics which occur very rarely at Spynie. The first floor of the range was supported on a vault springing from a 0.6m-thick cladding of masonry set against the inside face of the curtain wall, making the wall 2.3m thick at this point. Some of the springers of the vault are still in situ, although the E wall of the range does not stand above this level anywhere along its length.

The most intact part of the east range is its north gable where some of its masonry survives to firstfloor level. Within this wall is a doorway which opened into the ground-floor room, which is 1.0m wide and 1.9m high, topped with a depressed arch. To the left of it was a fireplace, 1.4m wide and 0.5m deep at its base. This door leads into a small (3m by 2m) vaulted passage, built on substantial foundations in a corner of the well chamber of the N range. It apparently formed a lobby connecting the E range with the withdrawing room or the transe (or perhaps both) in the N range. This connection and the existence of a fireplace suggest that the E range originally contained residential accommodation rather than stables, as later implied by Shaw (1775, 285). However, in the mid-16th century (Period 5A), a wide-mouthed gun-loop was slapped through the east wall, suggesting that by then the chamber was no longer used as a residence.

To ensure that the floor of the E range was level and at the same height as the banqueting hall, the S end of the building had been sunk some 0.5m into the subsoil. No trace of its floor surface or of any



illus 75
The east range, viewed from the south. In the north gable is the doorway into the vaulted chamber that led into the withdrawing room in the north range. To the left of the doorway is a fireplace.



illus 76
Elevation of part of the external face of the east curtain wall, showing remnants of the Period 4 chamfered plinth and the Period 5A latrine chute and wide-mouthed gun-loop.

occupation deposits survived but merely demolition debris and modern artefacts lying directly on the subsoil. As with many other parts of the site, the archaeological record had been almost completely destroyed within the E range.

In the first-floor chamber there was a fireplace towards the centre of the N wall, its position marked by the surviving left-hand jamb and lintel socket, as well as by heat-damaged masonry at its rear. This room was lit by a window in its W wall, hard against the N gable. In its NW corner survives the threshold stone for a door, which seems to have led into another lobby (directly over the one at courtyard level), giving access to the latrine in the E curtain wall and to the room above the dais chamber in the N range. A stone corbel surviving in the curtain wall,

just N of its S gable, may have supported the floor of a garret, set below a pitched roof that would have drained on to the curtain wall-head on its E and into the courtyard on its west.

Towards the N end of the range, the chamfered plinth on the outer face of the building had been disturbed with the insertion of a wide-mouthed gunloop, probably in the mid-16th century (Period 5A) (illus 76). Much of the stonework surrounding the gun-loop is now missing: indeed, its interpretation as such was possible only after substantial amounts of overburden had been removed from the outside face of the wall. The plinth was also missing where a mural latrine chute, whose opening measured 0.3m square, was inserted into the curtain wall, 11m from its N end, probably during Period 5A.

3.6.12 OUTSIDE THE EAST CURTAIN WALL

When the new gateway was forced through the E curtain, the ground level outside it had to be raised slightly to bring it up to the same level as that immediately inside the courtyard. This helped create a level platform that extended some 20m to the E of the palace and 6m N of the E gate. From the latter point the ground slopes quite steeply downwards to the lochside. Near the edge of that slope and abutting the curtain wall was a clay-bonded rubble wall (F1241), 0.8m wide and surviving to a height of 0.9m. Only 1.5m of the wall's length was exposed and its full extent is unknown. It may have marked

the N side of an enclosure whose S side was bounded by another similar wall (F1249), some 22m away (illus 80). Wall F1249 probably abutted the SE tower, midway along its length, although this could not be con-firmed within the constraints of the 1986 exploratory trenching. More work needs to be done before this area can be explained although it could have housed some outer defences, or perhaps stables.

Another very interesting feature in this area was a metalled road, part of which had been exposed during clearance work in 1974 but which was investigated and recorded more fully in 1986 when a small trench was excavated 6m beyond the east gate. This road ran eastwards from the gate before curving southwards beyond the trench edge. Built mostly of granite cobbles with a sandstone kerb on its NE side (the only side to be exposed), it was almost certainly the same road as that uncovered in two trenches at the E end of the field that lay to the S of the palace

(see below 3.6.13). It was not possible to confirm the relationship between this road and the boundary walls of the putative enclosure. The road appears to have run across the line of wall F1249, although it is not known which feature was the earlier. Alternatively, they could have been contemporary, the road running through a gate in the S wall of the enclosure.

3.6.13 OUTSIDE THE SOUTH CURTAIN WALL

Prior to the installation of a new power supply to the palace, ten small trenches were opened within the field that lay to the south of the palace. This field, defined on its N side by an early 19th-century drystone wall and on its remaining three sides by a modern fence, was roughly trapezoidal in shape with maximum dimensions of 120m E/W and 50m wide. During the later years (at least) of the palace, there were gardens and orchards within this area, although it had been ploughed regularly for some time before the excavation commenced.



illus 77
The Period 4 cobbled road exposed in the field to the south of the palace. Viewed from the west.

The trenches varied in size from 2m square to 8m by 2m. In the trenches in the NW corner of the field and in its centre, 0.2-0.5m of ploughsoil lay directly over the sandy subsoil, nothing of archaeological interest being encountered. In other trenches, however, evidence was uncovered of earlier boundaries and stretches of the cobbled road that continued as far as the E gate of the palace.

THE EAST ROAD (illus 77)

Running N/S through two trenches in the E side of the field was a road, 4.2m wide, presumed to be the continuation of the one identified outside the E gate of the palace. It comprised well-laid cobbles set in loose sandy mortar. The central ridge and the kerb on the E side of the road were formed from rectangular stones. Along its W edge was an earth bank, described below.

THE BOUNDARIES OF THE GARDEN ENCLOSURE

The limits of the modern field were almost identical to those of the presumed late medieval enclosure. Its E, S and W sides were defined by earth and stone banks (since replaced by fences), which were uncovered in four trenches. They were each approximately 0.5m wide and survived to a maximum height of 0.5m, although they had probably been much higher originally, having collapsed or been deliberately levelled at some stage. The E bank ran close to the cobbled road and appeared to be contemporary with it. Alongside the inside face of the W bank was a 0.7m-wide strip of yellow clay, perhaps the remains of a path although time did not permit a fuller investigation.

Removal of the 19th-century drystone wall on the N side of the field revealed remnants of an original wall below it. The earlier structure was 0.75m wide and built of rubble (including some reused sandstone)

bedded in silty soil, and it survived to a maximum height of 0.75m. It was 54m long, terminating 1m

short of the Period 5 cobbled road (the relationship between those two features was unresolved).

3.7 PERIOD 6: THE FINAL YEARS OF THE BISHOPRIC (late 16th to late 17th century)

3.7.1 INTRODUCTION

Following the death of the last Roman Catholic bishop of Moray, Patrick Hepburn, in 1573, the palace saw over a century of intermittent occupation by Protestant bishops and, during periods when episcopacy was suppressed, by lay keepers. There may have been numerous alterations to the palace during that period although many will have left little

or no trace in the architectural and archaeological records. One of the most conspicuous of the Period 6 features is the rubble wall whose remains stand outside the S range and David's tower. This was probably thrown up in response to the threat of an attack, either that by Major-General Monro in 1640 or that by allies of the Marquis of Montrose in 1645.

3.7.2 THE NORTH RANGE

The only modification to the hall range that can be attributed with any confidence to Period 6 was the laying of a clay floor in its W basement chamber. However, on the evidence of artefacts recovered from the well, it seems likely that this room was also abandoned during Period 6.

THE BASEMENT WELL CHAMBER

Most of the infill of the well comprised demolition debris, some of it perhaps from the walls of the N range but most from the lining of the shaft and perhaps its superstructure. Towards the bottom of the shaft were artefacts perhaps discarded after the well went out of use but before the palace was abandoned. Within the waterlogged silts at its base was a crude, but almost complete, ceramic jug in local redware as well as several fragments of leather. Most of the leather was from shoes (probably only two) which were welted and could date from almost any time after c 1500 (see Chapter 4.8). There were also two small fragments of leather from a decorated knife sheath of a type common during medieval and

post-medieval times.

THE WEST AREA OF THE BASEMENT

To the immediate W of the partition wall were the remnants of a floor comprising a layer of very compact clay and sand, 0.40m thick, and extending over an area of approximately 7.5m². It is not known whether this floor had extended over the whole of the basement although it is difficult to understand why such material would have been removed deliberately. The clay floor lay on a bed of sand from which a billon penny of James IV, dated to c 1500-1510 and showing only slight wear, was retrieved. Whilst this might suggest that the floor was laid in the early 16th century, a few clay pipe fragments recovered from deep within the floor (definitely not surface trample) indicate a later (probably Period 6) date. There were no indications on the surface of the clay as to the function of this chamber which was probably a store during Period 6, as it appears to have been in earlier times.

3.7.3 THE NORTH-WEST RANGE

Period 6 saw more alterations within the NW range, perhaps in response to the reduced need of the great hall in the N range. Whilst the E chamber might have continued operating as it did in Period 5 (although there was no firm evidence either way), the rest of the building clearly saw radical changes.

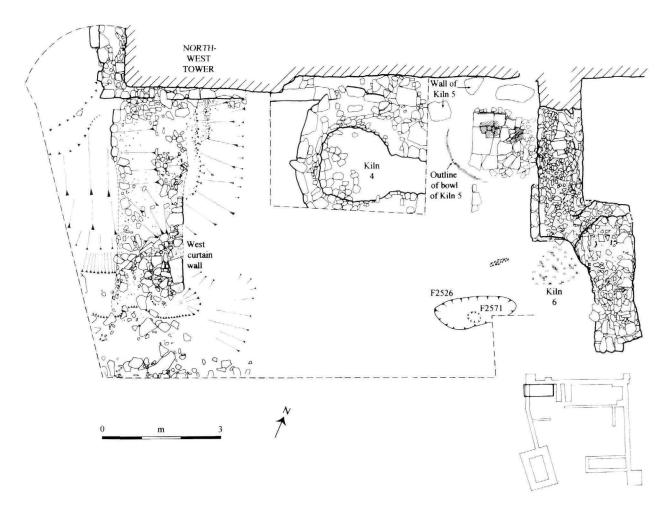
THE WEST AREA (illus 78)

The archaeological record in this part of the range was poorly preserved because of wholesale demolition and subsequent stone-robbing and landscaping. Nevertheless, it was possible to prove that partition wall F2688 had been demolished and the W latrine tower no longer used at this level whilst the range was still in use.

The demolished Period 4 partition wall was overlain by Kiln 4 whose remains were uncovered within the small trench excavated prior to the installation of the external stair to the NW tower in 1994. Its bowl measured 1.8m in diameter and its flue 0.9m wide, the latter extending eastwards beyond the edge of the trench. Only one course of the kiln wall survived, built of clay-bonded rubble, 0.6-0.8m wide. Over its floor of rough flagstones, most of which were missing, were spreads of charcoal, ash and burnt clay containing numerous very small fragments and flecks of bronze. These could be an indication of metal-working, although the lack of any supporting evidence could indicate that they were the remains of a stray object which had disintegrated within the kiln.

Between Kiln 4 and the N curtain wall were a few crude flagstones which extended as far as the Period 4 paving outside the W latrine tower, although the two features were clearly not contemporary. Over the earlier paving were the remnants of another kiln (Kiln 5), the evidence of which comprised a few fragments of its wall and a ring of soot on the underlying flagstones, defining the inside face of the bowl where the heat had been intense but the oxygen supply low. From these scanty remains, it is calculated that Kiln 5 had an internal diameter of 1.8m. After the construction of Kiln 5, the W latrine tower would have been inaccessible from this level.

There was even less information about Kiln 6, which survived as an area of burnt clay in the angle resulting from the partial demolition of wall F1334. Nearby was a spread of iron fragments, perhaps an indication of this kiln's function, although the evidence was far from definite. The only other features to be exposed within this area were a shallow curvilinear pit (F2526) just to the west of Kiln 5 and a post-pit cut into it. The pit measured 2.0m by 0.8m and 0.35m deep and was infilled with clay and rubble containing fragments of floor tiles, perhaps remnants of the floor of the building. Near



illus 78 Plan of the west and central chambers of the north-west range in Period 6.

the centre of pit F2526 was the only post-pit (F2571) to be uncovered within the NW range. Neither its function nor its relationship with the nearby kilns are known.

THE WEST LATRINE TOWER

There was no trace of waste at the base of the latrine tower, suggesting that it had been cleaned out before being abandoned. Its base was covered with collapsed masonry and sandy soil, which blocked the outlet in its N wall. This material was overlain by thin layers of humic soil, sandy soil, clay and rubble, up to 0.75m deep in total and resulting from the

partial collapse of the tower's walls and, perhaps, from the clearing of debris from within the NW range. The humic soils contained a few sherds of local pottery, large quantities of mammal bones and several fragments of textile. One of these was of fine cotton worsted, and the remainder were in tabby and fundamental twills, for everyday wear, made from single yarns with many weaving faults (see Chapter 4.9). About half of these fragments had been cut. Perhaps they were simply tailors' off-cuts or they may have been put to a sanitary use. If the latter, the tower may have continued to service a latrine at the wall-head.

3.7.4 OUTSIDE THE NORTH CURTAIN WALL

In this area, the only feature that appeared to continue in use during Period 6 was the E latrine tower although its function changed considerably.

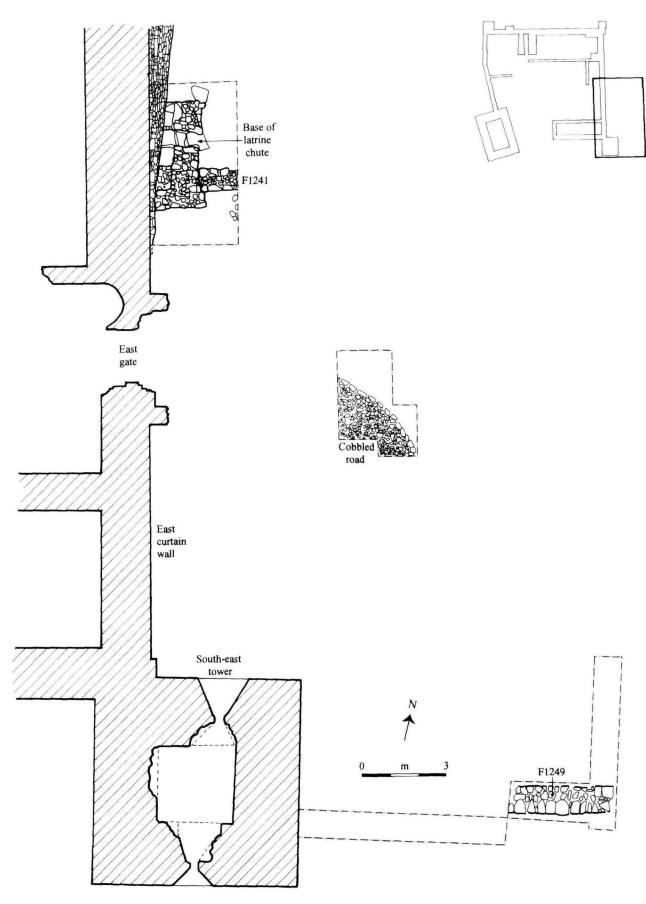
THE EAST LATRINE TOWER (illus 79)

At some stage, the E latrine tower was put to an entirely different use, perhaps after its superstructure had been demolished. The opening to the waste channel was blocked with rubble and soil and rounded beach pebbles laid as a floor. Covering the floor was 0.45-1.25m of grey ash and a grey-white concretion of calcined and comminuted mammal and fish bones in an open, calcified matrix. This very

light porous material is interpreted as partially hydrated lime which could have been used in making mortar or for agricultural purposes (although the quantities produced from such a small-scale operation might rule out the latter). Within it were several large, conjoining sherds of pottery from the base and body of a jug in a local redware fabric. Around three sides of this limy deposit were thin layers of black carbonized material, probably peatash, indicating the source of fuel for its manufacture. The lime appears to have been removed through an opening, 0.70m-wide, which had been forced through the base of the structure's W wall.



illus 79 The east latrine tower and its waste channel, viewed from the north-east.



illus $80\,$ Plan, showing structures and features on the platform outside the east curtain.

3.7.5 THE EAST RANGE AND ITS ENVIRONS

There was no evidence of any alterations to the ground floor of the E range during Period 6. However, there were certainly changes within the floor (or floors) above, perhaps carried out in conjunction with the remodelling of the E end of the adjacent N range. A latrine chute was built against the outside face of the E range, 5m from its S end, perhaps augmenting or replacing the Period 5 one located at the junction between this building and the N range.

The later latrine had been demolished to its foundations and it was not clear whether it had been

integral with the N wall (F1241) of the enclosure outside the E gate or had been built over its demolished remains (illus 80). Only the bottom few courses of its chute survived, indicating that it was 0.6m wide and built of clay-bonded rubble masonry. From its base, a drain ran 2.2m northwards alongside the curtain wall, before returning eastwards as a short channel from which waste was removed. The insertion of this latrine caused the destruction of yet more of the Period 4 chamfered plinth on the outside face of the E curtain wall.

3.7.6 STRUCTURES TO THE SOUTH OF THE PALACE ENCLOSURE

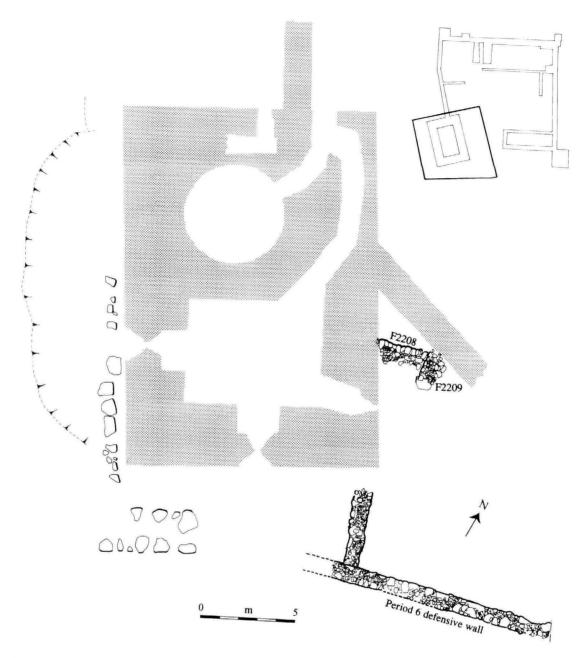
The most prominent Period 6 feature to the south of the palace enclosure comprised what is interpreted as a defensive wall, built as a response to the threat of attack either by Major-General Monro in 1640 or, perhaps more likely, by Lord Lewis Gordon in 1645. The fragmentary remains of two other walls, lying close to the SW tower, were too flimsy to have had any defensive function.

THE DEFENSIVE WALL (illus 81-82)

This was visible as a discontinuous line of boulders along the W and S faces of David's tower from where it ran slightly S of E before petering out in front of the S range. Adjacent to the tower, it comprised a single course of boulders of Cherty Rock, some of them massive, with no apparent



illus 81 The south-west corner of the palace, showing the Period 6 defensive walls near David's tower. Viewed from the east.



illus 82 Plan of the Period 6 features outside the south-west corner of the palace enclosure.

bonding material. Its outer face was missing to the west of the tower whereas its full width of over 2m was evident where it returned eastwards near the SW corner of the building. Further east, where the wall was uncovered in an excavation trench, it measured less than 1m wide although it stood to a maximum height of 1.3m. This section was built of smaller rubble than its W arm and was bonded with clay and soil. Its full extent was not traced (indeed, there is a 7m-long stretch between those parts of the wall described above that has still to be revealed).

The proximity of the wall to David's tower would have made the building's wide-mouth gun-loops

redundant, indicating that it was built some time after the gun-loops were inserted. The most likely explanation is that it was erected to protect David's tower from artillery fire and perhaps to provide cover for musketeers, although whether it would have proved an effective defence is open to doubt.

Abutting the wall, and extending some 4m northwards to a point just short of the SE corner of the tower, was another wall of similar build which stood to a height of only 0.5m. The purpose of this short stretch of wall is far from clear, and it is not even certain that these defences were completed before the palace was besieged.

OTHER STRUCTURES (illus 82)

In the re-entrant angle between the SW curtain wall and David's tower were the fragmentary remains of two drystone rubble walls (F2208 and F2209). Each

wall was about 1m wide and stood for only one to two courses. Their function remains unknown although their location suggests that they may have been associated with the latrine chute in the E wall of the tower.

3.8 PERIOD 7: POST-BISHOPRIC SPYNIE

3.8.1 INTRODUCTION

The physical decline of the palace was probably well under way long before its last incumbent, Bishop William Hay, surrendered it to the Crown in 1690. Nevertheless, at least some parts of it probably remained habitable for some time after that date and could have been exploited by squatters and latterly by farmers to house animals and to store crops. The less complete structures, and ultimately perhaps all the palace buildings, became ready sources of stone for the building of new farms, houses and field walls

around Spynie. Some appears to have been used in the construction of the Elgin-Lossiemouth railway in 1852. Even taking into account the large amounts of rubble littering the palace enclosure prior to excavation, it was obvious that enormous amounts of stone must have been removed from the site. Although the palace was more or less deserted from the late 17th century, the shore of Spynie Loch continued to accommodate a fishing community for at least another century.

3.8.2 THE LOCHSIDE STRUCTURES

An engraving published in the early 19th century depicts a row of cottages on the edge of the loch, some distance west of the palace (Forsyth 1806, 499). It also shows a small sailing boat just offshore, implying that the hamlet was inhabited by fisher folk. No trace of those buildings was visible prior to excavation. However, what was probably a related feature, known as the 'Bishop's well' and located on the old shore line 90m W of the palace, appears on all editions of O S maps. Limited investigations were undertaken in this area in 1987, a year after exploratory excavations had been carried out a short distance further W when the remains of one building (Structure 5) and a grain-drying kiln were uncovered (illus 83). Excavation within all the lochside trenches proved very difficult because of a dense mat of tree roots and constant waterlogging. Consequently, the information obtained from them was somewhat less than had been hoped.

THE 'BISHOP'S WELL' (illus 83-84)

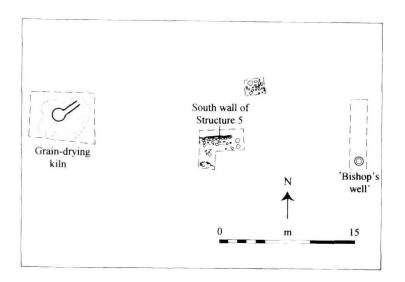
A trench, measuring 8m by 2m, was opened around the so-called 'Bishop's well' (which was excavated because cattle, using it as a watering hole, had been damaging the feature). The well, which had been demolished to ground level, consisted of a shaft approximately 1m in diameter within clay-bonded, sandstone walls, 0.3m thick. The water level within it

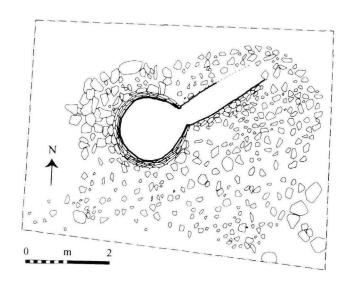
was similar to that in the surrounding area, which was very boggy.

To the immediate N of the well was what appeared to be a floor of crude flagstones and cobbles, overlain by topsoil from which 19th-century pottery was recovered. Just N of the well was a crude rectangular trough, aligned E/W and built of planks which were kept in place by posts. The cobbles and flags continued beyond the trough where they had been disturbed by a shallow E/W gully. In the NE corner of the trench were the remnants of an upright post, a post-pit, a few large boulders and patches of burnt soil, none of which could be investigated in the time available.

STRUCTURE 5 (illus 83)

Part of one wall of Structure 5 was exposed within an inverted L-shaped trench, measuring 5.2m by 4.0m, which was opened against the foot of the cliff, 12m west of the 'Bishop's well'. At this point and for some distance either side of it, the base of the slope was studded with boulders, presumably with the purpose of minimising erosion of the sandy bank behind the building. The fragmentary wall, built of rubble bonded with a very plastic pink clay, survived to a maximum height of 0.50m (four courses) and was about 0.7m wide. There was no recognizable



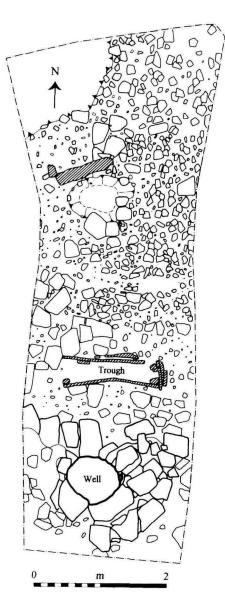


illus 83 Plan, showing the location of Period 7 features at the lochside, and a plan of the grain-drying kiln.

floor surface adjacent to it, other than the pink (probably lacustrian) clay upon which the wall was built. Numerous fragments of thin window glass retrieved from the topsoil indicated that the building had probably been glazed. Sherds of yellow-glazed earthenware in the same deposit suggest that it was occupied in the late 18th/early 19th century. In another smaller trench 4m farther N was a spread of sandstone rubble, perhaps the remnants of another wall. If this was the N wall of Structure 5, then the internal width of the building was approximately 5m.

THE GRAIN-DRYING KILN (illus 83)

Visible as a low mound prior to excavation, the kiln was partially exposed in a trench measuring 7.5m by 5.5m and located 12m W of the exposed remains of Structure 5. It was built of rubble, bonded with clay and sand. Its bowl measured 1.6m in diameter and its flue, which extended 2m to the NE of the bowl, was 0.55m wide. No artefacts were recovered from this trench. Limited time did not allow all the collapsed masonry to be cleared from the kiln and its outline is yet to be defined.



illus 84 Plan of the 'Bishop's well'.

3.8.3 CASTLE COTTAGE

Standing some 200m W of the palace enclosure, the single-storey, two-room Castle Cottage was built by the Barons of the Exchequer in 1828 as the first keeper's lodge at Spynie. It is perhaps ironic, however, that almost the final act in the conservation of the palace was the demolition of this building in 1994 and its subsequent replacement by an adjacent building to house the present custodian.

3.8.4 THE PALACE ENCLOSURE

During the excavation of the watergate passage, 68 numismatic objects and several items of jewellery, together with the remains of the leather wallet and two purses (one leather and one textile) that had contained them, were retrieved from its rubble infill. Of the items that could be dated, most were from the 19th century, the latest dating to 1886. These objects, some of which are now missing, are listed in Appendix 2. The most likely explanation for this assemblage is that it represented a personal collection that had been stolen and hidden but never retrieved. A search through local newspapers covering the late 19th and early 20th centuries failed to shed any light on this matter.

THE FINDS

4.1 COINS, JETONS AND OTHER NUMISMATICA

Nicholas M McQ Holmes

4.1.1 DESCRIPTION AND DISCUSSION

COINS

THE HOARD OF JETONS (illus 85-87)

Items submitted for identification comprised 74 individual finds and a hoard of 33 jetons and part of a coin. Unfortunately, most of the single coins were retrieved from fairly modern contexts. Of the finds from late contexts, the scarcest item is a Stirling bawbee of Mary (no 8).

The large assemblage of miscellaneous items associated with a cloth bag found in the watergate passage appears to represent an individual's personal numismatic collection, perhaps stolen and subsequently abandoned. In addition to British and foreign base metal coins, the assemblage included a trade token of Sherborne, Dorset, a large bronze commemorative medal of 1868 and a number of toy coins and medalets. The latest dated item among this group is a Belgian coin of 1886 (no 50) and, since this is in worn condition, the date of deposit is likely to have been in the 20th century.

A consideration of the overall coin loss pattern on the site reveals that only two finds definitely date from before 1500: the Robert II penny (no 1) (almost certainly redeposited); and a James III penny (no 2) from the 'collection' in the watergate passage. Although five pennies of James IV (representing the most common 'small change' of the first half of the 16th century) were recovered, only the Stirling bawbee of Mary and a James VI hardhead (no 9), both redeposited in late contexts, represent the issues of the last 90 years of the century. There is a high concentration of copper issues of Charles I together with a couple of contemporary foreign coins, whereas there are few coins of Charles II. All the later issues were found among the small hoard within the watergate passage.

This hoard was found in the foundation trench of the W wall of the SW tower which is generally accepted as having been built in the time of David Stewart, Bishop of Moray (1461/2-1475). The construction may have been completed under his successor, William Tulloch, but it is extremely unlikely that the foundation trenches would still have been open after 1475. There was no evidence of later disturbance of the context in which the jetons were found, and a terminus ante quem of 1475 for the deposit therefore seems beyond reasonable doubt.

The hoard comprised 33 jetons and a fragment of a coin, discovered together in a column, as if they had been contained within a wrapping of cloth or other organic material. Almost all the jetons date from the 15th century. Most of them can not be dated much more closely than this, but those that can seem to span a wide range, and there is very little duplication of exact types within the hoard. The majority are products of Tournai, western Belgium, although in the possession of the Dukes of Burgundy in the 15th century. It was at Tournai that so-called 'stockjetons', ie those made for general sale rather than for specific individuals or government departments, were manufactured in very large numbers throughout the 15th century. Full descriptions, and some comments on individual pieces or types, are included in the catalogue. Discussion here will be confined to selected items of particular interest and to the significance of the hoard as a whole.

In terms of dating, the two earliest jetons may be nos 4 and 5 in the catalogue, which Mitchiner (1988) describes as royal jetons of the Paris mint, belonging to the reign of Charles VI (1385-1415/22).

Mitchiner's dating is based on comparison between jeton and coin types and on contexts and associations of finds from the Thames foreshore in London, but unfortunately this evidence does not appear to be wholly reliable. This is particularly clear in the case of those jetons from Spynie that belong to types which Mitchiner sees as belonging to the late 15th or early 16th century. Nos 30 and 31 in the catalogue are examples of types which he ascribes to the period 1497-1521, and the pointed shield found on nos 27-29 is also a characteristic seen as belonging to the same period. Clearly this dating is in conflict with the date of deposition indicated by the historical and archaeological evidence at Spynie Palace, and this in turn would seem to cast doubt on the reliability of much of Mitchiner's dating.

Other individual jetons of particular interest in a British context are the two struck for Jean de Saulx, Vicomte-Maieur of Dijon, in Burgundy (nos 1 and 2). The presence of these two items in north-east Scotland is somewhat unexpected as is that of a 'portrait-groat' type jeton (no 3), possibly made for use in those parts of France that were under English rule in the first half of the 15th century. Mitchiner (1982, 133) states that no examples of this type had been included among some 1200 jetons known to have been found in London at the time of writing.

Hoards of jetons are rare finds, not only in Britain but throughout those areas of western Europe where jetons were made and commonly used. Since little attempt seems to have been made to assemble information on those discoveries which have been recorded, brief notes and references are included here.

GREAT BRITAIN

London, Bell Wharf (1982): 19 jetons, all of Nuremberg manufacture and all of 'Lion of St Mark' type; dated to 1490s; acquired by the Museum of London; unpublished.

London, Vintry House (1983): 27 jetons, comprising 25 early Nuremberg issues, one of Tournai and one 'French derivative'; dated *c* 1470–1490; unpublished.

London, Bankside (south foreshore) (1986): 80 jetons, all 'French derivative' or variations; dated to second half of the 15th century; Museum of London has a photographic record; unpublished.

Market Harborough (1988): 17 Nuremberg jetons (late 16th – early 17th century) along with many

other items, found while re-opening the rood loft stairwell of the church of St Dionysius; acquired by Harborough Museum.

Surrey (c 1980): 335 jetons (mostly 18th-century Nuremberg issues) and 903 coins found in a house at an unspecified address; see Mitchiner (1982); hoard dispersed, with many of the jetons sold at auction.

FRANCE

Prat-Loas, Plouzane, Finisterre: 2 coins and 17 jetons, all mid-16th-century Nuremberg issues of rose/orb type; see Dumas (1966).

Coussay, near Poitiers, Vienne: 13 Nuremberg jetons of French type, mostly with ship/four lis in lozenge design, found in the walls of the Château de la Giraudière; see Duplessy (1966).

Another group of Nuremberg French-type jetons, probably numbering 19, was discovered in northeast France a few years ago (Jacques Labrot pers comm). No report of this find has been published. The writer has been unable to locate any evidence for hoards of jetons in Germany or the Low Countries, the other areas where manufacture took place on a large scale.

There is thus very little comparable material that can be used in an analysis of the Spynic Palace hoard. Of the hoards listed above, only that from Bankside in London is at all comparable in terms of the types of jetons contained within it, but it is notable that almost all the jetons from Bankside bore the obverse design of a shield of France modern (ie bearing three lis). This general homogeneity of date, source and type is found also in the other hoards of which details are available, and a contrast is apparent with the Spynie hoard, which contains Tournai jetons bearing various designs as well as some examples from other mints. Indeed, there is very little duplication of exact types within the hoard at all. Even if Mitchiner's dating of the various types of jeton is set aside, there is definite stylistic evidence that some of the jetons are of much later issue than others and this, combined with the variety of designs represented and the multiplicity of sources, suggests strongly that the group of jetons was built up piecemeal rather than purchased as a working set.

This diversity raises various questions concerning the purpose that the jetons may have served. A set of 33 jetons would certainly have sufficed for manual calculation up to a certain point, although a standard working set, as issued to court officials, contained 100, and there is no doubt that accounting would have been required at Spynie, which was one of the administrative centres of a large episcopal estate. If a working set of jetons was required by a large Scottish estate in the later 15th century, however, it would surely have been possible for such a set to be acquired by purchasing it from a merchant or supplier and, if this occurred, the jetons may reasonably be expected to have been of the same type, date and area of production. Stray finds of 15th-century Tournai stock-jetons from urban excavations demonstrate clearly that such items were indeed available and in use in Scotland. It seems improbable, therefore, that it would have been found necessary to build up a working set of jetons from stray items. Even if this had been done, the assemblage is unlikely to have included such items as the Dijon issues and the 'portrait-groat' type, which are not normally found in Britain at all.

Dumas (1966) suggested that the coins and jetons found in Finisterre might have belonged to a child who had used them for practice in counting, and this may also have been the case with those recovered in Market Harborough, accompanied as they were by a large number of wooden toys. Such an explanation is

also possible for the Spynie Palace hoard, but it does not in itself explain the wide diversity of types and the almost total absence of duplicates, which appears more deliberate than accidental.

It is tempting to draw an analogy with Britain in the late 18th century, when the issuing of local trade tokens throughout the country prompted sufficient interest among sections of the population for collecting to become fashionable, leading eventually to the production of some tokens in very small numbers for sale to collectors. Whilst it would be fanciful to suggest that any late medieval copperalloy jetons were ever struck for other than purely practical purposes, it is perhaps not impossible that occasionally a person might have attempted deliberately to collect together jetons of different types. The inclusion within the Spynie hoard of half a coin of a type which must have been unfamiliar to most Scots, a silver Schilling of the Teutonic Order in Prussia (no 56), might perhaps add weight to the suggestion that this may have been the case here. The urge to collect has probably been part of human nature since people first had sufficient leisure to indulge it, even if concrete evidence for such an activity is often hard to find.

4.1.2 CATALOGUE

THE COINS

SCOTTISH

1 ROBERT II, silver penny of Perth (1371-90), as Burns (1887), 279, no 8, fig 322

18.0 x 18.5 mm, 0.72 g, die axis 2.5

obv: $+[ROBGRTV]S \times RGX[\times SG]OTTOR';$ star on sceptre handle rev: V[ILL]/[ADG]/[PGR]/TbX

much edge damage, with much of legends missing; some flattening and surface corrosion; probably only moderate wear Post-abandonment deposit on N side of courtvard

2 JAMES III, billon penny, class CVb (1475-84)

13.5 x 14.5 mm, 0.43 g, die axis 9.0

obv: [+]ΙΛ[] rev: []/LΛθ/DIN/[

mis-shapen flan; some flattening and corrosion; fairly worn 19th- or early 20th-century cache in watergate passage

3 JAMES IV, billon penny, 2nd issue, type IVa (c 1500–10)

14.5 x 14.0 mm, 0.72 g, die axis 12.5

obv: $+I\Lambda\OmegaO[BVS \cdot D]\Omega[\cdot]GR\Lambda \cdot R\OmegaX \cdot [S\Omega]O$

rev: $[+VIL]/LT \cdot C/DINB/VRG[]$; lis in 1st and 3rd quarters, crowns in 2nd and 4th

reverse slightly off-centre; slight flattening; slight wear 20th-century deposit in N range

4 JAMES IV, billon penny, 2nd issue, type IVd (c 1500–10)

13.0 x 13.5 mm, 0.55 g, die axis 12.0 obv: $[+I \Lambda \Omega O]BVSD \Omega [GR \Lambda R \Omega [X]S \Omega [$

rev: [+]VIL/L\(\tag{DI\)B/[]; possibly a pellet after VILL\(\tag{VIL\}\)

some surface corrosion; slight wear

Deposit directly below Period 6 clay floor in basement of N range

5 JAMES IV, billon penny, 2nd issue, type IV (uncertain sub-type) (c 1500–10)

14.0 x 14.5 mm, 0.81 g

some surface corrosion; worn

Post-abandonment deposit on N side of courtyard

6 as no 5

14.5 x 14.0 mm, 0.45 g

some edge damage, flattening and corrosion; fairly worn Deposit that extends below Period 6 defensive wall to south of palace

7 JAMES IV, billon penny, 2nd issue, uncertain type (c 1500--0)

16.0 x 16.5 mm, 0.85 g, die axis 2.0

oby: []IACOBYS[DEI]GRA

rev: []VIL/LTG/DIN/BVR[G]; lis in 1st and 3rd quarters, crowns in 2nd and 4th

uneven striking; obverse weak; fairly worn; slight silvering

Fill of pit beneath latrine outlet in E wall of David's tower; probably post-abandonment

8 MARY, billon bawbee of Stirling, 1st period (1544) (Stewart 1967, no 156)

0.74 g

bent; edge badly chipped

20th-century deposit in N range

9 JAMES VI, billon hardhead, 2nd issue (November 1588), (Stewart 1967, no 200)

1.36 g

much flattening; worn

19th- or early 20th-century cache in watergate passage

10 CHARLES I, copper turner, 1st issue (1629), (Stewart 1967, no 235)

1.74 g

much flattening; fairly worn

Probable post-abandonment deposit outside S range

11 as no 10 1.94 g

both sides slightly off-centre; slight surface corrosion; slight flattening; moderate wear

Root hole in S range

12 CHARLES I, copper turner, 2nd issue (1632-9), (Stewart 1967, no 237)

0.71 g

some surface corrosion; fairly worn 20th-century deposit in N range

13 as no 12 1.06 g

slight to moderate wear

Post-abandonment deposit in N range

14 as no 12

0.60 g

much surface corrosion; degree of wear uncertain Post-abandonment deposit outside E range

15 as no 12

0.76 g

slight corrosion; moderate wear; rather crude lettering – *possibly* a counterfeit

19th- or early 20th-century cache in watergate passage

16 as no 12

0.49 g

in two pieces, with a chip missing; some surface corrosion; fairly worn

Post-abandonment deposit on N side of courtyard

17 as no 12

 $0.90~\mathrm{g}$

some surface corrosion; moderate wear

Topsoil in S range

18 as no 12

0.78 g

both sides off-centre, especially reverse; some flattening and surface corrosion; slight wear

Disturbance of uncertain date against David's tower

19 as no 12

0.85 g

both sides slightly off-centre; some corrosion; moderate wear Probable post-abandonment deposit outside S range

20 as no 12

0.90 g

some corrosion; probably moderate wear

Topsoil in NW range

21 as no 12

0.44 g

are cut from edge at 9.0-11.0 (obverse); some flattening; moderate wear

20th-century deposit in NW range

22 as no 12

0.42 g

buckled; worn

20th-century deposit in NW range

23 as no 12

0.60 g

surfaces corroded; probably moderate wear 20th-century deposit in NW range

24 as no 12

0.71 g

both sides slightly off-centre; striking flaws on reverse; slight to moderate wear

20th-century deposit in NW range

25 as no 12

0.63 g

slight surface corrosion; moderate wear

Topsoil in W range

26 as no 12

0.76 g

some surface corrosion; fairly worn

Topsoil in W range

27 Contemporary forgery of a copper turner of CHARLES I, as 2nd issue (1632-9)

17.0 mm, 0.80 g, die axis 6.0

obv: lozenge CARDG · SCO · ANG · FR · ETHIBR

rev: $\cdot \mathbf{I} \cdot \mathsf{SNAOI} \forall \mathbf{P} \cdot \mathsf{NI} \forall \mathsf{CMFN} \cdot \mathbf{I} \ (\mathsf{P} \ \mathsf{is} \ \mathsf{reversed})$

reverse lettering larger and rougher than obverse; reverse slightly off-centre; slightly buckled; slight to moderate wear Probable post-abandonment deposit outside S range

28 CHARLES I, copper turner, 3rd issue (1642-50), (Stewart 1967, no 243; reattributed to Charles I)

3.01 g

surfaces corroded; probably fairly worn

19th- or early 20th-century cache in watergate passage

29 as no 28

3.30 g

some corrosion on reverse; slight flattening; moderate wear Topsoil in NW range

30 as no 28

2.57 g

much corroded; probably moderate wear 20th-century deposit in NW range

31 CHARLES II, silver half-merk (1671), type as Stewart (1967), no 240

22.0 x 21.5 mm, 2.90 g, die axis 3.0

slight corrosion on surfaces; worn

Post-abandonment deposit in W range

32 CHARLES II, copper bawbee (1677-9), (Stewart 1967, no 244)

corroded and very worn; corroded together with no 51 19th- or early 20th-century cache in watergate passage

33 WILLIAM II (III of England), copper bawbee (1695-7), (Stewart 1967, no 256)

6.56 g

surfaces corroded; obverse very worn; reverse worn flat 19th- or early 20th-century cache in watergate passage

34 Highly corroded fragment: four pieces glued together, forming just over half of a copper coin of turner/bodle/hardhead type (late 16th or 17th century)

0.32 g

Deposit directly below Period 6 clay floor in basement of N range

35 Unidentified copper alloy disc, possibly a Scottish coin

18.0 mm, 0.73 g

bent; worn almost flat; some surface corrosion

20th-century deposit in NW range

BRITISH

36 GEORGE III, copper halfpenny (1770-5)

surfaces much corroded; possibly an evasion issue 19th- or early 20th-century cache in watergate passage

37 GEORGE III, copper penny (1797)

some surface corrosion; very worn; large M or W scratched on obverse

19th- or early 20th-century cache in watergate passage

38 GEORGE III, copper halfpenny (1806-7)

8.49 g

worn

19th- or early 20th-century cache in watergate passage

39 Copper or copper alloy forgery of a GEORGE III silver 1/6 bank token of 1811

5.98 g

flattening on portrait; fairly worn

19th- or early 20th-century cache in watergate passage

40 GEORGE IV, copper farthing (1826)

4.51 g

some verdigris; fairly worn

19th- or early 20th-century cache in watergate passage

41 VICTORIA, bronze penny (1861)

slightly bent; dent on obverse; fairly worn

19th- or early 20th-century cache in watergate passage

42 as no 41

8.91 g

slightly bent; scratches on reverse; fairly worn

19th- or early 20th-century cache in watergate passage

43 VICTORIA, bronze penny (1862)

8.15 g

very worn

Topsoil in SW corner of courtyard

44 VICTORIA, bronze penny (1866)

9.11 g

fairly worn

19th-or early 20th-century cache in watergate passage

45 VICTORIA, bronze farthing (1866)

moderate wear

19th- or early 20th-century cache in watergate passage

46 VICTORIA, bronze penny (1872)

slight to moderate wear

19th- or early 20th-century cache in watergate passage

47 Unidentifiable copper alloy

30.0 mm, 5.54 g

cracked flan; both sides worn flat

described on label as '1862 penny'; possibly identified as such before cleaning

19th- or early 20th-century cache in watergate passage

48 GEORGE V, bronze penny (1917)

9.32 g

moderate wear

Topsoil in SW corner of courtyard

FOREIGN

49 AUSTRIA (PROVINCIAL): FURTHER AUSTRIA: FRANZ II, base silver 6 Kreutzer (1802), (Craig 1966, no 17) 1.92 g

very worn, especially reverse which appears very coppery 19th- or early 20th-century cache in watergate passage

50 BELGIUM: LEOPOLD II, copper 2 centimes (1886), (Yeoman 1967, no 2)

3.34 g

worn

19th- or early 20th-century cache in watergate passage

51 CHINA: a copper cash of uncertain type

some surface corrosion; corroded together with no 32

19th- or early 20th-century cache in watergate passage

52 DENMARK: CHRISTIAN VII, copper 1 Skilling (1771), (Craig 1966, no 47)

12.00 g

moderate wear

19th- or early 20th-century cache in watergate passage

53 DENMARK: FREDERIK VII, bronze Rigsmontskilling (1863), (Craig 1966, no 135)

3.76 g

slight verdigris; slight wear

19th- or early 20th-century cache in watergate passage

54 FRANCE: NAPOLEON III, bronze 10 Centimes (1854A),

(Yeoman 1967, no 17)

9.75 g

moderate wear

19th- or early 20th-century cache in watergate passage

55 Probably FRENCH PROVINCIAL, unidentified billon (probably 15th or early 16th century)

20.0 x 21.0 mm, 0.80 g obv: mostly illegible (....?OM_ ?QVD....); indistinguishable design

rev: [_ M]ONETA[.....]; short cross pattee some edge damage; much flattening; very worn

Deposit directly beneath cobbled road leading to E gate of palace

56 GERMANY: PRUSSIA: coin fragment; approximately half of a silver Schilling of the Teutonic Order in Prussia, struck for the Grand Master Paul Bellizer von Russdorf (1422-40)

obv: [MAGST] PAVLVSP [RIM]

rev: NONG [TADNORVM (or variant)] PRVC

(I am grateful to Miss Marion Archibald of the British Museum for identifying this fragment.)

With jeton hoard in foundation trench for David's tower (illus 87, no 34)

57 GERMANY: PRUSSIA: FRIEDRICH WILHELM III, silver 1 Silber Groschen (1821-40), mint uncertain, (Craig 1967, no 128 or 128a) 1.82 g

some surface corrosion; extremely worn

19th- or early 20th-century cache in watergate passage

58 GERMANY: PRUSSIA: FRIEDRICH WILHELM IV, copper 1 Pfennig (1857A), Berlin mint, (Craig 1966, no 140b) 1.48 g

some verdigris; very slight wear

19th- or early 20th-century cache in watergate passage

59 as no 58, but 1858A

1.46 g

some verdigris; very slight wear

19th- or early 20th-century cache in watergate passage

60 as no 59

1.42 g

some verdigris; very slight wear

19th- or early 20th-century cache in watergate passage

61 INDIA (BRITISH): BENGAL, copper quarter-anna (1809-17), (Craig 1966, no 58)

6.58 g

slight to moderate wear

19th- or early 20th-century cache in watergate passage

62 JERSEY: VICTORIA, copper one-twentysixth of a shilling (1841), (Seaby & Purvey 1984, no 7002)

8.05 g

fairly worn

19th- or early 20th-century cache in watergate passage

63 as no 61

7.99 g

some surface corrosion; fairly worn

19th- or early 20th-century cache in watergate passage

64 NETHERLANDS: FRIESLAND, copper doit (1619) (Purmer and van der Wiel 1996, 6005)

21.0 mm, 2.16 g, die axis 1.5

obv: [NISI]DNS lion \cdot NOHISCV; crowned and garnished shield bearing 2 lions passant gardant to left

rev: [F]RI/[S]IA/1619 within wreath

both sides very slightly off-centre; some flattening and surface corrosion; moderate wear

Debris overlying demolished W wall of N range hall

65 NETHERLANDS: GELDERLAND, copper doit (1635) (Purmer and van der Wiel 1996, 1008)

20.0 mm, 1.72 g, die axis 5.0

obv: IN + DEO + [SP]ES + [NOS]TRA; shield bearing 2 lions rampant face to face

rev: DVC/GEL/1635 within wreath

uneven striking; fairly worn

Destruction debris from W curtain wall

66 PORTUGAL: JOAO as regent for MARIA I, copper 5 Reis (1813), (Craig 1966, no 49c)

6.38 g

moderate wear

19th- or early 20th-century cache in watergate passage

67 RUSSIA: NICHOLAS I, copper 5 Kopecks (1836), (Craig 1966, no 140)

22.05 g

pierced at 12.0 (obverse); moderate wear

19th- or early 20th-century cache in watergate passage

THE JETONS

All of the jetons were retrieved from the foundation trench for the W wall of David's tower.

BURGUNDIAN

1 Jean de Saulx, Mayor of Diion (c 1426-31)

oby: +1 @ DC @ SAVLS @ VIGOMTC @ MAIC; stops are 5-pointed mullets; ancient arms of Dijon on a shield

rev: TAPA/TAPS/TAPS/TAPA; triple-stranded cross fleury, the fleurs extending across the legend; lis in each angle

27.0 mm, 4.60 g, die axis 11.0

moderate wear

2 A similar piece

oby: as previous, from same die

rev: as previous, but legend reads TAPA/[]/TAPA/TAPA

27.0 x 27.5 mm, 3.97 g, die axis 10.5

worn; pierced in centre; pattern scratched across second quarter of reverse legend

As Feuardent (1904-15), no 9958, Corre (1980), no 4196 and Rouyer & Hucher (1979), 167, no 4; obverse as Blanchet and Dieudonné (1969), 352, fig 39. Feuardent reads **TAPA** four times in the reverse legend. Corre reads **TAFS** four times, with the **S** horizontal. On these two specimens the third letter in

each case appears to be a P. Blanchet and Dieudonné date this issue to 1426 or 1430. Rouyer and Hucher, with reference to Père Anselme, state that Jean de Saulx was Vicomte-Maïeur of Dijon in 1431.

ANGLO-GALLIC OR FRENCH

3 obv: +DG: L/TON: SVI: NOVMG: crowned bust facing in tressure of three curves and three angles alternately; three pellets below bust

rev: + PAR MAOVRS SVI DOVNG; triple-stranded cross fleuretty in 4-arc tressure; lis on cusps; rosettes in spandrels

26.0 mm, 3.87 g, die axis 12.0

slightly weak striking on obverse; very slight wear

Groat-based type, as Mitchiner (1988), no 329, Barnard (1981), pl 3, no 58 but with variations. The obverse legend is as B.58, but the reverse legend does not appear to have been published on a jeton of this type. It does appear on jetons with crown obverse (eg M.439 and 537) and Paschal Lamb obverse (eg M.544-5 and 549-51). The date and origin of these 'groat-type' jetons is not certain. B.58 shows the partial piercing indicative of English manufacture, and Mitchiner considers them best attributed to Henry VI's French possessions (ie pre-1453). The majority of the jetons are not pierced, however, and Labrot (1989), 200 illustrates two specimens and describes them as 'jetons banalisés', or stock-jetons, of Tournai. It may be that the type originated in England and was subsequently copied at Tournai.

FRENCH

Crown type

Mitchiner (1988) describes nos 4 and 5 as royal jetons of the reign of Charles VI, dating from the period 1385-1415/22. If this is correct, they are the two earliest jetons in the hoard.

4 oby: + ★VE ③ M⊼RI⊼ ② GR⊼GI⊼ ② PLE; stops are 6-petalled rosettes; crown with three six-petalled rosettes across body

rev: triple-stranded cross fleuretty with quatrefoil of rings at centre, within 4-arc tressure with 2 is on cusps; $A \lor G M$ in spandrels, each letter flanked by two small stars

24.5 mm, 4.00 g, die axis 4.0

worn

of Mitchiner (1988), nos 460-481, especially 468-75 for obverse ornamentation

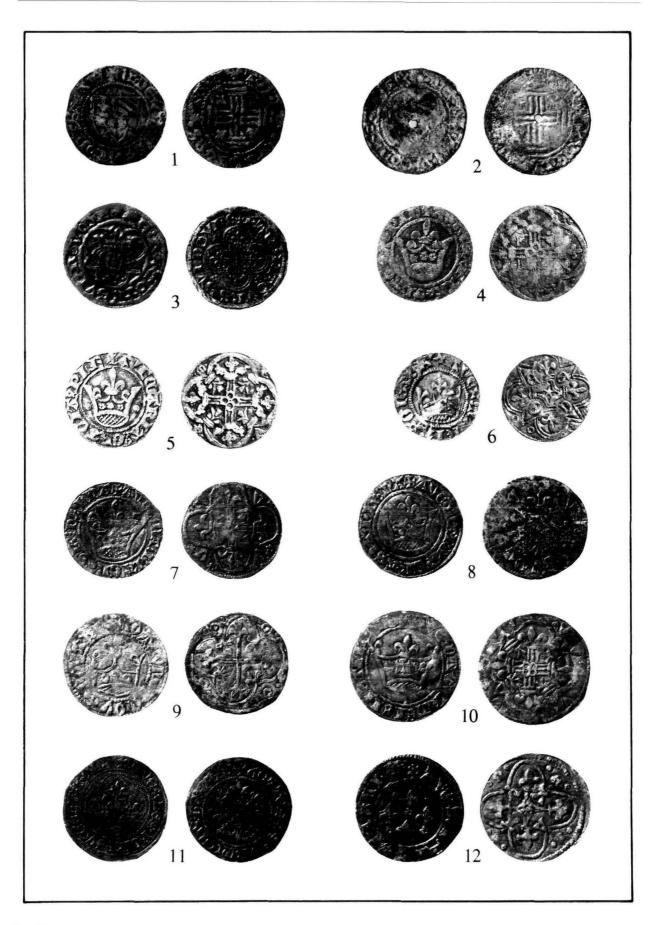
5 obv: + AVE MARIA & GRACIA & PLE; stops are pairs of 5-petalled rosettes; crown with three 5-petalled rosettes across body; pellet in annulet on either side

rev: triple-stranded cross fleuretty with quatrefoil of rings at centre, within 4-arc tressure; ?lis on cusps; $\nabla V \in \mathbb{M}$ in spandrels, each letter flanked by two pellets

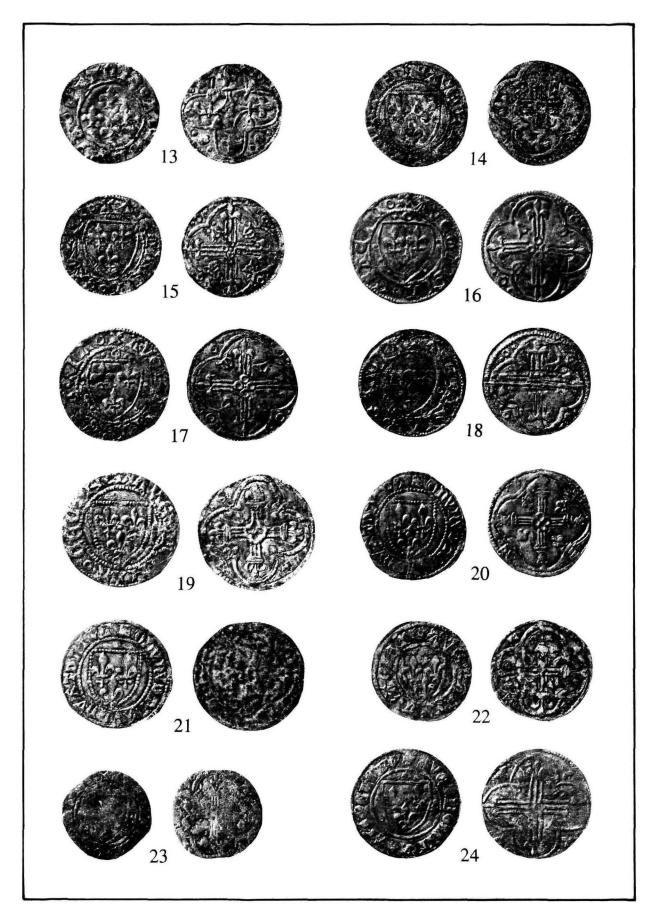
26.0 x 25.5 mm, 3.11 g, die axis 8.0

moderate wear

cf Mitchiner (1988), nos 460-81, especially 480 for obverse ornamentation and reverse type, but with obverse legend ending



illus 85 Jetons, nos 1–12. Retrieved from the foundation trench of David's tower.



illus 86 Jetons, nos 13–24. Retrieved from the foundation trench of David's tower.

The next five jetons (nos 6-10, also with crown obverses, all appear to be Tournai stock-jetons.

6 obv: © AVG © MARIA © GRAGA; stops are large 5-pointed mullets; crown with an annulet between two pellets on the body rev: double-stranded arcuate cross fleuretty, with 5-pointed star in centre and G G O G in angles, all within tressure of four arcs and four angles; two rosettes flanking second angle and two annulets flanking third (others uncertain)

23.0 mm, 3.18 g, die axis 12.0 with this order of letters

moderate wear, edge filed down, leaving flan too small for complete design and legends

obverse from same die as Mitchiner (1988), nos 663a and 663b; reverse of Mitchiner (1988), no 654 which has straight triple cross but is otherwise very similar. Mitchiner describes no 663 as 'probably struck after 1478'.

7 obv: **+AVE * MAR IA GRASIA * P * LNA**; stops are three pellets arranged vertically; crown with eight pellets across body

rev: tripled-stranded cross fleuretty with rosette of four rings in centre, within 4-arc tressure; flowers on cusps; **V** between two 6-petalled rosettes in each spandrel

26.5 x 26.0 mm, 4.72 g

very slightly buckled and flattened; moderate wear

as Mitchiner (1988), no 660 which is described as having a fictitious obverse legend, although the photograph suggests otherwise

8 obv: + AVC · MARIA · GRASIA · PLCNA; crown with three annulets and five pellets across body

rev: short double-stranded arcuate cross fleuretty; around, ⊚⊚⊚ OV ⊚ OV ⊚ _OVOVO _V; stops are 6-petalled rosettes

 $27.5 \times 27.0 \text{ mm}$, 6.80 g, die axis 1.0 with this reverse reading obverse fairly worn; reverse appears more worn but has parallel marks suggestive of rubbing

Reverses of this type, with arcuate cross and no inner circle, are illustrated by Mitchiner (1988), nos 534-5 which he lists as probable products of the Paris mint, *c* 1418-37, but the blundered attempt at a reverse legend suggests that this is a later Tournai copy.

9 obv: MOXROR © XMOVR © ROVXB ∞; stops are 5-petalled rosettes, with two annulets at end of legend; crown with three annulets across body

rev: single cross fleuretty with 4-arc tressure; lis on cusps; annulet between two pellets in each spandrel

27.5 x 27.0 mm, 3.84 g

fairly worn of Mitchiner (1988), nos 651-662, but single cross reverse is unusual by the 15th century

10 obv: __XVGMXXVRMGIGIISTRITRI crescent; crown with spread eagle between two lis on body

rev: triple-stranded cross fleuretty in tressure of four arcs and four angles; $\boldsymbol{\Lambda}$ in each angle of cross; pairs of \boldsymbol{V} s flanking each angle of tressure

28.0 mm, 2.42 g

very slightly buckled; slight flattening in legend; moderate wear cf Mitchiner (1988), nos 651-662, especially 654 for reverse type; no exact parallels are listed, however, and eagle on crown is very unusual

Four lis in a lozenge type

11 obv: + VIVE @ LE @ ROI @ VIVE @ LE @ ROI @; stops are pierced cinquefoils: four lis within a lozenge, within a 4-arc tressure; triangle of three pellets in each spandrel

rev: + GETTES © SEVREMENT © GETTES; stops are pierced cinquefoils; short triple-stranded cross fleuretty, with lis and crowns in alternate angles

27.0 mm, 2.35 g, die axis 1.5

moderate wear, with slight flattening in places

obverse similar to Mitchiner (1988), nos 588 and 595, which he describes as royal jetons of the Paris mint, dating from 1461-97.

All these issues have single cross pattée fleuretty or feuilly on the reverse, however, rather than a triple-stranded cross. The legends and style of this piece point to the Paris mint rather than to Tournai.

Four lis in field type

Nos 12 and 13 belong to a group of Tournai jetons attributed by Mitchiner (1988) to the reign of Charles VII (1422-61) or shortly after.

12 obv; ② AVE MARIA ③ GRACIA; first rosette is in the form of a 7-pointed mullet; the second is indistinct but more flower-shaped and with a central pellet; four fleurs-de-lis and five small rosettes in field

rev: single-stranded arcuate cross fleuretty with central rosette; two π s and two ν s in alternate angles; all within 4-arc tressure, with rosette between two pellets in each spandrel

27.0 mm, 4.49 g

slight to moderate wear

cf Mitchiner (1988), no 638

13 obv: ② ★Λલ _木RI木 ∘ GR 木αI木; first stop is pierced cinquefoil; legend commences at 2.0; four lis in field

rev: single-stranded arcuate cross fleuretty, with pierced cinquefoil in centre within 4-arc tressure; two Vs and two Ms on alternate cusps; pierced cinquefoil between two pellets in each spandrel

25.5 x 26.5 mm, 3.85 g

very rough workmanship; fairly worn

as Mitchiner (1988), no 639, which he describes as having fictitious obverse inscription (whereas 'blundered' would be more accurate). The obverse is very possibly from the same die, but the reverse is different. The letters **V m** stand for VIRGO MATER.

Shield of France modern type

All these jetons (nos 14-26) appear to be products of Tournai.

14 oby: + AV6 MARIA: GRACIA: PLGN'; shield bearing three lis; single pellet above and to each side

rev: triple-stranded cross fleuretty in 4-arc tressure; Λ on each cusp; cross between two pellets in each spandrel

26.5 x 27.5 mm, 5.18 g

moderate wear

as Mitchiner (1988), no 671, the obverse from the same die. (Mitchiner does not note the apostrophe at the end of the legend.)

15 oby: X AVG MARIA • GRACIA •; shield bearing three lis; no external ornaments

rev: triple-stranded cross fleuretty in 4-arc tressure; Vs, flanked by pellets, and Ms on alternate cusps; annulet between two pellets in each spandrel

27.5 x 27.0 mm, 2.20 g

generally slight wear

obverse type as Mitchiner (1988), no 685; reverse as Mitchiner (1988), nos 683-687a, but variant with \cdot **V** \cdot is not listed

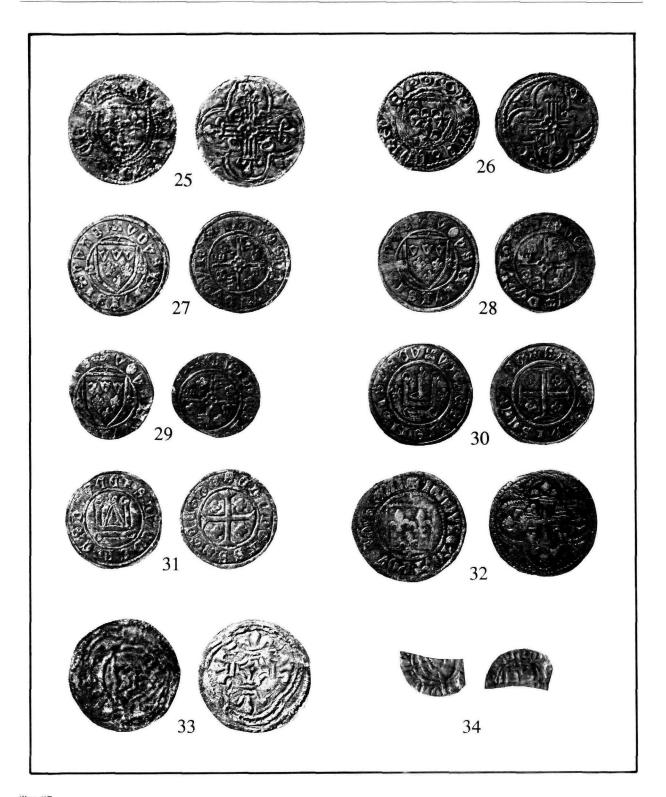
16 obv: X AVE MARIA • GRACIA; shield bearing three lis; annulet between two pellets above; three pellets on either side rev: triple-stranded cross fleuretty within 4-arc tressure; Vs and Ms on alternate cusps; annulet between two pellets in each spandrel

28.0 mm, 3.95 g

slight to moderate wear

type as Mitchiner (1988), nos 687-687a

17 obv: X AVE MARIA : GRACIA : shield bearing three lis; annulet between two pellets above; three pellets on either side rev: triple-stranded cross fleuretty in 4-arc tressure; Vs and Ms on alternate cusps; annulet between two pellets in each spandrel



illus 87 Jetons, nos 25–33 and coin fragment (34). Retrieved from the foundation trench of David's tower.

27.5 x 28.0 mm, 2.13 g generally slight wear type as Mitchiner (1988), 687-687a

18 oby: uncertain initial mark AV6 MARIA four annulets in lozenge formation GRACIA; shield bearing three lis; annulet

between uncertain symbols above; three annulets on either side rev: triple-stranded cross fleuretty in 4-arc tressure; Vs and Ms on adjacent cusps; annulet between two pellets in each spandrel 28.5 x 28.0 mm, 4.10 g both sides rubbed and scratched; probably moderate wear

19 obv: ★V€ ∞ M★NIA ∘ G€GI (or T) N ∞; shield with beaded edge, bearing three lis; beaded inner circle

rev: triple-stranded cross fleuretty in 4-arc tressure; lis on cusps; crowns in spandrels

29.5 x 29.0 mm, 2.90 g slight to moderate wear

20 obv: +ONVNVDTNVNTDNTVT; shield with beaded edge, bearing three lis; beaded inner circle

rev: triple-stranded cross fleuretty in 4-arc tressure: lis on cusps; crown between two pellets in each spandrel

28.5 x 29 mm, 3.24 g slight to moderate wear

21 obv: from same die as no 20

rev: very poorly struck design of a cross fleuretty in 4-arc tressure: internal ornaments indistinguishable; crowns or $\bf M$ s in spandrels 29.0 x 28.5 mm, 3.13 g

slight to moderate wear on obverse

22 obv: + AV6 MARIX GRXCIX P; shield with beaded edge, bearing three lis with a six-pointed star above; beaded inner circle rev: triple-stranded cross fleuretty in 4-arc tressure; Vs on cusps; crowns in spandrels

26.0 x 25.0 mm, 1.98 g

fairly crude workmanship; moderate wear

23 obv: + AV6 MARIA * GRAGIA * PLG; stops appear to be small, 5-petalled rosettes; shield bearing three symbols, probably lis; annulet between two stalked flowers above and to each side rev: triple-stranded cross fleuretty in 4-arc tressure; uncertain letters on cusps; A V G M, each between two annulets or rosettes, in spandrels

23.5 mm; 2.37 g

pierced; much damage to edge; very worn

24 obv: + AVG · DOMINA · AHGGLORV; shield bearing three lis; trefoil between two annulets above and on either side rev: triple-stranded cross fleuretty in 4-arc tressure; Vs and Ms on alternate cusps; trefoil between two pellets in each spandrel 28.5 mm, 5.27 g

some rubbing and scratching; moderate wear

25 obv: $\langle \nabla V \mathcal{C} \rangle \langle M \nabla V \mathcal{C} \rangle \langle M \nabla V \mathcal{C} \rangle$, the first, third and sixth to right, the others to left; shield with beaded edge, bearing three lis; beaded inner circle

rev: triple-stranded cross fleuretty in 4-arc tressure; \$\mathbb{G}\$s on cusps; lozenge between two horizontal crescents in each spandrel 29.0 mm, 2.01 g

rather poor workmanship; probably only slight wear

26 obv: GRIGLG • GORNVGL - >< ->< -: pair of crescents back to back between each pair of pellets at end; shield with beaded edge, bearing three lis; two concentric beaded inner circles

rev: triple-stranded cross fleuretty in 4-arc tressure; lis on cusps; I between two pellets in each spandrel

27.5 x 27.0 mm, 3.80 g

slight flattening; generally slight wear

The obverse legend of this piece is somewhat obscure, and the following two possible interpretations have been suggested by Labrot (1996):

1 GRELE CORNUE, meaning a thin baton or staff;

2 GRIE(S)LE CORNU(I)EL(LE), meaning the sound of music produced by a small horn. The latter seems more probable, firstly because it involves the shortening of the words by leaving out some letters, as frequently occurs on jetons because of lack of space, whereas the first interpretation would involve the insertion of extra letters. Also, a reference to music would fit well into the context of legends on jetons of Tournai which frequently allude to the enjoyable side of life.

Shield of France derivatives

The following three jetons (nos 27-29) belong to a group of apparently late derivatives, with pointed shield and frequently with other symbols on the shield as well as the three lis.

27 obv: quatrefoil VOVSNAVISI quatrefoil VVTS lis; shield with pointed base on which are three Vs above three lis; V above; rosette on either side

rev: quatrefoil DEVVOSDDVVADVGVIOT; legend commences at die axis 5.0; four keys arranged in a cross; rosette in each angle 27.0 mm, 3.63 g moderate wear

28 obverse and reverse die duplicate of no 27 26.0 x 25.5 mm, 3.40 g; die axis 11.5 mm slight flattening; moderate wear

29 oby: die duplicate of nos 27 and 28

rev: quatrefoil **GVIDGSI**[]VSI: cross of four keys; rosette in each angle

21.5 x 22.5 mm; 2.29 g; die axis 8.0 mm

much clipped, especially in lower left area of obverse; mostly moderate wear

Jetons of this type are not recorded by Mitchiner, Barnard or Feuardent (but the latter lists the following comparable pieces: 14869-70 have this obverse type but with the second word transcribed NVCISI and reverse type of a cross pattée with lis; 14887 has no reverse legend but has the design of four keys with rosettes within the inner circle, surrounded by a 'double couronne'. The obverse of this piece bears a Châtel Tournois.) The cross of four keys was originally associated with the Trésor Royal but it also appeared on Tournai stock-jetons, eg Mitchiner (1988), no 633, with 'Dauphiné' obverse.

A jeton from the same obverse die as these three items was recovered during excavations at York (Piric 1986, 68 and pl XVII, no 228). This has reverse type as Feuardent (1904-15), nos 14869-70.

Châtel Tournois type

Nos 30 and 31 bear an obverse design traditionally relating to Tours. According to Mitchiner (1988), 241, it was reintroduced for jetons of Tournai during the period 1497-1521.

30 obv: quatrefoil VISGSSIGNSIS flower SQV; Châtel Tournois with central column surmounted by a lis; lis on either side rev: SRQ (sideways) VISQVISQQVRQVR; cross pattée with flower in each angle

27.0 x 26.5 mm; 4.70 g; die axis 12.0

moderate wear

This jeton is an obverse and reverse die duplicate of Mitchiner (1988), no 741, which is a thick piedfort.

31 obv: QISDVQDQS - QSDVVQ; Châtel Tournois with central apex surmounted by a lis

rev: SQDQD_ISS @ GQQGD @; stops are flowers; cross pattée with flower in each angle

26.0 mm; 4.51 g; die axis 11.5 mm

as Feuardent (1904-15), no 14883, but sixth letter of obverse legend there read as **G**; obverse from same die as Mitchiner (1988), no 742

Miscellaneous

32 obv: + IGNDVRG TOVT POVR VOVS QGDII; beaded square in which are three lis, the lowest one cutting its base; uncertain symbol above; all within beaded inner circle

rev: triple-stranded cross fleuretty within beaded 4-arc tressure; trefoil of three pellets on each cusp; \mathbf{M} in each spandrel; all within beaded outer circle

30.0 x 29.0 mm; 6.39 g

fairly worn

The obverse design, which is fairly crudely executed, appears to be a combination of the shield of France modern and four lis in a lozenge types, and it may therefore date from the period when both were in use. Mitchiner's dating would suggest the 1470s-1480s. The obverse legend is listed by Blanchet & Dieudonné (1969, 506). The somewhat puzzling last word may be read as SEDUIRE (Labrot 1989, 175).

33 A crude contemporary forgery

obv: almost indistinguishable with much of reverse design appearing in bracteate form; a shield bearing uncertain device in the middle

rev: double-stranded arcuate cross fleuretty, with pellet in centre, within double-stranded 4-arc tressure; all within dentated outer circle

29.0 mm; 2.21 g

very thin and crudely struck; probably moderate wear

TRADE TOKEN

Copper halfpenny token of SHERBORNE, DORSET (1793) (Dalton & Hamer 1910-17, no 7; Bell 1963, 31-2, no 3, issued by Messrs Pretor, Pew and Whitby, bankers)

10.42 g

worn

19th- or early 20th-century cache in watergate passage

MEDAL

Bronze medal (1868)

51.0 mm, 61.06 g, die axis 12.0

obv: H.R.H. ALBERT EDWARD PRINCE OF WALES.KNIGHT OF ST PATRICK &.; bust to right;

F.H.MARES.DUBLIN in small letters on truncation

rev: TO COMMEMORATE THE VISIT TO IRELAND OF/H.R.H. ALBERT EDWARD PRINCE OF WALES/AND HIS INSTALLATION AS KNIGHT/OF THE MOST ILLUSTRIOUS ORDER OF ST PATRICK; shield bearing harp within ornamental border; Prince of Wales's plumes and star above, with ICH DIEN on ribbon; QUIS SEPARABIT on ribbons flanking shield; APRIL 1868 on ribbons below some verdigris; otherwise as struck

19th- or early 20th-century cache in watergate passage

TOY COINS AND PARANUMISMATICA

All of these objects were retrieved from the 19th- or early 20th-century cache in the watergate passage.

1 Victorian copper model half-farthing (1848), by Joseph Moore of Birmingham (Rogers 1990, 41, no 240) 13.5 mm, 1.19 g, die axis 5.5 moderate wear

2 Copper alloy toy coin, by S.G. Onions of Birmingham (c 1843) (Rogers 1990, 52, no 359)

3 Copper alloy medallion or counter, by H. Kettle (for whom see Rogers 1990, 19)

18.0 mm, 2.20 g, die axis 6.5; struck on an undersized flan oby: head of George IV to left; [GEORGE] IIII KING OF GRE[AT BRITAIN]

rev: head of George III to right: GE[.....]; KETTLE below truncation slight wear

4 as no 3, from same dies, and also on undersized flan 18.0 mm, 2.25 g, die axis 6.5 slightly bent; slight surface corrosion; moderate wear

5 Copper alloy toy coin or counter, based on gold half Friedrich d'Or of Friedrich Wilhelm III of Prussia (cf Craig 1966, 118) 18.5 x 18.0 mm, 1.53 g

obv: FR[] III BORUSS · REX; bust to left

rev: legend illegible; trace of design of eagle with wings spread; 180 A below (last figure of date illegible) obverse very worn; reverse extremely worn

6 Brass decorative sequin, probably of Middle Eastern origin (as Rogers 1990, 214, lower photo, top right) 23.0 mm, 1.66 g

4.2 SMALL FINDS OF METAL, STONE AND BONE

Julie Franklin

The report does not include all the artefacts recovered from the excavations, some having been lost. Although this is unfortunate, the remaining

assemblage does contain some interesting pieces. However, few are closely datable and most are from modern or disturbed contexts.

4.2.1 COPPER-ALLOY OBJECTS (illus 88-89)

BUCKLES

Buckles nos 1 and 2 are from post-abandonment deposits. No 1 is of a common form, with parallels from early 15th-century London (Egan & Pritchard

1991, 83:337, 339), a 16th-century level at Sampton (Harvey 1975, 263:1789), and from Tantallon Castle, East Lothian (Caldwell 1991, 340:8, 9) where the assemblage dates from the mid 14th to the late 17th century. Nos 3 and 4 are of simpler

construction, manufactured from a loop of thick wire with pins made from strips folded longitudinally towards their ends to form points. They were both recovered from one of the infilling deposits within the 12th-century ditch and may be considerably later than the ditch itself. No 4 is very elaborate and may be of a relatively late date.

- 1 Double D-framed buckle with pin; pin made from thick, pointed strip with the broad end curled round the bar. Length 27mm, width 20mm, thickness 1-3.5mm. Post-abandonment deposit in W range.
- 2 Part of double square-framed buckle with curved profile; pin missing. Associated fragments of sheet are possibly from a plate. Length 19mm, width 18mm, thickness 1-3mm. Postabandonment deposit in NW range.
- 3 Simple D-framed buckle with plate and pin. Frame made from shaped loop of thick wire; pin made from curled strip of wire. There are two parallel engraved lines across the width of the plate, near its top. The plate was held by two rives at the bottom corners, one of which is still in place. Frame length 14mm, width 20mm, plate length 17mm, width 13mm, overall length 28mm. Upper infill of Period 2 ditch.
- 4 Simple round framed buckle with pin. Made from a loop of thick wire; pin made from a thin strip curled longitudinally to form a point. Diameter 17-18mm. Upper fill of Period 2 ditch.
- 5 Ornate simple square-framed buckle? Roughly cut out square frame with ornamented corners and engraved spikes in the centre of three of the edges. There may have been a sheet roller between the two opposite spikes and a strap attached to the plainer side. Length 57mm, width 57mm. Topsoil in NW range.

MISCELLANEOUS OBJECTS

- 6 Solid cast strip, triangular in section with two raised bars on widest surface. Tooling marks visible on all faces. Length 51mm, width 10mm. Post-abandonment deposit in NW range.
- 7 Flat-sectioned handle and deep oval bowl of large spoon. From the shape and size of the bowl, this spoon probably dates to the 17th century (D Caldwell pers comm). Length of bowl 66mm, width of bowl 48mm, overall length 145mm. Associated with textile fragments of unknown fibres, Topsoil in S range.
- 8 Flat, but thick and heavy, object with raised lumps on the surface. Possibly part of a vessel? Length 51mm, width 31mm, thickness 7mm. Topsoil in W range.
- 9 Copper-alloy decorative mount. Piece of thin sheet pressed into shape with a central hole and fleur-de-lis design around its edge. Length 12mm, width 9mm. Within E wall of Period 5 N range.
- 10 Rumbler bell? Small domed object, squashed but still with a small loop attached to the top, formed by splaying its two ends. Possibly the top half of a rumbler bell or the back half of a rounded button. Rumbler bells were popular in the medieval period, both for human dress and for horse harnesses. This is a relatively early type with a separate loop made from a small strip. Similar objects have been found in London in late 13th- to early 15th-century levels (Egan & Pritchard 1991, 338). Length 11 mm. Within W wall of E wall of Period 5 N range.
- 11 Ferrule? Piece of curved sheet metal, possibly from a ferrule. Length 24mm, width 9mm. Probable post-abandonment deposit outside S range.
- 12 Strip rivet. Made from a pointed strip about 35mm long, this type of rivet is generally associated with vessel repairs. Length

- 17mm, width 16mm. Probably post-abandonment deposit in SW corner of courtyard.
- 13 Strip. Thin strip, thinner at one end, with tip bent over. Length 53mm, width 2.5mm, Probable post-abandonment deposit in SW corner of courtyard.
- 14 Ornate strap end? Shaped strip with crude engraved decoration and two rivet holes at narrow end. It is folded over around its mid point although it may originally have been straight. Length 58mm, width 13mm. Below W curtain wall: Period 3 or earlier.
- 15 Button/bell fragments? Small lump of copper corrosion half covered by a domed object with hole at the top, an associated loop with splayed ends and nine tiny fragments of sheet metal. The splayed ends are similar to those of no 10. Diameter 9mm. Post-abandonment level in N range.
- 16 Ferrule? Small sheet curled into a tube and flattened. Length 33mm, width 11mm. Probably Period 5 deposit in NW range.
- 17 Strap fitting. Semi-circular object made from east metal. A loop at the rounded end and a hole through its centre are probably to hold laces. The flat end has a hinged plate to hold a narrow strap. Length 23mm, width 12mm, thickness 5mm. Probably Period 5 deposit in NW range.
- 18 Mount. Rectangular piece of sheet metal, partially rolled lengthways, with rivet hole at each end. Length 31mm, width 7mm. Midden material, redeposited in Period 5 behind retaining wall at N end of courtyard.
- 19 Sheet. Small, diamond-shaped piece of sheet metal folded in half to form a triangle. Possibly intended as clip for repairing metal vessels. Length 14mm, width 12mm. Midden material, redeposited in Period 5 behind retaining wall at N end of courtvard.
- 20 Strip. Narrow, triangular strip of sheet metal; probably an off-cut. Length 45mm, width 5mm. Midden material, redeposited in Period 5 behind retaining wall at N end of courtyard.

LACE TAGS

Laces were used to fasten a variety of clothing and lace tags were used to stop the ends of cloth fraying. Most of the 17 lace tags are extremely simple with an edge to edge seam and unfinished ends. Only four of the examples show any method of securing the join between lace and tag, two by rivet and two by facetting the wide end to grip the lace more tightly. The rest seem to have been left unfinished to grip the lace only by being hammered tightly round it. Both examples with faceted wide ends also have finished free ends although both the riveted examples are left unfinished. Most (11 out of 17) were recovered from the SW corner of the courtyard, many from preabandonment contexts. The earliest (no 31) is broken and was retrieved from a probable 12thcentury or earlier context, as perhaps was no 32, although this object, being of probable later date, is thought to be intrusive. Lace tags have not been found in levels pre-dating the mid-13th century in London, most being of early 15th-century date (Egan & Pritchard 1991, 281). At Sandal Castle tags ranged from the late 13th to the mid-17th century,



illus 88 Copper-alloy objects, nos 1–22, 24, 26, 28–30, 34 and 37. Scale 2:3.

most of them being in post-1450 levels (Goodall 1983, 232). In Nampton the majority were within deposits ranging between the 15th and 17th centuries (Oakley 1979, 262). At Spynie, other than no 27, the earliest lace tags are from levels pre-dating the construction of the SW tower in the late 15th century, others being recovered from 16th- and 17th-century contexts.

- 21 Lace tag. Complete with finished free end. Length 33mm, width 3mm. Topsoil outside the N range.
- 22 Lace tag. Complete with finished free end. Length 18mm, width 2mm. Probable Period 5 level in S field.
- 23 Lace tag. Broken at free end. Length 22mm, width 2mm. Modern deposit in S range. Not illustrated.
- 24 Lace tag. Complete with possible traces of rivet at top end. Length 30mm, width 2mm. Probable Period 5 level in S field.
- 25 Lace tag. Complete. Length 25mm, width 2mm. Postabandonment deposit in S-west corner of courtyard. Not illustrated.
- 26 Lace tag. Complete with finished free end and faceted at its wide end. Length 26mm, width 2mm. Probable post-abandonment deposit in SW corner of courtyard.
- 27 Lace tag. Complete. Length 18mm, width 2mm. Probable post-abandonment deposit outside S range. Not illustrated.
- 28 Lace tag. Complete with rivet at wide end. Length 18mm, width 3mm. Post-abandonment deposit in SW corner of courtvard.
- 29 Lace tag. Broken and bent open. Length 8mm, width 2mm. Possible Period 6 deposit in SW corner of courtyard.
- 30 Lace tag. Broken at free end and bent open. Length 11mm, width 3mm. Modern disturbance.
- 31 Lace tag. Broken at free end. Length 11mm, width 2mm. Probable buried topsoil below medieval levels in SW corner of courtyard, Not illustrated.
- 32 Lace tag. Complete? Length 21mm, width 2mm. Possible buried topsoil below medieval levels in SW corner of courtyard. Not illustrated.
- 33 Lace tag. Broken. Length 28mm, width 2mm. Late occupation or post-abandonment deposit in SW corner of courtyard. Not illustrated.
- 34 Lace tag. Complete but loosely made with seam slightly overlapping. Length 26mm, width 2.5mm. Possible Period 6 deposit in SW corner of courtyard.
- 35 Lace tag. Complete with finished free end and faceted at its wide end. Length 18mm, width 2mm. Post-abandonment deposit in NW range. Not illustrated.
- 36 Lace tag. Broken at free end. Length 10mm, width 2mm. Post-abandonment deposit in W range. Not illustrated.
- 37 Lace tag. Complete. Length 28mm, width 2mm. Possible Period 6 deposit in SW corner of courtyard.

PINS

For the sake of convenience, two white metal pins are included in this section. One (no 41) is possibly of silver but has exactly the same form as the copperalloy examples; the other (no 67) is a modern nickel-plated steel pin. All the pins are small and non-ornamental. Almost all have heads made from wound wire, with heads either loosely coiled or tightly coiled into a sphere. The former are made by sticking or soldering the head onto the shaft, the latter by stamping the head on, causing it to take on the round shape of the hollow punches used (Caple 1983, 273). At Sandal Castle soldered heads date from the mid-13th century. Stamped heads began to appear after c 1485 although soldered heads were still being manufactured. Similar results were recovered from Nampton (Oakley 1979, 260) where 11% of the pins from 15th-century deposits had spherical stamped heads, compared to 49% of the 16th- and 17th-century pins.

Unfortunately very few of the Spynie pins were recovered from pre-abandonment deposits. The earliest levels from which pins (both stamped and soldered) were retrieved dated to the 16th century. Those with stamped heads tended to be shorter (19-30+mm) than those with soldered heads (29-42mm), which was also true at Nampton where only 8% of 15th-century pins were under 30mm whereas 73% of 16th- and 17th-century pins were so sized. At Spynie, most of the pins were recovered from the SW corner of the courtyard and nearby.

- 38 Pin. Complete? with soldered coiled wire head. Length 29mm, width of head 2mm. Topsoil outside E range. Not illustrated.
- 39 Pin. Broken at point, with small round head, possibly solid. Length 13mm, width of head 1.5mm. Post-abandonment deposit outside E range. Not illustrated.
- 40 Pin. Complete, with soldered coiled wire head. Length 42mm, width of head 2.5mm. Post-abandonment level in NW range.
- 41 Pin. Possibly silver or silver/tin plated. Complete, with soldered coiled wire head. Silver coloured all over. Length 31mm, width of head 1.5mm, Period 6 deposit in SW corner of courtyard.
- 42 Pin shaft. Thin shaft flattened at top, head missing. Length 28mm. Post-abandonment deposit in SW corner of courtyard.
- 43 Pin. Complete, with stamped coiled wire head. Length 23mm, width of head 1mm. Post-abandonment deposit in SW corner of courtyard. Not illustrated.
- 44 Pin shaft. Length 23mm. Post-abandonment deposit in SW corner of courtyard.
- 45 Pin shaft, Broken at point, Length 21mm. Post-abandonment deposit in SW corner of courtyard. Not illustrated.

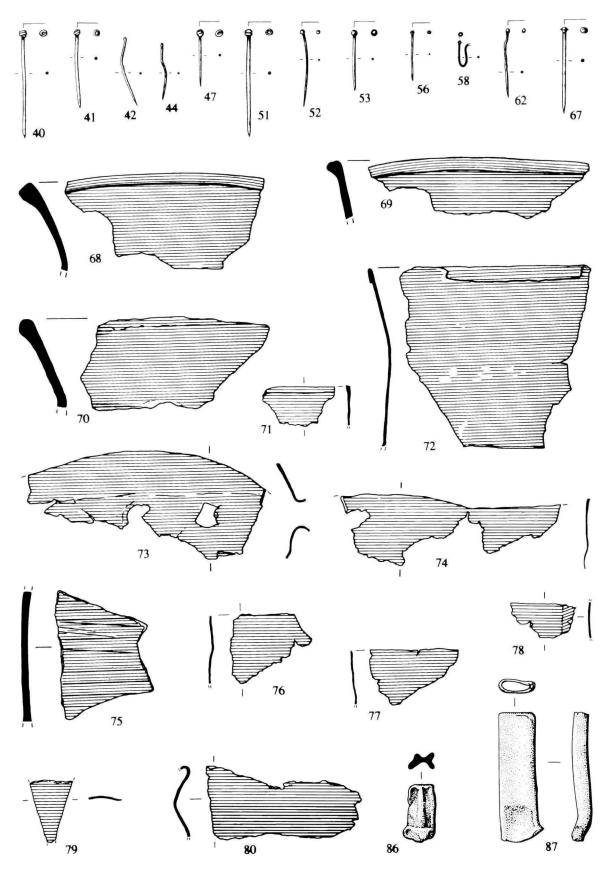
- 46 Pin shaft. Length 18mm. Post-abandonment deposit in SW corner of courtyard. Not illustrated.
- 47 Pin. Complete with large stamped coiled wire head. Length 23mm, width of head 2.5mm. Post-abandonment deposit in SW corner of courtyard.
- 48 Pin. Complete with stamped coiled wire head. Length 21mm, width of head 1mm. Post-abandonment deposit in SW corner of courtyard. Not illustrated.
- 49 Pin. Complete with stamped coiled wire head. Length 24mm, width of head 1mm. Post-abandonment deposit in SW corner of courtvard. Not illustrated.
- 50 Pin shaft. Length 12mm. Post-abandonment deposit in SW corner of courtyard. Not illustrated.
- 51 Pin. Complete with soldered coiled wire head. Length 42mm, width of head 2.5mm. Modern level in SW corner of courtyard.
- 52 Pin. Complete with stamped coiled wire head. Length 29mm, width of head 1mm. Post-abandonment deposit in SW corner of courtvard.
- 53 Pin. Complete with thick shaft and stamped coiled wire head. Length 24mm, width of head 1.5mm. Post-abandonment deposit in SW corner of courtyard.
- 54 Pin. Broken at point, with stamped, coiled wire head. Length 30mm, width of head 1mm. Post-abandonment deposit in SW corner of courtyard. Not illustrated.
- 55 Pin. Broken at point, stamped coiled wire head. Length 23mm, width of head 1mm. Post-abandonment deposit in SW corner of courtyard. Not illustrated.
- 56 Pin. Complete with stamped coiled wire head. Length 19mm, width of head 1mm. Post-abandonment deposit in SW corner of courtvard.
- 57 Pin. Broken at point, with stamped coiled wire head and remains of ?silver plating. Length 23mm, width of head 1mm. Post-abandonment deposit in SW corner of courtyard. Not illustrated.
- 58 Pin. Broken at point and bent, with stamped coiled wire head. Length 20mm, width of head 1mm. Post-abandonment deposit in SW corner of courtyard.
- 59 Pin. Broken at point, stamped coiled wire head. Length 18mm, width of head 1mm. Post-abandonment deposit in SW corner of courtyard. Not illustrated.
- 60 Pin. Complete with stamped coiled wire head. Length 22mm, width of head 1mm. Modern material in SW corner of courtyard. Not illustrated.
- 61 Pin. Complete with stamped coiled wire head. Length 22mm, width of head 1mm. Modern material in SW corner of courtyard. Not illustrated.
- 62 Pin. Complete with small round head, possibly solid. Length 27mm, width of head 1mm. Modern material in SW corner of courtvard.
- 63 Pin shaft. Length 18mm. Modern material in SW corner of courtyard. Not illustrated.
- 64 Pin. Complete with soldered coiled wire head. Length 34mm, width of head 1.5mm. Post-abandonment deposit in Structure 4. Not illustrated.
- 65 Pin. Complete with stamped coiled wire head. Length 19mm, width of head 1mm. Modern deposit in NW range. Not illustrated.

- 66 Pin. Complete with stamped coiled wire head. Length 25mm, width of head 1.5mm. Waste associated with a Period 6 kiln in NW range. Not illustrated.
- 67 Nickel plated steel pin. Small white metal pin with solid biconical head. Modern. Length 34mm, width of head 2mm. Modern deposit in SW corner of courtyard.

VESSELS & SHEET COPPER

Bronze vessels began to replace ceramic ones during the 13th century. By the 14th century metal was the more common material. Fragments nos 68-70 all bear the typical out-turned shape of rim sherds from cauldrons and skillets although all appear to be from different vessels. Two sheet rim sherds (nos 73 and 74) are probably from the same shallow dish. One example of a strip rivet (no 12), which were commonly used for repairing vessels, was also recovered. The remainder comprises miscellaneous pieces of sheet, possibly from vessels. None can be accurately dated although they all appear to be of late medieval or post-medieval dates. The earliest context from which one of these objects (no 75) was retrieved probably pre-dates Period 5 but may be considerably earlier. The majority of these objects were recovered from the N side of the palace.

- 68 Cast vessel rim. Shallow angled, beaded rim, probably from a large skillet or cauldron. Length 79mm, width 39mm, thickness 2-3mm, rim diam 240mm. Post-abandonment deposit in NW range.
- 69 Cast vessel rim. As 67 but bent out of shape. Length 86mm, width 25mm, thickness 1.5-2mm. Probable Period 5 deposit in NW range.
- 70 Cast vessel rim. As no 67 but rounder at the rim. Length 74mm, width 37mm, thickness 2-3mm, rim diameter 240mm. Probable Period 5 deposit in NW range.
- 71 Small piece of plate with one straight edge. Length 29mm, width 16mm. Modern deposit in N range.
- 72 Large sheet, folded over at one side. Length 78mm, width 71mm, thickness 0.5mm. Modern deposit in S range.
- 73 Large sheet with rounded edge and several rivet holes. Possibly the rim from a dish. Length 94mm, width 38mm, thickness 1mm. Post-abandonment deposit in NW range.
- 74 Sheet with rounded edge and rivet holes. Probably part of the same object as no 72. Length 86mm, width 38mm, thickness 1mm. Post-abandonment deposit in NW range.
- 75 Cast vessel body sherd. Thick curved piece with tooling marks across surface. Length 51mm, width 35mm, thickness 2mm. Period 5 or probably earlier deposit in SW corner of courtyard.
- 76 Small piece of sheet metal. Length 33mm, width 24mm. Post-abandonment deposit in N range.
- 77 Piece of sheet found in 11 fragments, ranging in size from 5mm by 5mm to 35mm by 21mm. Modern deposit in S range.
- 78 Small piece of sheet. Length 25mm, width 13mm. Post-abandonment deposit in N range.



illus 89 Copper-alloy objects, nos 40-42, 44, 47, 51-53, 56, 58, 62, 67-80; lead objects, nos 86-87. Scale 2:3.

79 Small, triangular piece of sheet metal, quite neatly cut. Length 26mm, width 14mm. Post-abandonment deposit in N range.

80 Sheet, bent along long axis. Possibly part of a vessel. Length 60mm, width 30mm, thickness 1mm. Probable Period 5 deposit in NW range.

81 Sheet fragment, probably from the same object as no 15. Length 8mm, width 7mm. Post-abandonment deposit in N range. Not illustrated.

82 Sheet fragment. Length 11mm, width 4mm. Modern deposit in S range. Not illustrated.

In addition, several unidentified fragments were recovered, mostly from modern contexts. These are not described nor illustrated here.

4.2.2 LEAD OBJECTS (illus 89)

None of the lead objects is particularly diagnostic or identifiable. The pieces of sheeting (nos 83-5) are from pre-abandonment levels outside the E range and may be fragments of roofing lead.

83 Sheet. Large D-shaped piece of lead sheet with scratch marks on both sides, some of them probably score lines. Length 59mm, width 35mm, thickness 1mm. Possible Period 6 deposit outside E range. Not illustrated.

84 Sheet. Small irregular piece of lead sheet, probably part of same piece as no 83. Length 42mm, width 38mm, thickness 1mm. Possible Period 6 deposit outside E range. Not illustrated.

85 Scrap. Small scrap of lead sheet, screwed up. Length 21mm, width 18mm. Possible Period 6 deposit outside E range. Not illustrated.

86 Scrap. Small curved strip. Length 23mm, width 11mm. Post-abandonment deposit in SW corner of courtyard.

87 Piping. Length of lead pipe, squashed flat. Length 51mm, width 15mm, breadth 6mm. Topsoil in NW range.

4.2.3 COMPOSITE OBJECTS (illus 90)

This group comprises a collection of 19th-century trinkets, nos 88-92 being recovered from the uppermost deposits infilling the watergate passage. These represented part of a larger assemblage which included a large number of coins, tokens and medals (see above 4.1.1).

88 Copper-alloy & glass earring. Thin, pressed sheet copper-alloy drop earring on hook fastening. Lozenge-shaped with central hole for bead. The bead is of pink glass, to resemble a pink pearl or coral. Another smaller but similar bead is set at the base of the hook. Length 40mm, width 15mm. 19th-/20th-century infill of watergate passage.

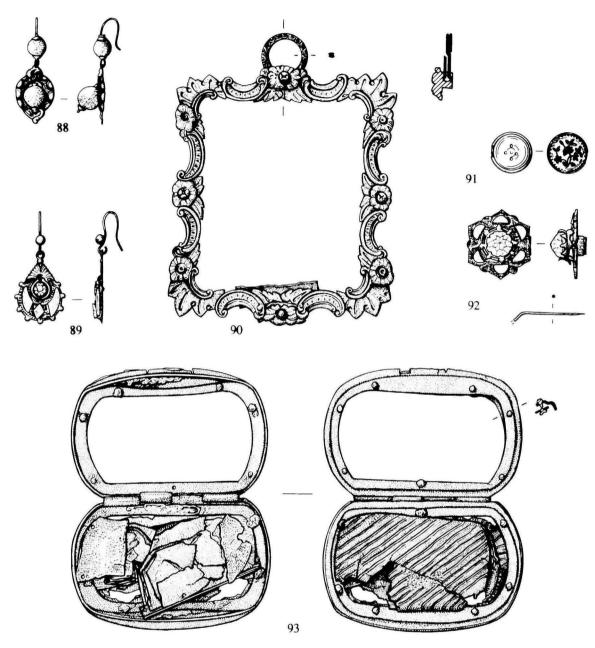
89 Silver, glass & stone earring. Silver, or possibly silver-plated copper, drop earring on hook fastening, similar in style to no 88. Drop-shaped with surface engraving and central free hanging setting for pale orange gemstone. Three insets around bottom for polished agate. Associated with purse (no 91). Length 42mm, width 20mm. 19th-/20th-century infill of watergate passage.

90 Gilded copper-alloy picture frame. Small, rectangular frame, ornately moulded with floral and curvilinear designs. Remains of gilding on front. Suspension loop attached to back and thin flap at bottom to hold picture in place. The small size suggests it is probably for mounting a photo. Height 102mm, width 89mm. Contained within leather wallet (see below 4.8, no 13). 19th-/20th-century infill of watergate passage.

91 Copper-alloy & bone button. Small, round, bone button with copper-alloy covering around rim and over front. Four central holes pierced through the bone. Stamped decoration on front of a sprig of flowers (probably clover or shamrock family) inside a chevroned border. Diameter 16mm, thickness 3mm. Modern deposit in N range.

92 Silver, glass & stone brooch. Six-lobed brooch of stylised flower design, probably silver plated. Surface covered in engraved with zig-zag and fan patterns. Central setting for large orange glass gemstone. Semi-circle of polished stone or opaque glass inset into each petal, alternately brownish-orange and dark green. Pin present but detached. Associated with purse (no 93). Width 26mm, depth 13mm. 19th-/20th-century infill of watergate passage.

93 Copper-alloy, leather and cloth purse. Curved, rectangular purse frame with remains of cloth interior and leather exterior. Remains of gilding on exterior and iron rivets holding pieces of frame together. Length 78mm, width 52mm. Ten small shells and a broken glass bead associated with it. The bead is hollow, of extremely thin glass and is painted pink from the inside, very similar to the beads in earring no 88. The shells are tiny ?periwinkles and are stripped down to their mother-of pearl surface. 19th-/20th-century infill of watergate passage.



illus 90 Composite objects, nos 88–93. Scale 2-3.

4.2.4 IRON OBJECTS (illus 91-92)

94 Tool. Heavy pointed tool with rectangular-sectioned blade that tapers, presumably to a point originally, although the tip is missing. The butt end is round in section. Possibly a chisel or wedge. Length 142mm, length of blade 79mm, maximum width of blade 15mm. Midden material, redeposited in Period 5, at N end of courtyard.

95 Knife. Blade of knife with tang missing, except for short stump. The blade has a characteristic narrow triangular section although corrosion has left the sharp edge very ragged. Length of blade 129mm, width of blade 17mm. Midden material, redeposited in Period 5, at N end of courtyard.

96 Arrowhead. Broad triangular blade with central spine. The end

is broken although it was probably socketed rather than tanged. Triangular-bladed arrowheads are common between the 11th and 14th centuries. They tend to have a diamond section, rather than a central spine, although spines are found on contemporary, barbed arrowheads (Jessop 1997, 3). It is similar to an arrowhead from Dyserth Castle, Flint which was occupied 1241-63 (LMMC, 69:13) and to one from Urquhart Castle, occupied 13th-17th centuries (Samson 1982, 468:17). On balance, it is likely to date from the 13th or 14th centuries. Length 49mm, width 23mm. Period 5 or earlier in SW corner of courtyard.

97 Jew's harp. Made from a square-sectioned rod with a flat tongue. The tip is missing and the butt end is triangular. Jews harps appeared in Europe by the late 14th century and were still

in use in the 19th century with very little change in form. Most securely identified and stratified examples date between the 15th and 17th centuries (Ypey 1976, 269). Other Scottish examples are from Finlaggan and Castle Sween (D Caldwell pers comm). Length 52mm, width 27mm. Topsoil in NW range.

98 Shoe heel. U-shaped heel iron of flat, rectangular section with square nail holes visible. Probably no earlier than 19th century. Length 63mm, width 60mm. Topsoil in W range. Not illustrated.

99 Handle? V-shaped object with loop formed at apex. Length 71mm, width 39mm. Possible recent disturbance in W range. Not illustrated.

100 Ring, Large ring in two pieces. Possibly part of horse gear. Diam 40mm, thickness 10mm. Possible floor surface in Period 5 Structure 3. Not illustrated.

101 Length of iron forked and curving at one end. Length 111mm, width 35mm. Period 4 levelling deposit below NW range. Not illustrated.

102 Blade? Strip, possibly with wedge-shaped section. Length 42mm, width 12mm. Period 6 or post-abandonment deposit in NW range. Not illustrated.

103 Hook. Thin metal strip, curved at one end. Length 40mm. Bedding trench for Period 6 wall against SW tower.

104 Length of ?steel bar, triangular in section and curved at one end. Heavy and in very good condition. Modern. Length 82mm, width 17mm. Modern deposit in SW corner of courtyard.

105 Knife. Dagger with wooden handle, largely intact. Blade one-sided, broken at tip and with a plate at the top. The handle is tipped with a copper rivet and expands into a distinct double dome at its base. Probably 16th century (D Caldwell pers comm). Overall length 283mm, blade length 166mm, blade width 27mm, handle length 117mm, maximum width of handle 50mm. One of basal deposits in W latrine tower: Period 6.

OBJECTS FROM THE WELL IN THE NORTH RANGE

The infill of this well contained many iron objects, forming what appears to be a related assemblage. As well as the objects listed here, there are 46 nails and six unidentifiable fragments and lumps. The nails are all similar, having small flat heads, as do those that are still *in situ* in no 106. This possible door fitting, together with the lock mechanism (no 108), the nails and the large quantity of waterlogged wood, suggest that a door was thrown into the well when it was still intact, or nearly so. Many of the nails and other objects have mineralised wood adhering to them, indicating they were deposited while still attached to wooden objects.

106 Door fitting? Large plate with a central recess containing a hole. It has four nails, two on each side, still in place. The amount of mineralised wood on the back of this object implies it was attached to a wooden object. The nails all have flat square heads and square-sectioned shafts. The only complete nail has a length of 65mm and the only head visible has a width of 15mm. Length of plate 188mm, width 40mm, thickness 8mm.

107 Key. Identified by X-ray. Length 138mm, maximum width 44mm.

108 Part of lock mechanism? Large bar once attached to wood by nails at each end and in the middle. It has a central screw and a spring and could be part of a large lock. Length 224mm, width 23mm.

109 ?Bowl. Shallow bowl-shaped object, irregular in outline and thickness, with fragments of wood adhering to the rim. There is no solid metal core and it probably comprises only iron pan, formed under waterlogged conditions in the well. Width 114-127mm, depth 40mm.

110 Small, rectangular plate with round nail hole at one end. Associated with no 106. Length 63mm, width 27mm.

111 Strip, wider at one end. Length 61mm, width 20mm, maximum thickness 8mm. Not illustrated.

112 Strip of plate. Length 57mm, width 21mm. Not illustrated.

113 Strip of plate. Length 46mm, width 23mm. Not illustrated.

114 Sliver of plate. Length 67mm, width 12mm. Not illustrated.

OTHER STRIPS AND PLATES

115 Strip, flat sectioned with a knob at one end. Length 63mm, width 15mm. Period 6/post-abandonment deposit in SW corner of courtyard. Not illustrated.

116 Small piece of plate. Length 31mm, width 20mm. Postabandonment deposit in SW corner of courtyard. Not illustrated.

117 Strip with flat section. Length 27mm, width 11mm. Topsoil in NW range. Not illustrated.

118 Strip with lump at one end. Length 37mm, width 14mm. Topsoil in NW range. Not illustrated.

119 Piece of plate. Quite heavy, possibly slag. Length 40mm, width 27mm, breadth 12mm. Post-abandonment deposit in NW range. Not illustrated.

120 Piece of plate with nail hole. Length 39mm, width 34mm. Post-abandonment deposit in NW range. Not illustrated.

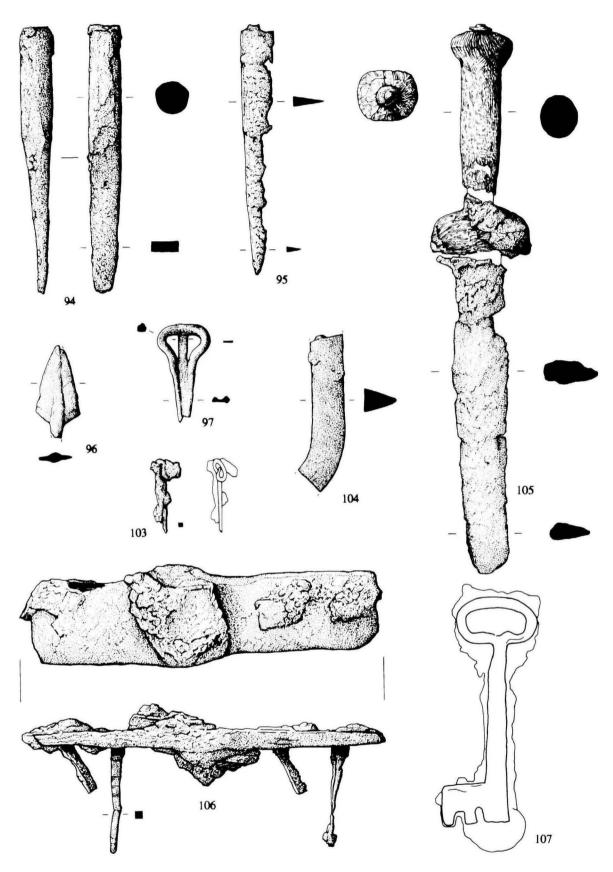
121 Strip. Length 40mm, width 13mm. Modern deposit in Structure 4. Not illustrated.

122 Strip with flat section. Length 117mm, width 10mm. Post-abandonment deposit in NW range.

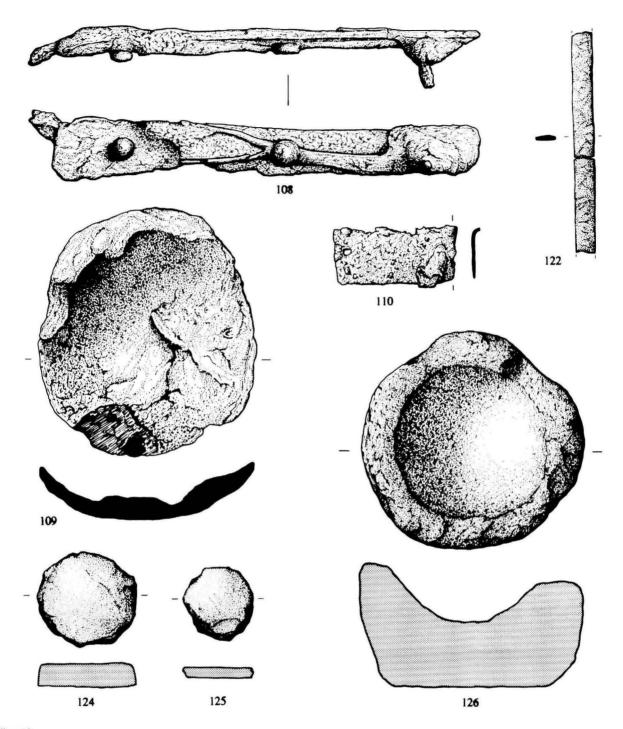
123 Wide strip in two pieces. Length 170mm, width 31mm. Unstratified in W range. Not illustrated.

NAILS

As on many sites, nails comprised most of the iron finds. Unfortunately, the broken and corroded condition of most of them allows no more than an approximate idea of their sizes and shapes. Most have flat heads, either round or square. A few recovered from later levels have bar (rectangular) heads, measuring approximately 15mm by 8mm,



illus 91 Iron objects, nos 94–97, 103–107. Scale 1:2.



illus 92 Iron objects, nos 108–110 and 122; stone objects 124–126. Scale 1:2.

roughly the same as the width of their shafts. In general, large heads tend to be earlier. As well as those retrieved from the well, some of the nails from the W range also had mineralised wood attached to them. The nails are not described individually here although there is a catalogue of them within the site archive.

UNIDENTIFIABLE FRAGMENTS

There were numerous fragments that have defied identification: these are not described here although a catalogue of them appears in the site archive.

4.2.5 STONE OBJECTS (illus 92) (Stone identification by Nigel Ruckley)

Almost all the stone artefacts are of sandstone, which varies from very fine to coarse grained. There were several sandstone quarries in the vicinity of the palace (Peacock *et al* 1968, 68) and it is likely that all of the stone described here came from its immediate area. Even the flint could have come from drift deposits in Buchan rather than from farther south.

- 124 Disc. Sandstone, Diameter 50-55mm, thickness 11mm. Post-abandonment deposit in N range.
- 125 Disc. Silt/sandstone. Diam 34-38mm, thickness 5mm. Postabandonment deposit in N range.
- 126 Cresset lamp. Crude sandstone vessel, hollowed to about half its depth. One side of the rim is flatter than the rest, possibly to form a spout. There is no sign of wear but there is a slight trace of burning on the lip. Diameter 112-115mm, height 65mm. Modern deposit in the N range.
- 127 Hammer Stone. Sandstone. Large oval beach pebble with anthropogenic wear fractures on both faces. Length 92mm, width 83mm, breadth 42mm. Below Period 6 defensive wall to S of palace courtyard. Not illustrated.
- 128 Flint flake. Small flake, unworked apart for thin flake taken off the back. Anthropogenic but date indeterminable. Topsoil in SW corner of courtyard. Not illustrated.

AMMUNITION

No iron cannonballs were retrieved from the site and only six in stone. Stone cannonballs probably date from the 15th or 16th century and were used in wrought iron, breach-loading guns (D Caldwell pers comm). Four of them (nos 131-134) were found near to the SW corner tower, including no 132 which was retrieved from the foundation cut for its E wall, built in the late 15th century. The remainder is from 17th-century or post-abandonment deposits. None is illustrated.

- 129 Cannonball. Fragment of small sandstone cannonball. Diameter 39mm. Post-abandonment deposit in N range.
- 130 Cannonball, Slightly modified sandstone pebble. Diameter 51-56mm. Post-abandonment deposit in NW range.
- 131 Cannonball. Sandstone, Diameter 53mm. Deposit underlying Period 6 wall.
- 132 Cannonball, Sandstone, Diameter 64-67mm. Foundation trench for E wall of Period 5 SW tower.
- 133 Cannonball. Sandstone. Diameter 62-74mm. 17th-century or post-abandonment deposit in SW corner of courtyard.
- 134 Cannonball. Sandstone. Diameter 82-89mm. Post-abandonment deposit in SW corner of courtyard.

4.2.6 BONE OBJECTS

Two bone objects – a toothbrush and a button – were recovered from the topsoil on the S side of the

palace enclosure. Both are of 19th-century date and neither is illustrated.

4.2.7 OBJECTS NOT RETRIEVED FROM THE EXCAVATIONS

Stray finds deposited in Elgin Museum include the following:

Bronze seal of William de Ros and dated to perhaps 1227 (accession number 1978.1).

Lead papal seal depicting St Peter and St Paul; Martinus PP IIII on obverse; 1281-85.

Lead papal scal depicting St Peter and St Paul; IOHANNES PP XXII on obverse; 1316-34.

Stray finds deposited in the National Museums of Scotland, Edinburgh include:

Half-complete lead bulla of Pope Eugenius IV (1431-47) (accession number H.NM262).

4.3 PREHISTORIC POTTERY

Helen Smith

Eight sherds of prehistoric pottery, six of them very small, were recovered from a sub-rectangular pit just east of the SW curtain wall (see Chapter 3.2.3; illus 10). Within the N side of the pit was a carefully arranged, roughly circular mound of periwinkles covered by oysters, to the immediate west of which was the pottery.

DESCRIPTION

Two conjoining body sherds have pinkish brown surfaces and a dark grey core. They are 12mm thick and their fabric is of medium to coarse clay with flecks of mica and large (up to 7mm), angular rock inclusions, mainly quartz. Some of the inclusions break the surface of the sherds. The sherds are relatively straight in profile. They are undecorated.

DISCUSSION

These sherds appear to be from a large straight-sided vessel, perhaps a simple bucket urn. Such simple forms are difficult to date and occurred between the third and the late first millennia BC. In the absence of corroborative evidence, it is suggested that this pottery may date to the Bronze Age.

4.4 MEDIEVAL AND POST-MEDIEVAL POTTERY

Naomi Crowley

The excavations produced a large assemblage (2,255 sherds) of pottery. Many sherds are small although several complete and near-complete vessels were recovered or have been reconstructed. The majority of the assemblage is medieval, of which 90% is thought to have been manufactured locally (fabrics 1, 2, 3 and 4); there are also smaller quantities of east coast white gritty ware (fabric 5), Scarborough ware (fabric 6), other Yorkshire wares (fabrics 7 and 8) and several continental imports (fabrics 9, 10 and 11). There is also a small quantity of post-medieval and modern wares. The classification of fabrics is based on colour, hardness and the type, frequency, size and sorting of mineral inclusions. Full details of all this material are contained within the site archive.

LOCAL WARES

On the evidence of their mineralogy and their predominance on site, fabrics 1, 2, 3 and 4 are thought to have been made locally. The vessels comprise a typical range of medieval pottery, the emphasis being on jugs and cooking pots although other forms such as a skillet, a cistern and urinals also occur. The style of decoration and the forms (particularly a face-mask jug in fabric 4 and a lid in fabric 1) show the influence of other industries, particularly Scarborough, on local potters. A range of similar oxidized fabrics occurs at other sites north-east of the Tay, such as Aberdeen, Perth and Elgin.

FABRIC 1 (illus 93)

Hard, smooth, red fabric with a very fine texture; oxidized or very occasionally partly reduced. Contains moderate mica and occasional very fine quartz. Several examples of strap handles and a bridge spout have chaff temper added.

JUGS

The most common form in fabric 1 is the jug. They vary in size from squat jugs to large, wide globular jugs, their rim diameters ranging from 60mm to 160mm. Most of the basal fragments are simply knife-trimmed and very occasionally thumbed; many have slightly sagging bases but two examples have turned foot-rings. Many of the bases have scars where the vessels were stacked in the kiln. The majority of fragments are glazed various shades of green although examples of yellow, brown and clear glaze also occur. The glaze cover varies from splashed or patchy to a more extensive even cover from the neck to the base. Most have a simple rim with a small pulled lip although one example has a tubular spout and another a bridged spout.

Strap handles predominate although there a few examples of rod handles. Some handles have grooved or incised lines along their length but most are undecorated. A small percentage of the jugs are decorated around the neck and shoulder with small parallel cuts, incised lines or combed wavy lines,

either horizontal or vertical. A few sherds have a thin white slip under the glaze. The quality of manufacture varies, and many of the sherds are quite thick.

COOKING POTS

These tend to be fairly straight-sided and unglazed with sooting on the exterior surfaces. Because of the fragmentary nature of these sherds, no good profiles can be reconstructed.

LID

A complete green-glazed lid, with a base diameter of 70mm and open at the top, was retrieved from the infill of Structure 2, a Period 3 building. Lids were produced at Scarborough where they are thought to have been used on tubular-spouted jugs (Farmer 1979, 42) but are rare on Scottish sites. The Spynie lid is less ornate than examples from Scarborough but its size suggests that it was used on a jug.

URINAL

A near-complete urinal was recovered from a late occupation or post-abandonment deposit against the SW tower. It is a one-handled, globular, closed form with a round aperture near the top, ideally suited for male use. Its top half is covered in a yellowish-green glaze. This type of urinal occurs from the English Midlands to Scotland and is frequently, although not exclusively, found on monastic sites (McCarthy & Brooks 1988, 115). Similar urinals have been found in Aberdeen, Melrose Abbey and Bothwell Castle.

CISTERN

One fragment of a cistern with green glaze and a circular cutaway at its base for a bung was retrieved from topsoil in the S range.

SKILLET

A rim of a skillet with a rod handle and internal and external green glaze was recovered from a modern level in the W range.

FABRIC 2 (illus 94)

Hard, smooth, red fabric containing moderate mica and occasional to moderate quartz. Comprises approximately 10% of the local fabrics.

JUGS

Jugs are the most common form in this fabric with rim diameters varying from 70mm to 120mm with the same forms and glaze on those in fabric 1. A small percentage of the sherds are decorated, either with incised lines, a rouletted cordon, or a dark iron oxide slip applied in strips.

COOKING POTS

There are only a few fragments of cooking pot in this fabric, most with sooting on their external surfaces. One sherd has a rim diameter of 180mm and has a yellow glaze. Although classified as a cooking pot, it may have been used for food preparation or storage.

URINAL

A small fragment from a similar urinal to that in fabric 1 was recovered from outside the S range.

FABRIC 3 (illus 94)

Hard, coarse, grey fabric containing abundant quartz up to 0.5mm, sparse mica and very occasional red iron oxide. This fabric makes up a very small percentage of the local wares and is probably a reduced version of fabric 4.

JUGS

The only vessels in fabric 3 are jugs with rim diameters of 60-80mm. Most of the fragments are glazed green, dark green, yellow or brown. Several are decorated with a dark iron oxide slip applied in strips or with combed lines. The handles are grooved rod handles.

FABRIC 4 (illus 94)

Hard, coarse, red fabric containing abundant quartz up to 0.5mm (occasionally up to 1mm) and sparse to moderate mica. Sometimes the core is reduced.

JUGS

The most common form in this fabric is the jug with rim diameters varying from 60mm to 120mm. The majority of sherds are glazed green, dark green, olive green, yellow, brown or clear which varies from splashed or patchy to more extensive even cover from the neck to the base.

All the handles are rod-shaped, most of them plain or grooved although a few examples have a twisted, barley-sugar shape. Occasionally there is a thin white slip under the glaze. The quality of manufacture varies, most sherds being fairly thin-walled and well-made. A lot of sherds in fabric 4 are embellished with knife-cut decorated cordons, incised or combed lines, rouletting or applied pellets on the neck and shoulder, pushed out boss decoration and dark iron oxide slip applied in strips. The only example of a face-mask jug is in fabric 4: a half-complete jug with a bearded face between the handle and the lip and two decorated arms attached to the globular body of the vessel. It has a thumbed base.

COOKING POTS

Many of those sherds classified as cooking pots have sooting on their external surfaces and traces of splash glaze. All the sherds are small, making it difficult to reconstruct profiles. Two rims have measurable diameters of 120mm and 220mm, the latter having a globular profile.

OTHER SCOTTISH POTTERY

EAST COAST WHITE GRITTY WARE (fabric 5)

Hard, light-coloured fabric varying in colour from white to pink or grey. Some examples have a lighter internal surface and a darker, reduced exterior. The matrix contains frequent quartz inclusions with varying amounts of iron oxide, rock fragments and occasional mica.

JUGS

Of the small quantity of sherds in this fabric, the majority appear to be from jugs. One squared rim form has a diameter of 90mm. Some sherds have no glaze or merely splashes of it; others are covered entirely with either green or yellow glaze. Decoration consists of incised lines and a dark iron oxide or white slip applied in strips.

COOKING POTS

A few sherds, classified as cooking pots, have fairly straight sides and sooted exterior surfaces. One rim, with a diameter of 160mm, is glazed green but has no sooting and may have been from a vessel used for food storage or preparation rather than cooking.

ENGLISH POTTERY

SCARBOROUGH WARE (fabric 6)

Pinkish, sometimes with a buff coloured core, with frequent quartz and occasional red iron oxide inclusions. Scarborough ware has a wide distribution up the east coast of Scotland and most sites of any status produce a few sherds. The Scarborough kilns were manufacturing wares from the 13th to the mid-14th century (Farmer 1979). Excavations at Aberdeen have shown that Scarborough ware imports were at their peak there from the early to mid-14th century (Murray 1982).

JUGS

The site yielded 13 small sherds of Scarborough ware, all of them probably from jugs, including one handle and a rim fragment with a diameter of 120mm. All sherds have a shiny, dark green glaze except the rim sherd, which is glazed dark brown.

BEVERLY-TYPE WARE (fabric 7)

Hard, smooth, orange-red fabric with frequent fine quartz and sparse mica. Beverly-type ware was produced from the 12th to 14th centuries (Didsbury & Watkins 1992, 83).

JUG

Four sherds of a well-made fabric, identified as Beverley-type ware with an olive green or green glaze, were recovered from the excavations. One sherd was retrieved from a context below the late 15th-century SW tower.

?NORTH YORKSHIRE WARE (fabric 8)

Orange fabric with lighter outer margins and containing frequent quartz and occasional red iron oxide inclusions.

JUG

One sherd of this ware, from a thumbed jug base with a yellow glaze, was recovered from the site.

CONTINENTAL IMPORTS

NORTH FRENCH (fabric 9)

Hard, off-white fabric with no noticeable inclusions. There are two very small sherds in this fabric, both with a shiny green glaze; one on both surfaces, the other on its exterior only.

RHENISH BLUE-GREY WARE (fabric 10) (illus 94)

Hard, dark grey fabric with abundant large quartz inclusions and a purple-grey, lustrous surface. Bluegrey ware has been found on sites along the east coast of Scotland, including Berwick on Tweed, St Andrews, Perth and Aberdeen. Its earliest occurrence on Scottish sites is the 12th century and its appears to continue into the 13th century (Verhaeghe 1983, 26). At Spynie, it occurs in association with local fabrics 4 and 5, the latter dating from the late 12th to the 15th century, suggesting that this is a late 12th- or 13th-century import.

LADLE

Eight conjoining sherds from a small globular handled ladle with a rim diameter of 70mm were retrieved from the base of the Period 2 ditch on the S side of the palace. Blue-grey ware has been dated to the mid-11th century in London; it was still being imported a century later and possibly as late as the 13th century (Vince 1991, 103).

LANGERWEHE STONEWARE (fabric 11)

Hard grey fabric. Two small fragments of this stoneware, manufactured some 20km east of Aachen in what is now north-west Germany, were retrieved from what were probably late levels against the E wall of the SW tower. One sherd, with a brown iron wash and shiny glaze over its exterior, is from a jug. In Britain, this pottery appears in late 14th- and 15th-century levels.

POST-MEDIEVAL POTTERY

SCOTTISH GREEN-GLAZED REDUCED WARE (fabric 12) (illus 94)

Hard, reduced, grey fabric containing a fine scattering of quartz, frequent flecks of mica and small red iron oxide inclusions. This type of reduced pottery dominates most assemblages in Scotland from the 15th to the early 18th century. The two known production centres were at Throsk, near Stirling (Caldwell & Dean 1992) and at Stenhouse, near Falkirk, although the Spynie material was probably produced locally.

JUGS

In this fabric were several sherds from jugs as well as a complete mis-shapen and over-fired jug, recovered from the base of the well in the N range. All the examples have a covering of green glaze.

POST-MEDIEVAL RED WARE (fabric 13)

Sandy red fabric with frequent quartz. The site yielded three small fragments of this fabric, all with white slip on their internal surfaces and clear glaze on their exteriors.

WESTERWALD STONEWARE (fabric 14)

Hard light grey stoneware, produced east of the Rhine during the 17th and 18th centuries. One very small sherd of this material, with blue decoration, was recovered from a post-abandonment deposit in the N range.

SALT-GLAZED STONEWARE (fabric 15)

Three fragments of 18th-century salt-glazed stoneware bottles were recovered from late deposits which also contained 19th- and 20th-century material.

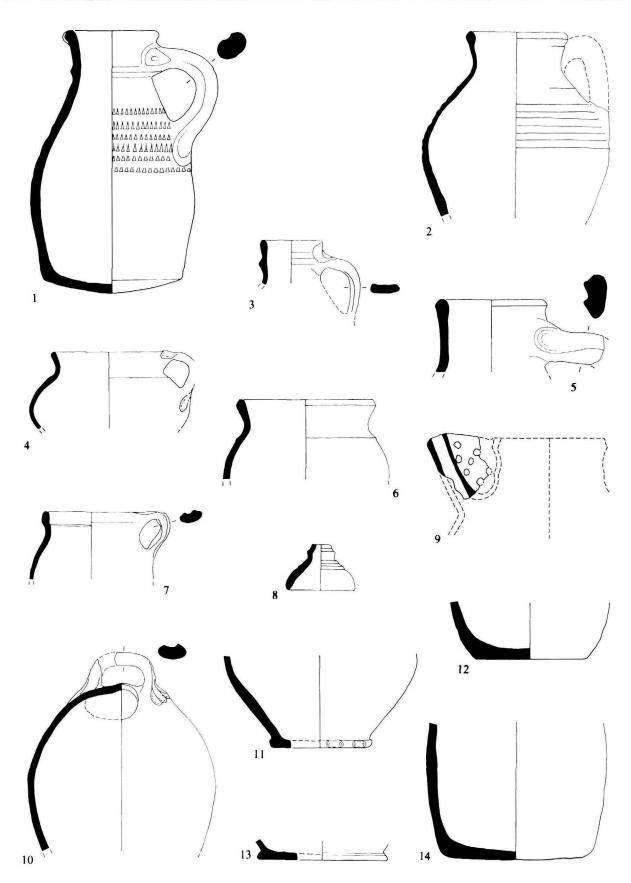
19th- and 20th-CENTURY POTTERY

There was a range of 19th- and 20th-century pottery, including sherds of Scottish brown-glazed white earthenware teapots and transfer-printed ware.

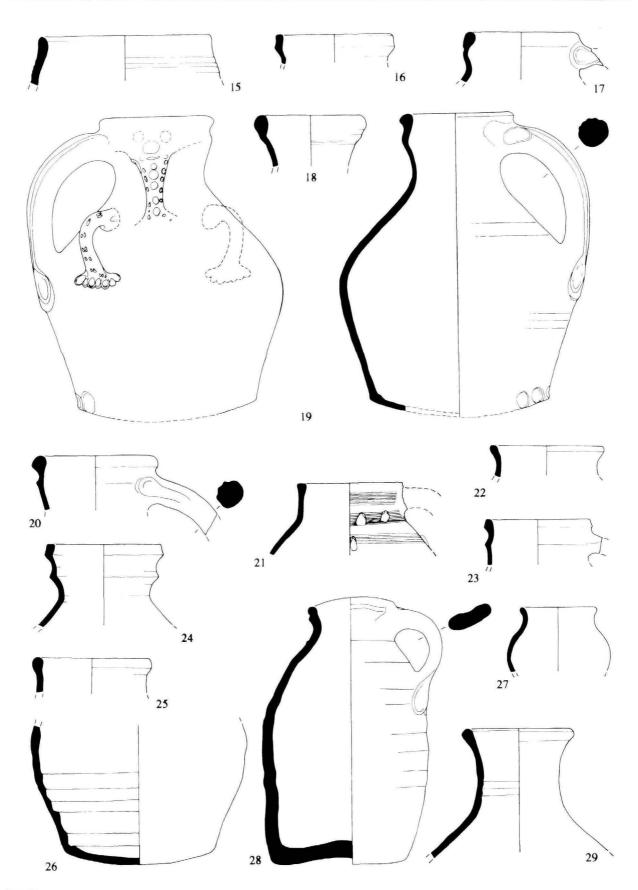
DISCUSSION

The majority of the pottery is in locally produced fabrics 1, 2, 3 and 4. Much of the medieval pottery was in residual deposits together with post-medieval reduced wares and 18th- to 20th-century material.

Local fabric 4 and its reduced equivalent (fabric 5) occurred throughout the site. They were associated with east coast white gritty ware (late 12th to 15th century), Scarborough ware (13th and 14th century) and Rhenish blue-grey ware (12th to early 13th



illus 93 Pottery, fabric 1. Scale 1:4.



illus 94 Pottery, fabric 2 (15); fabric 3 (16); fabric 4 (17–26); fabric 10 (27); fabric 12 (28–29). Scale 1:4.

century) at the base of the Period 2 ditch. This suggests that fabrics 3 and 4 were being manufactured from the late 12th or 13th century which is supported by their association with Beverley-type ware (thought to have been produced from the 12th to 14th century) elsewhere on site. The forms and decoration in fabrics 3 and 4 are all consistent with those of other 13th- to early 14thcentury Scottish pottery such as east coast white gritty ware, as well as wares from Scarborough and further south. Recent excavations of kilns at Kingston-on-Thames show that the Surrey white ware industry was producing jugs with similar types of decoration up to the late 13th or early 14th century (pers comm R Stephenson). The face-mask jug in fabric 4 suggests that local potters were copying vessels in east coast gritty ware as well as those from Scarborough.

Large quantities of fabric 1 and the slightly coarser fabric 2 occurred throughout the site, much of it in post-abandonment deposits. A few sherds of fabric 1 were recovered from the E and W ranges, the latter dating to the 14th century. The forms and decoration of the fabric 1 and 2 pottery range from typical late 13th-/14th-century cooking pots and jugs with sagging bases, tubular and bridge spouts and rod handles as well as skillets and cisterns, common in the 14th and 15th century, and urinals, common from the mid-14th to the 16th century. Some fabric 2 sherds had dark iron oxide slip decoration, suggesting 13th- to early 14th-century dates. Amongst fabric 1 pottery were two turned foot-rings of probable 15th- or 16th-century date, giving fabric 1 a wide date range.

A number of Scottish sites have yielded pottery imported from northern England. There were examples at Spynie although in lesser quantities than might be expected from a high-status site: only 13 small sherds of Scarborough ware, four sherds of Beverley-type ware and one possible North Yorkshire ware sherd were retrieved.

A small number of sherds from continental imports were also retrieved. The earliest of these was a Rhenish blue-grey ladle which, along with east coast white gritty ware, Scarborough ware and fabric 4 pottery, was recovered from the presumed Period 2 ditch on the south side of the palace.

CATALOGUE OF ILLUSTRATED POTTERY

FABRIC 1

- 1 Complete jug encrusted with shell fragments. Within pit underlying S wall of Structure 3, Probably Period 4.
- 2 Near complete jug. Within pit underlying S wall of Structure 3. Probably Period 4.
- 3 Rim and handle of jug. Modern disturbance within Structure 4.
- 4 Rim and handle of small jug. Fill of drain outside E range. Probable post-abandonment context.
- 5 Rim and handle of jug. Post-abandonment deposit in N range.
- 6 Rim of jug. Topsoil in NW range.
- 7 Rim and handle of jug. Fill of foundation trench for Period 5 David's tower.
- 8 Lid. Infill within Structure 1. Period 4 deposit.
- 9 Bridge spout of jug. Topsoil in W range.
- 10 Urinal. Post-abandonment deposit outside E wall of David's tower.
- 11 Base of jug. Disturbed deposit outside N range.
- 12 Base of jug. Topsoil in NW range.
- 13 Base of jug. Disturbed deposit outside N range.
- 14 Base of jug. Topsoil in NW range.

FABRIC 2

15 Rim of cooking pot. Levelling material in NW corner of courtyard. Period 4.

FABRIC 3

16 Rim of jug. Levelling material behind retaining wall at N end of courtyard. Date of primary deposition unknown; redeposited Period 5.

FABRIC 4

- 17 Rim of jug. Levelling material behind retaining wall at N end of courtyard. Date of primary deposition unknown; redeposited Period 5.
- 18 Rim of jug. Destruction debris associated with demolition of Structure 2. Period 3/4.
- 19 Half-complete face-mask jug. Destruction debris associated with demolition of Structure 2. Period 3/4.
- 20 Rim and handle of jug. Levelling material behind retaining wall at N end of courtyard. Date of primary deposition unknown; redeposited Period 5.

- 132
- 21 Rim of jug. Post-abandonment debris in E chamber of NW range.
- 22 Rim of jug. Levelling material behind retaining wall at N end of courtyard. Date of primary deposition unknown; redeposited Period 5.
- 23 Rim of jug. Levelling material behind retaining wall at N end of courtyard. Date of primary deposition unknown; redeposited Period 5.
- 24 Rim of jug. Levelling material behind retaining wall at N end of courtyard. Date of primary deposition unknown; redeposited Period 5.
- 25 Rim of jug. Levelling material behind retaining wall at N end of courtyard. Date of primary deposition unknown; redeposited Period 5.
- 26 Base of jug, Within pit underlying S wall of Structure 3. Probably Period 4.

FABRIC 10

27 Ladle. Basal fill of Period 2 ditch to S of palace enclosure. Period 2/3.

FABRIC 12

- 28 Almost complete jug. Basal fill of well in basement of N range. Period 6 or post-abandonment.
- 29 Rim of jug. Levelling material behind retaining wall at N end of courtyard. Date of primary deposition unknown; redeposited Period 5.

4.5 WINDOW GLASS

C Pamela Graves

The Spynie Palace assemblage is amongst the highest quality medieval window glass yet excavated in Scotland (illus 95), much of it complementing designs already noted at Elgin Cathedral. On the evidence of the Spynie material, glazing schemes at the 13th-century palace (and presumably those at Elgin Cathedral) used human figural representation on geometric backgrounds. A group of plain glass, thought to date from the late 15th or 16th century, may indicate a deliberate eschewal of decorated glass following the Reformation, that utilitarian glazing remained in place after more valuable decorated glass had been removed, or simply that most of Spynie's buildings were domestic.

COMPOSITION AND DECAY

The glass is in varying states of decay because of inconsistencies within its composition and differences of soil conditions although it all appears to be potash glass. Pitting on the external (unpainted) surfaces of many fragments is the result of exposure while in windows. Much of the 'white' glass has a green or yellow tint, probably caused by iron salts within the sand from which it was made. There is only slight evidence for coloured glass although the extreme decay of many fragments has made it impossible to be certain in most cases.

MANUFACTURE

Fire-rounded edges, evident on several pieces, is an indication of the cylinder method of flat-glass manufacture where the edges are cut when opening out the cylinder and flattened thereafter by melting. One example was recovered from Structure 2, a Period 3 (13th-century) building; the remainder was all in residual contexts. Painted decoration is all red/brown in colour, which is typical of medieval iron-oxide based paint. Almost all the paintwork can be described as *grisaille*: predominantly white glass painted with stylized or repeated designs, set in geometric patterns or used as a background to coloured panels.

A number of fragments are marked with a narrow white stain around their edges where the lead cames overlapped the glass. These were sacrificial panes that could be broken to remove decorated glass intact during repairs or releading.

There is no direct evidence for medieval glass being made in northern Scotland. Cunninghame (1859, 138) states that St Gilbert of Moray oversaw the manufacture of glass at Ciderhall, SW of Dornoch, for the windows of Dornoch Cathedral. Unfortunately, the source of his statement is unknown. It is likely that glass waste recovered from a pit at Elgin Cathedral was the residue from a glazing programme and not manufacturer's debris (Lindsay unpublished).

DATING AND STYLISTIC AFFINITIES

The assemblage consists of two distinct groups of glass:

Group 1 glass is generally quite thick and is all badly corroded. It is painted with designs known as trefoil *grisaille*. In glass technology, *grisaille* is a grey vireous pigment used to colour glass.

Group 2 glass is usually quite thin, most examples being relatively uncorroded and still quite transparent. None of it is painted with decorative designs. The only paint occurs at the edges of a small number of fragments and would have outlined the shape of the quarry rather than forming part of the decorative composition of a window.

Group 1

The painted decoration on the *grisaille* glass consists of small curling trefoils with quite distinctively shaped heads. There are three variations of this form (Types A-C); one of the border patterns (Type E) repeats the basic form of A on a continuous scrolling stem. These forms are so similar that they are almost certainly all contemporary, even though approximately half the *grisaille* occurs on crosshatched grounds and half on plain (eg Types A, C & K). A few fragments have both designs.

The Spynic trefoils are quite distinctive and contrast with examples of early *grisaille* with bulbous trefoils on cross-hatched grounds. Examples of this occur in the south transept of Lincoln Cathedral (first half of the 13th century) (Morgan 1983, 39-40); the south transept of York Minster (perhaps as early as 1230; and the north transept at York (*c* 1250) (O'Connor & Haselock 1977, 325).

Cross-hatched grounds were generally superseded by plain grounds in the second half of the 13th century. Tight trefoils with berries occur on plain grounds at Chartham and Selling parish churches in Kent (Winston 1867, 99; pls 18 & 20); Selling also has some grisaille on cross-hatching. Both have been dated to c 1298-1305 (Newton 1979, 183). Similar trefoils at Stanton Harcourt, Oxfordshire, occur on cross-hatched grounds and have been dated to between 1250 and 1280 (Newton 1979, 183). At Stanton Harcourt, patterns identical to borders G and H are also used to define the geometric shapes in which the grisaille is set. This mixture of crosshatched and plain grounds occurred amongst the excavated window glass from the Dominican Friary, Beverley, which has been dated to the late 13th century (Graves 1996).

Plain grounds were used in *grisaille* with more naturalistic leaves at York Minster chapter house windows of *c* 1285 (O'Connor & Haselock 1977, 334-41; pl 98); and the chapel of Merton College, Oxford, where the glass dates to *c* 1295. However, the earliest painted glass (other than durable blue fragments) excavated from the episcopal palace of Wolvesey, Winchester is of stiff-leaf foliage designs

with no cross-hatching that has been dated to the 12th or 13th centuries. This includes an example of a trefoil head very similar to those from Spynie (Kerr 1990, 398; 412-413; fig 102, 900.15).

Another characteristic of the Spynie *grisaille* is the group of three berries accompanying trefoils (Type A). The Beverley material also includes groups of berries, fine radiating stamens within the head (cf Spynie Type C), the border pattern G and another similar to pattern H. Whereas the border pattern uses trefoils, in other characteristics it resembles scrolling borders of the 14th century (cf Kerr 1990, 410; fig 100, 898.1, 898.4A and 4B).

Exact parallels for the Spynie material can be found amongst excavated material from Elgin Cathedral (Lindsay unpublished; Graves 1985, fig 11, 7.8; fig 20, 7.211, 216; fig 21, 7.224, 226, 227). This material includes a border pattern that can be compared with one at Salisbury Cathedral, dating to c 1260 or later (Winston 1865, 117, pl III).

Because some of the architecture of Elgin Cathedral has been compared with that of French churches (MacGibbon & Ross 1897, II, 125), comparison should perhaps be made between the glass from Elgin and Spynie with grisaille from France. The Scottish material is more detailed and less geometrical than the extant grisaille in Saint-Père de Chartres or Troyes Cathedral, both of which occur on cross-hatched grounds (Lillich 1978 passim). Day (1909, 146; fig 120) illustrates grisaille from Chartres Cathedral which has trefoils with groups of three berries, as well as smaller leaves curling off to the side. These are similar in configuration to the Spynie material although they lack the distinctive shape of the Spynie and Elgin trefoil heads. Indeed, none of the early French grisailles has this feature. Some of the mid-late 13th-century grisaille at Chartres Cathedral and Saint Urbain, Troyes, are much closer to the trefoil form (Day 1909, 160, figs 138-40; 161, fig 143).

The art-historical affinities of the Spynic glass suggest a date between the mid- and late 13th century. Although the earliest parallel is the Wolvesey Palace material, which suggests a date in the first half of the 13th century, the bulk of evidence, supports a later date. Identical patterns have been identified on glass from Spynie and Elgin Cathedral, suggesting that the two assemblages may be similar in date. The cathedral was probably started before the see was moved from Spynie in 1224. A fire in 1270 caused considerable damage to the cathedral, resulting in another, more extensive

building campaign. If the fashion in Scottish glass was similar to that in England, the Elgin glass could date to the period *c* 1224–1270. Glazing after 1270 tended to contain more naturalistic foliage, similar to that in the York chapter house and to some of the excavated material from Jedburgh Abbey (Graves 1995). One such fragment was recovered from Elgin Cathedral (Lindsay unpublished; Graves 1985, fig 20, 7.213); and this may well be contemporary with the trefoils as the style is indistinguishable. In a few places, such as Saint Urbain, Troyes, and Stanton St John, Oxfordshire, both trefoils and naturalistic leaves appear together in the late 13th century.

The initial work at Elgin Cathedral was supervised by Richard the Glazier (McGibbon & Ross 1896, II, 122). Richard (Ricardo vitreasio) also appears with Master Gregory the Mason (Magister Gregorio cementario) as witnesses to a charter of Bishop Andrew of Moray in Elgin in 1237 (RM, 133 no 121). Unfortunately, it is not known how long he was employed there, where he came from or where else he might have worked – such as Spynie.

On stylistic grounds, the closest parallels for the Spynie material are in England, particularly Salisbury. However, the artwork does not seem to have been carried out by English glass-painters or even copied directly from their work, rather that the Spynie glass is the product of Scottish craftsmen producing variations on a general theme.

Group 2

Because there is no painted decoration with which to date this group on art-historic grounds, dating is dependent on the physical characteristics of the metal, the manufacturing process, and the archaeological context.

Neither the cylinder nor the spun method produced glass of a consistent thickness, and it must be stressed that dating by thickness is difficult. There is no proof that window glass was manufactured in Scotland before the 1620s, and it is likely that uncoloured window glass was imported from England, France and the Low Countries. Coloured glass almost certainly came from the Continent. There are a few references to glass being imported into Blackness, Leith and Dundee from the 14th century onwards (ER III, 222: IV, 533, 619; XV, 515; XVI, 35, 65, 229, 360, 374).

The origin of most medieval white window glass in the British Isles is unknown, although there is evidence for its manufacture in the Weald from the 14th to the 17th century (Kenyon 1967, 104) and at Bagot's Park, Staffordshire, in the 16th century (Crossley 1968).

Consistently thin, durable glass has been dated as early as the mid-8th century (Biddle & Hunter 1990), most 12th- to late 13th-century glass being quite thick. Little of the early glass recovered from Scottish sites is as thin as the Spynie Group 2 material. The first documented manufacture of braid' or sheet window glass in Scotland refers to Wemyss and Leith in 1628, other glassworks having been established at Leith by 1664 (Fleming 1948, 110). Uniformly thin glass was available in the 17th century, on the evidence of 1.5-2.0mm-thick panes from Bolsterstone, Yorkshire (Ashurst 1987, 192) and the original glazing on Alderman Fenwick's house in Newcastle upon Tyne (Crossley 1990, 240).

There is no doubt that the majority of glass in this group dates to the later medieval or early post-medieval period. Certainly, it is not as late as the 17th century, for fragments were retrieved from a foundation trench for the late 15th-century SW tower.

THE DISTRIBUTION OF THE GLASS

A detailed description of the excavated sources of the entire assemblage can be found in the full, archived catalogue.

Most of the material recovered from the N side of the site comprised undecorated late medieval or early post-medieval glass. To the SE of the palace were moderate quantities of late medieval and post-medieval glass, as well as some of possibly earlier date, all of it undecorated.

The S range produced 111cm² of trefoil *grisaille* as well as probably contemporary coloured and undecorated glass. Some mid- or late 13th-century *grisaille* was recovered from the fill of the foundation cut for the E wall of the building, implying there had been an earlier glazed structure near by.

The majority of the glass (430cm²) from the W and SW parts of the courtyard is undecorated, late medieval or post-medieval in date. However, a small quantity (28.5cm²) of mid-late 13th-century trefoil grisaille was retrieved from this area, and 10.5cm² of an arcaded design of the 13th/14th century came from the fill of a Period 2 or 3 post-pit. One fragment from the strapwork edging of a quarry design (13th or 14th century) was associated with

the construction of Structure 2, a Period 3 building. In addition, 467cm² of mid- to late 13th-century trefoil *grisaille* was recovered from debris associated with the demise of Structure 1, which also dates from Period 3. At least seven of these fragments are heat-distorted and three of them are laminating. This was perhaps the result of lying in hot ashes subsequent to melting, which might also explain the blackened granular surfaces on most of this glass.

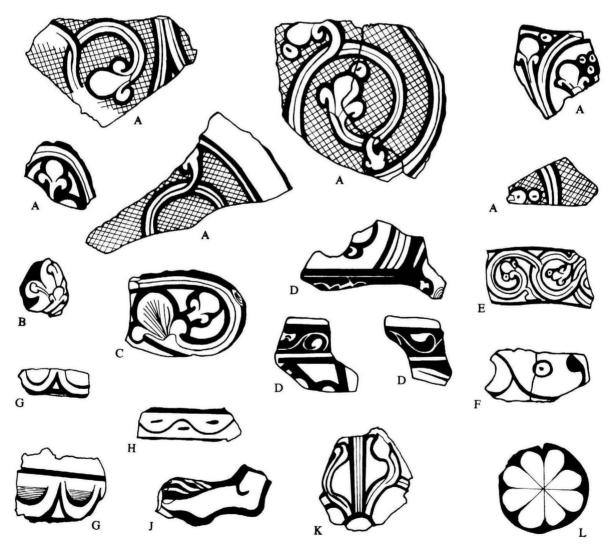
Trenching through the rubble, burnt debris and midden materials banked against the retaining wall on the N side of the courtyard yielded 21cm² of trefoil *grisaille* with berries. Also retrieved from those trenches were large quantities (298cm²) of trefoil *grisaille*, both on plain and on cross-hatched grounds, including a painted human foot (illus 95, J), green and pink pot metal (glass that is coloured all the way through), and an octofoil rosette (illus 95,

L). There was also 45cm² of unpainted glass and 55.5cm² of mid-late 13th-century painted and unpainted glass in this group.

CONCLUSIONS

The two main groups of material represented here are mainly decorated glass, dating to the mid- to late 13th century, and plain glass, of probable late 14th-to early 16th-century dates. The distribution of the earlier material strongly suggests that there were 13th-century buildings across the S half of the site.

Group 1 glass is of very high quality, and the occurrence of a human foot (illus 95, J) amongst its designs indicates that the *grisaille* served as a decorative background to biblical, hagiographic or other historiated scenes. Such panels would probably



illus 95 Painted window glass. Scale 2:3.

have formed geometric shapes and would almost certainly have been coloured, in contrast with the large white *grisaille*. Examples of this kind of glazing survive at Lincoln and Salisbury Cathedrals (*c* 1220–30 and *c* 1220–58/60 respectively) as well as several parish churches such as Stanton Harcourt, Oxfordshire (*c* 1250–80). The stylistic affinities of the first group, as far as they can be identified, seem to lie with English glass-painting. This connection may perhaps be seen in the perspective of the close constitutional and liturgical connections between Elgin and Lincoln established by Bishop Brice before 1222 (MacGibbon & Ross 1896, II, 121).

The distribution of the glass debris suggests that several buildings may have been glazed in the 13th century. Analogies with other episcopal complexes and high-status sites confirm that not only churches and chapels were glazed but also bishops' halls, private apartments and guest chambers. *Grisaille* formed peripheral zones on most windows and was often broken to retrieve the central coloured glass, which was reused in windows or as cullet. This has resulted in *grisaille* dominating many medieval glass assemblages.

The considerable quantity of plain glass retrieved from the excavations suggests that there was widespread use of glass between the 14th and 16th centuries. It appears that the later glazing schemes were deliberately devoid of the kind of figural, biblical and hagiographical scenes that characterized earlier buildings.

CATALOGUE

The full catalogue of the assemblage can be found in the site archive. The glass listed below represents the most interesting decorated examples recovered from the excavation and belong to those types that are illustrated.

NORTH RANGE

- 1 Fragment of opaque white glass with partial painted decoration, probably trefoil *grisaille*. 13th-14th century. Residual level.
- 2 Two fragments of opaque glass, painted with partial trefoil design on finely cross-hatched ground. 13th century. Post-abandonment debris.

SOUTH RANGE

3 Opaque rounded painted with octofoil rosette in reserve. 13th-14th century. Destruction debris.

- 4 Fragment of thick, opaque white glass with rounded, grozed edge, painted with small trefoil in outline on plain ground with curved, painted edge (Type A). Mid- to late 13th century. Destruction debris.
- 5 Fragment painted with partial trefoil design in outline, with berry, 13th-14th century, Destruction debris,
- 6 Two fragments of opaque glass with a running scroll foliate design in reserve on painted background with stickwork detail (Type D), 13th-14th century, Destruction debris.
- 7 Fragment of thin border piece or side strip. 13th-14th century. Destruction debris.
- 8 Two fragments of opaque glass, one painted with probable foliage stems from trefoil *grisaille*. 13th-14th century. Destruction debris.
- 9 Fragment of opaque glass with a border of running scroll, foliate design in reserve on painted ground with stickwork detail. Border to *grisaille* (Type D). 13th-14th century. Destruction debris
- 10 Four fragments of opaque glass painted with trefoil *grisaille* with small trefoils and stems. One fragment combines curved strapwork or a thick stem, with a trefoil head on a plain ground, and running scroll foliage design (Type D). Also another, small fragment of Type D. One fragment of possible strapwork. Mid- to late 13th century. Destruction debris.
- 11 Three opaque fragments painted with curved lines; two fragments with trefoils on curving stems (Type A). Mid- to late 13th century. Foundation trench for E wall of Period 4 south range.
- 12 Fragment of opaque glass painted with crossed trefoil stems. 13th-14th century. Residual context.

SOUTH-WEST CORNER OF THE ENCLOSURE

- 13 Fragments of opaque glass painted with curvilinear lines. 13th-16th century. Post-abandonment deposit.
- 14 Three fragments of opaque white glass, slightly bevelled, painted with curling stems on a plain ground. Mid- to late 13th century. Probable post-abandonment deposit.
- 15 Five fragments with some painted decoration, including groups of berries in outline, with central dots from trefoil *grisaille* on a plain ground. Mid- to late 13th century. Probable Period 6 deposit.
- 16 Fragment of semi-transparent fine, white glass with curled stem and trefoil in outline on plain ground. Probable Period 6 deposit.
- 17 Fragment of opaque white glass painted with curved lines, possible foliage stems, 13th-14th century. Period 6 or post-abandonment deposit.

WEST AREA

18 Two fragments of opaque glass with painted decoration forming either an arcaded pattern (Type G) or the letter 'B'. A thin wash has been used to shade the design. 13th-15th century. Fill of post-pit, probably Period 2 or 3.

STRUCTURE 1

All of this material was retrieved from debris (mainly burnt deposits) associated with the destruction of this building.

- 19 Several fragments (263cm²) of semi-transparent white glass, painted with trefoil *grisaille* on finely cross-hatched grounds. Many of the trefoils curl in almost complete circles and have twisted stems (Type A). Three fragments have rounded, grozed edges with petals in reserve around a central point, suggesting small roundels.
- 20 Fragments of opaque glass painted with a strapwork on the edges and with a curved stem from trefoil *grisaille* on a finely cross-hatched ground. There is some linear painting on the back.
- 21 Three fragments, including one grozed, in the shape of a spandrel. Painted with a design in outline, perhaps representing a running foliate scroll decorated with circles (a variation on Type F)
- 22 Opaque glass (54cm²), the majority of the fragments blackened with an unusual granular surface. At least seven are heat-distorted and three are both distorted and laminating, perhaps having lain in hot ashes after melting.
- 23 Opaque glass (43cm²) painted with designs that cannot be recognized because of corrosion.
- 24 Opaque glass (6cm²) painted with a border design of inverted arcs (Type G).
- 25 Thin border (9cm²) painted with serpentine line and alternating dots (Type H).
- 26 Opaque glass (10cm²) painted with what may the hooks and folds of drapery.

NORTH SIDE OF THE COURTYARD

All of this material was retrieved from humic midden-like soils redeposited in Period 5 to infill the

space to the back of the retaining wall to the S of the N range.

- 27 Opaque white glass (13cm²) painted with curling trefoil designs in outline (Type A). One has berries.
- 28 Opaque white glass (8cm²) painted with lines and curves, perhaps from *grisaille* trefoil stems.
- 29 Opaque to semi-transparent glass (121cm²), all painted with trefoil *grisaille*. The trefoils are small, tight leaves, some doubled with one small outlined trefoil within a large trefoil in reserve; and detailed with fine lines within (Type B). One large fragment has fine radiating stamens or veins with a smaller offshot trefoil within its curling stem (Type C, with subsidiary Type A). Many examples have groups of three berries adjoining a leaf (Type A with berries). At least five fragments have fine cross-hatched grounds and there is nothing to distinguish the style of design between those with and those without cross-hatching.
- 30 Two large fragments of curved border stem with curling trefoils almost encircled by their own stem which forms a running pattern (Type E).
- 31 Two fragments, corroded to a bright copper green and may have been a green pot metal. They are painted differently and, with long lines and hooks, may represent drapery.
- 32 Fragment (Type J) of brown-pink glass, clearly painted as a human right foot, possibly a saint or someone from an historical scene. The bend of the ankle is rendered with a curled hook and the individual toenails are detailed.
- 33 Fragment of opaque glass with an octofoil rosette (Type L).
- 34 Miscellaneous painted fragments (17.5cm²).
- 35 Opaque glass (18cm²) with painted decoration in outline. One fragment has a central stalk with curling stems on each side with a circle beneath. This design is indistinguishable from other trefoil stems from Spynie. One fragment has a scroll foliate pattern (Type D).

4.6 VESSEL GLASS

Robin Murdoch

DISCUSSION

Of this assemblage of 127 fragments, 41 are contemporary with the occupation of the palace. They include 21 sherds of fine wares, nine from urinals and four from bottles. There is very little 18th-century glass, suggesting that there was limited (if any) occupation of the site after the end of the bishopric.

MEDIEVAL GLASS

Most medieval glass from northern Europe was fluxed with potash, which tends to decay readily in

alkaline conditions, such as where lime mortar is present in large quantities. Consequently, much of this material may have disappeared. It is remarkable, therefore, that Spynie yielded several fragments of interesting medieval vessels, as well as considerable quantities of window glass (see above 4.5). Several sherds of a probable urinal (nos 1 & 3), in which some of the heart glass had survived, were retrieved from below David's tower. Although urinals have few characteristics to allow close dating (styles did not change significantly between the 12th and 17th centuries), these fragments were associated with Period 3 Structure 1 and hence are probably 13th century in date.

Within the redeposited midden material at the N end of the courtyard were fragments of three vessels: another probable urinal (no 2), the handle of a jug-type vessel (no 7), and two sherds from a thick rim (nos 5 & 6). None of these pieces retained any heart glass. These four sherds exhibit signs of heat distortion, as do fragments of associated window glass, suggesting they may also have been associated with Structure 1.

POST-MEDIEVAL GLASS

Vessels with pushed-in bases

There are sherds from four vessels with pushed-in bases, a type that is common in England and has been retrieved from several Scottish sites. The vessels are formed from a single paraison (bubble of glass at the end of a blowpipe) where the base is pushed in to form the bottom of a bowl whose wall is of double thickness at its lower part. Such vessels usually have a hollow, almost flattened foot-ring.

Several types of vessel were made using this technique, including goblets, beakers and flasks, the earliest examples being from 4th-century Gaul. According to Wood (1982, 30), this was '. . . the classic way of forming the foot in the forest glasshouses in England . . .'. During the late medieval and post-medieval periods, vessels with this type of foot were made in Venice and in northern Europe, including Antwerp and Liège. Venetian glass was soda-fluxed making it generally, but not exclusively, more durable than potash-glass. It is usually clear with a very faint tinge, typically yellow, ginger-brown or grey, whilst most north European glass tends to have a greenish tinge, sometimes quite intense. Whereas the pushed-in base has a long pedigree, English vessels very similar to those from Spynie were particularly common between 1570 and 1630. A similar example from Fast Castle, Berwickshire, dates from early in this period (Murdoch 2001, 82, illus 38.10).

Although it is difficult to assess the shape of the vessel from which it came, no 7 strongly resembles material recovered from the Woodchester glasshouse which operated from 1590 to 1615 (Daniels 1950, pl 8, 72-74 & pl 9, 82) and to glass from Hutton, Yorkshire (Crossley & Aberg 1972, fig 63, 93, 94). The strong greenish tinge in the Spynie glass betrays its north European origin. Indeed, if these shards

date from the early 17th century, the vessels could have been manufactured in Scotland, perhaps at Morison's Haven or Wemyss both of which were operational before 1625 (Turnbull 2001, 27, 70).

Fragments 8, 9 and 10 were retrieved from a probable post-abandonment deposit in the SW corner of the courtyard, and they may all be from the same vessel. The clarity and condition of the glass, together with the use of a complex mould in the vessel's manufacture, strongly suggests that it is Venetian. Excavation at Carrick Castle, Argyll, has yielded fragments from a remarkably similar vessel (Murdoch 1998, 977); and glass with similar ribbing but without enamel decoration has been recovered from Exeter (Charleston 1984, fig 148-58). It is not possible to reconstruct the pattern of the enamel decoration on the Spynie vessel from the few surviving fragments although it appears to have been simple and probably restricted to a band between the top of the ribbing and the rim.

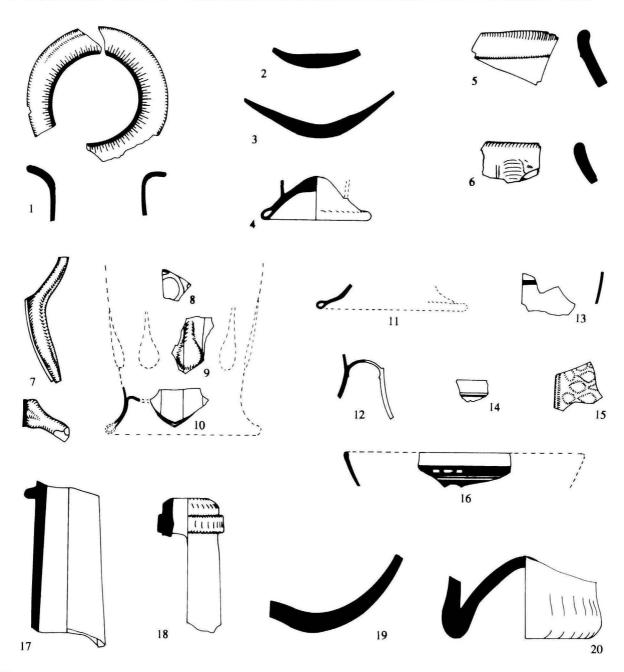
Vessels with thin, trailed band decoration

Two sherds are decorated with thin bands of horizontal trailing. No 15 is from a vessel with 11 thin, parallel bands of trailing below the rim whilst no 14 is very small and badly abraded. Another sherd (no 13) might also be banded although the glass is almost totally denatured and the putative trailing, which is indistinct, may simply be a mould mark.

Venetians used enamel and sometimes *lattimo* (milky, opaque, white glass) for surface decoration. Charleston (1984, 259, fig 148, 52) dates a vessel with similar banding to the first half of the 16th century. Glass with this type of decoration was recovered from Niddry Castle, West Lothian, and Fast Castle, Berwickshire; the latter almost certainly dates to the 16th century. Glass with thin, trailed decoration has been recovered more frequently from Scottish sites than from contemporary English ones, perhaps indicating a preference for this material north of the border.

Possible bossed beaker

A small rim with moulded teardrop or lozenge pattern (no 15) is very similar to those on 16th- and 17th-century Dutch bossed beakers (Henkes 1994, 139, 31.2). Its greenish tinge and blotchy patination confirm its north European origin.



illus 96 Vessel glass. Scale 1:2.

Wine bottles

Two conjoining sherds (no 19) are from the base of a wine bottle with a gentle curve running through its base ring and into a shallow kick. The maximum diameter of this bottle was well above its base. Similar material was recovered from Niddry Castle (Murdoch 1997, 83, illus 21.169A). Hume (1961, 97-117) dates this type of base to the third or early fourth quarter of the 17th century. A wine bottle neck (no 17) is of similar date or slightly earlier. Nos 17 and 19 are probably Scottish in origin.

CATALOGUE

- 1 Two large and five small rim sherds encrusted with mortar. The two large sherds have the profile of an out-turned lip, typical of urinals. Destruction debris from Structure 1 (Period 3).
- 2 Sherd, measuring 46mm by 41mm, from round-bottomed vessel, probably a urinal, with traces of pontil scar on outer (convex) surface. Totally denatured with very dark brown corrosion products. Maximum thickness 8mm, thinning to 3mm. Redeposited midden material behind retaining wall for Period 5 N range.
- 3 Part of urinal base, measuring 78mm by 73mm, in clear glass

with a pale green tinge and very heavy dark brown to black denaturing. Has the same colour and denaturing as no 1 and could be from the same urinal. Maximum thickness 8mm, rapidly thinning to 1.5mm at its edge. Encrusted with mortar. Destruction debris from Structure 1 (Period 3).

- 4 Pushed-in base, probably of beaker, with double thickness wall. Mid-green with blotchy denaturing and pontil scar. Diameter over base ring 58-60mm. Post-abandonment deposit in SW corner of courtvard.
- 5-6 Two fairly thick rim sherds, probably from the same vessel. The rim shape is not uniform, indicating a spouted vessel or perhaps heat distortion. No 5 appears to have a deliberate mould line. Totally denatured with almost black corrosion products. Redeposited midden material behind retaining wall for Period 5 N range.
- 7 Lower half of strap-handle from jug-type vessel, possibly a decanter, with 2mm-thick side wall. The handle is badly offset and appears to have sagged because of high temperature. Totally denatured with very dark brown corrosion products. Redeposited midden material behind retaining wall for Period 5 N range.
- 8 Small sherd of clear glass with enamel decoration and very light surface denaturing. No mould marks but probably from the same vessel as nos 9 and 10. Enamel has denatured from original white to brown on its outer surface. Destruction debris in S range.
- 9 Five sherds of clear, thin glass with light iridescent denaturing. The glass has no appreciable tinge, which is unusual even for classic Venetian 'cristallo'. Thickening of the sherds is an indication of slight ribbing; mould lines are present; feathered striations suggest that the glass was blown into the mould slightly below the optimum working temperature. Post-abandonment deposit in SW corner of courtyard.
- 10 Junction of bowl and foot from beaker-type vessel with pushed in, double-thickness, base. Mould lines, ribbing, colour and denaturing very similar to no 9 and probably from the same vessel. Diameter over base ring is 80-85mm. Mould lines are 10-11mm apart, suggesting the mould had 18 segments. Destruction debris in S range.
- 11 Sherd of pushed-in, double-thickness base from a drinking vessel with a hollow foot ring. Foot ring is near-circular in section unlike most examples which are somewhat flattened. Clear glass with slight greenish tinge and light blotchy denaturing. Inner and outer surfaces are rippled, suggesting mould contact. No

- significant abrasion on base ring. Effective base ring diameter 80mm. Post-abandonment deposit in NW range.
- 12 Lower part of bowl and part of base of drinking vessel with pushed-in base and double-thickness wall. Slightly greenish glass with variable denaturing. Bowl and base splay outwards, suggesting biconical shape. Minimum diameter at junction of bowl and base is 21mm. Post-abandonment deposit in SW corner of courtvard.
- 13 Three conjoining sherds of totally denatured glass. Possible trailed decoration comprising a thick band with thinner bands each side. Post-abandonment debris in NW range.
- 14 Tiny rim sherd from drinking vessel in clear, abraded, very thin glass with two thin, parallel, self-coloured trails or mould marks. Within matrix of W wall of Period 5 north range.
- 15 Rim sherd of thin-blown glass from drinking vessel of conical, or similar, bowl form with slightly flared lip. The vessel has been blown in a multiple 'tear drop' or 'lozenge' mould. Diameter across the rim about 70mm; thickness 1.2-1.6mm. Probably Dutch; 16th/17th century. Post-abandonment deposit in NW range.
- 16 Rim sherd in clear glass with blotchy denaturing. Decorated with 11 thin, parallel, trailed bands in enamel or opaque white glass. One of the bands is discontinuous with a broad lozenge-shaped design. Diameter over rim about 130mm, indicating that it is from a bowl or *tazza* cup rather than a drinking vessel. Post-abandonment debris outside E range.
- 17 Wine bottle neck with no appreciable splay; heavy rounded string-ring; no lip surviving. Mid-green with blotchy metallic denaturing. Probably no later than 1670. Post-abandonment deposit in SW corner of courtyard.
- 18 Part neck and lip from bottle in light green glass with broad, vertical, flat string-ring and rounded lip. Light to moderate denaturing. Late 18th/19th century. Topsoil in NW range.
- 19 Two conjoining sherds of wine bottle base in light green glass with moderate to heavy denaturing and gentle curve through base ring into shallow kick-up. Second half of 17th century. Topsoil in N side of courtyard.
- 20 Base sherd in dark, firebright, olive glass with belling. Probably early 19th century. Topsoil in NW range.

4.7 CLAY TOBACCO PIPES D B Gallagher

A total of 110 clay tobacco pipe fragments were recovered from the excavations (illus 97-98). The recording and study of the pipes have been based on the guidelines published by Davey (1981), modified by those proposed by Higgins and Davey (1988). The number of fragments recovered was not great and very few were retrieved from sealed occupation deposits.

DISCUSSION

DUTCH-TYPE PIPES

These are mainly from the period 1640–60, with the exception of no 1, an early biconical bowl, dated to c 1610–30, and no 9 which is of early 18th- century date. The Dutch pipes vary in quality. There are two

low-quality 'moulded rose' bowls (nos 4 and 5) which are common among Dutch imports in Scotland. The better quality imports are represented by highly burnished bowls (nos 6 and 7) and stamped stems (nos 10-14). Bowls similar in form to examples from Leiden (no 4) and Amsterdam (no 3) are also present in the Spynie assemblage, whilst no 1 may be an early Rotterdam product (cf Duco 1988, 143 and 149, No 1).

The stem decorated with fleur-de-lys in relief (no 15) is an unusual, late 17th-century mould-imparted variation of stems covered with multiple stamps, which were popular earlier in the century. Although this treatment of the fleur-de-lys is uncommon, similar stems are known to come from Utrecht (Smiesing and Brinkerink 1988, 40-41) and Gorinchem (Brinkerink and Veen 1988, 60, no 56).

In the later 17th century, Dutch pipes and a wide variety of other goods were imported through Findhorn, 20km west of Spynie, by a consortium of Elgin merchants and landed gentry who used Scottish merchants in Holland as their buyers (Warrack 1920, 14-52). It is likely that a similar trading arrangement existed earlier in the century.

One broken stem (no 17), decorated with milling, has been adapted to form a flute or whistle, of which one finger-hole survives. This reuse of stems is uncommon but not unknown. Similar examples have been found at Zwolle and Nijmegen in Holland, the latter stem also having double milling (Tupan 1985, 1; Engelen 1988, 141, no 37). An English example, probably later in date, was found at Birstall (Brook 1991, 29-30).

ENGLISH-TYPE PIPES

One basal fragment with IW stamped on its base (no 8) is probably an English import. Whilst such circular stamps were produced throughout eastern England, IW stamps are particularly common in York where they have been identified as products of John Wright, a pipe-maker from 1639 to 1697 (Lawrence 1979, 76, fig 4, nos 74-80; Andrews 1991, 9).

SCOTTISH PIPES

There are no records of active pipe-makers in north-east Scotland during the 17th century. During the first half of that century Scottish production was centred on Edinburgh although pipes from there are rarely found in northern Scotland where Dutch imports predominated. One, or possibly two, Edinburgh pipes have been recovered from excavations in Elgin (Gallagher 1987, 272-3), and several from Aberdeen (Davey 1987b, 254-7, nos 8, 12, and 24). The source of the stem marked ROBE....NTR (no 13) is not obvious. There were several British pipe-makers with this first name working in Holland in the early 17th century, including Robbert Pieterss who came from Auchtermuchty, Fife (Duco 1981, 333). The style of the border of fragment no 14 and its crude execution suggest parallels with Scottish roller-stamped pipes, particularly one excavated in Aberdeen which had a border consisting of pellets and triangular fields (Davey 1987b, 256, no 24).

19TH- AND 20TH-CENTURY PIPES

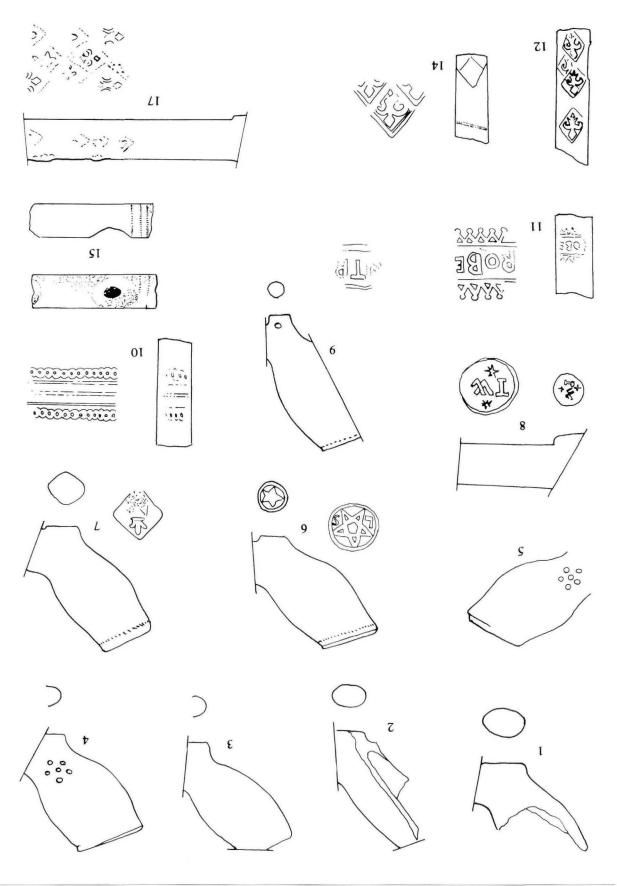
The 19th-century pipes probably represent casual losses by visitors to the palace ruins and by local estate workers. These included the complete stem of a William Beveridge pipe (no 23). Beveridge was a pipe-maker in Forres between 1869 and 1882 and in Aberdeen from 1882 to 1908 and his products have been recovered from excavations in Elgin (Gallagher 1987, 277) and Aberdeen (Davey 1987b, 258 & 262). The Beveridge fragment is from a cutty pipe, a robust short-stemmed form that was produced in a variety of bowl designs. Another bowl of 19thcentury or early 20th-century date is stamped ANDERSON'S CUTTY (no 19). There is no record of a Scottish pipe-maker of this surname and the stamp may simply be advertising another type of business, such as a public house or a brewery. The bowl fragment stamped G... ROTHIEMA[Y] (no 20) may also have been an advertisement, in this case for a business in the village of that name, some 36km ESE of Spynie.

The majority of the pipes from Spynie are dated to *c* 1630-60, reflecting pipe usage during the last decades of the occupation of the palace. The assemblage is a useful addition to the small corpus of pipes from northern Scotland and emphasizes the dominant position of Dutch imports in north-east Scotland during the 17th century.

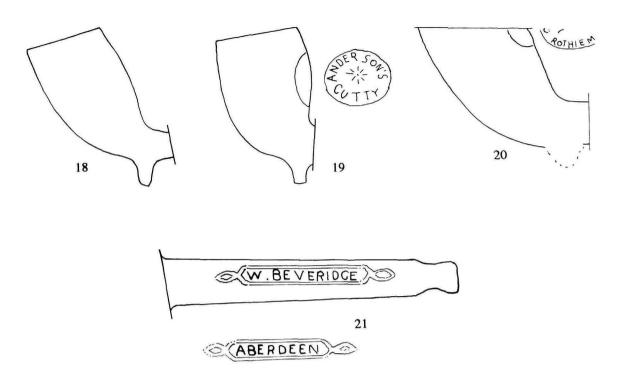
CATALOGUE OF PIPE FRAGMENTS

BOWLS

1 Fragment of biconical bowl, much damaged but with small part of a bottered rim surviving; bore 6/64" (2.4mm); Dutch, possibly Rotterdam; *c* 1610–30 (cf Duco 1987, 29, no 21; Duco 1988, 149, no 1).



illus 97 Clay tobacco pipes, nos 1-12, 14, 15, 17, Scale 1:1.



illus 98 Clay tobacco pipes, nos 18–21. Scale 1:1.

- 2 Bowl fragment, rim and front missing; bore 7/64" (2.8mm); Dutch; c 1640-60.
- 3 Bi-conical bowl of poor quality; damaged; bore 6/64" (2.4mm); Dutch, possibly Amsterdam; *c* 1630–60 (cf Duco 1987, 248, no 109)
- 4 Bowl with 'moulded rose' design in dots on side; bottered; bore 6/64" (2.4mm); Dutch, probably Leiden; mid 17th-century (cf Duco 1981, 243, no 12).
- 5 Bowl with 'moulded rose' design; damaged; bore 6.64" (2.4mm); Dutch c 1630–50 (cf Duco 1981, 244, no 33).
- 6 Biconical bowl, burnished, bottered and finely milled; basal stamp with star and letters LS, possibly from the same pipe as roller-stamped stem no 17; bore 7/64" (2.8mm); Dutch, possibly Nijmegen; c 1640–60 (cf Engelen 1988, 141, no 44).
- 7 Bowl fragment, burnished, rim bottered, milled, with diamond-shaped basal stamp, the lower part of which is damaged; has a crown or fleur-de-lys over a letter (?M); bore 7/64" (2.8mm); Dutch; c 1640–0.
- 8 Heel and stem fragment; circular stamp with IW and stars above and below; bore 7/64" (2.8mm); English, possibly York (cf Lawrence 1979, 76, nos 74-80 which are identified with John Wright, 1663-97).
- 9 Bowl fragment, damaged, finely bottered and milled; pellet in relief on left side of spur; bore 5/64" (1.9mm); Dutch, Duco basic type 2; c 1690–1740 (Duco 1987, 27).

DECORATED STEMS

10 Stem fragment with notched ribs and a 'ring of pearls' border; width 13mm; bore 6/64" (2.4mm). Similarly marked stems were found on the Kennemerland, wrecked in 1664 (Martin 1987, 212, fig 1.6). Duco (1981, 246, no 46) refers to an example of *c* 1670

- from Gouda and two others have been recovered from Aberdeen (Davy 1987b, 257, nos 17-18).
- 11 Fragment of roller stamp with ROBE....NTR within a border; bore 8/64" (3.2mm); possibly Andrew Roberts of Nijmegen, recorded as a pipe-maker in 1670 (Duco 1981, 440).
- 12 Stem fragment with five deeply-impressed fleur-de-lys stamps; bore 6/64" (2.4mm); Dutch; ε 1630–60.
- 13. Small fragment of stem with part of a roller stamp with notched ribs and a 'ring of pearls' border, identical to no 12 and possibly from the same pipe; bore 6/64" (2.4mm); Dutch; c 1660–70. Not illustrated.
- 14 Stem fragment with a four part fleur-de-lys stamp and a single line of milling; bore 7/64" (2.8mm); Dutch; mid 17th-century (cf Davey 1981, 218, no 222).
- 15 Stem fragment with part of a roller stamp design consisting of two lines of milling applied twice; Dutch; ε 1650–80. This stem has been reused as a whistle or flute. One complete notched hole and part of another survive, the latter possibly being part of the mouthpiece (cf Smiesing & Brinkerink 1988, 114; Duco 1987, 87, no 460; Duco 1981, 250, no 123).
- 16 Stem fragment with a single line of milling; bore 8/64" (3.2mm); Dutch; 17th-century. Not illustrated.
- 17 Stem fragment with multiple fleur-de-lys design in relief, the poor impression indicating a worn mould; bore 8/64" (3.2mm); Dutch; c 1660–70 (cf Brinkerink & Veen 1988, 60, no 56; Smiesing & Brinkerink 1988, 40-41).

19TH-/20TH-CENTURY PIPES

18 Thin-walled bowl with clongated spur and knife-cut rim; bore 5/64" (1.9mm); probably Scottish; 19th-century.

- 19 Spurred bowl with knife-cut rim; oval stamp on rear of bowl with ANDERSON'S CUTTY and star motif; bore 4/64" (1.6mm).
- 20 Spurred bowl, spur and upper bowl missing; fragment of a stamp on the rear with G... ROTHIEMA[Y] within an oval frame; bore 5/64" (1.9mm).
- 21 The complete stem of a cutty-type pipe marked with W. BEVERIDGE in incuse sanserif in a relief frame, no mid stroke on final E of Beveridge; modified mouthpiece; bore 5/64" (1.9mm).
- 22 Small fragment of a thick-walled bowl decorated with narrow ribbing; 19th-century. Not illustrated.
- 23 Fragment of the lower side of a low-angled bowl; bore 4/64" (1.6mm). Not enough survives to indicate the exact form of this bowl although it appears to be similar to the Dutch basic form 3 (Duco 1987, 27). This form was copied by 19th-century Scottish manufacturers, such as Thomas Davidson Junior of Glasgow (Gallagher & Price 1987, 130, fig 14, no 144). Not illustrated.

4.8 LEATHER

Clare Thomas

The leather consists of 13 items: two fragments of a sheath, ten shoe pieces, a small fragment of shoe, and a wallet (illus 99).

SHEATH

Although only two small fragments survive, they are large enough to suggest a type very common throughout the medieval and post-medieval periods. Unfortunately, it is not possible to date these fragments. Most men (and probably women) carried a small knife for a variety of domestic and other reasons. The knife was usually held in a leather sheath, attached to the owner's belt. Decoration on these sheaths varies from simple curvilinear designs, as on this one, to elaborate copies of heraldic emblems.

SHOES

The ten shoe pieces probably represent no more that two shoes. Grain to flesh stitching channels on the soles suggest that these are welted outer soles although they appear to have unusually short stitch lengths, 5-6mm, compared to 7-10mm more normally found on welted shoes. Additional stitching on seats indicates that heel-pieces have been added; no 6 may be an example. No 10 is possibly a welt, albeit a most unusual one. Unfortunately, insufficient evidence survives as to the nature of soles or the shape and style of uppers.

Welted shoes date from *c* 1500 onwards. Heel pieces, as original features rather than repair clumps, date from the mid-16th century in England (Swann 1973, 23). The earliest recorded examples from Scotland (17th-19th centuries) are from Gunn's Close, Kirkwall, Orkney (Thomas 1982, 415). The Spynie shoes may date from the mid-16th century, but are more likely to belong to the 17th century or later.

WALLET

Unlike the rest of the leather, the wallet has been machine-stitched and therefore probably dates from the 19th century. A later date is unlikely, given the nature of the print on its lining.

CATALOGUE

SHEATH

1 There were two small fragments of decorated knife sheath, both worn and delaminated.

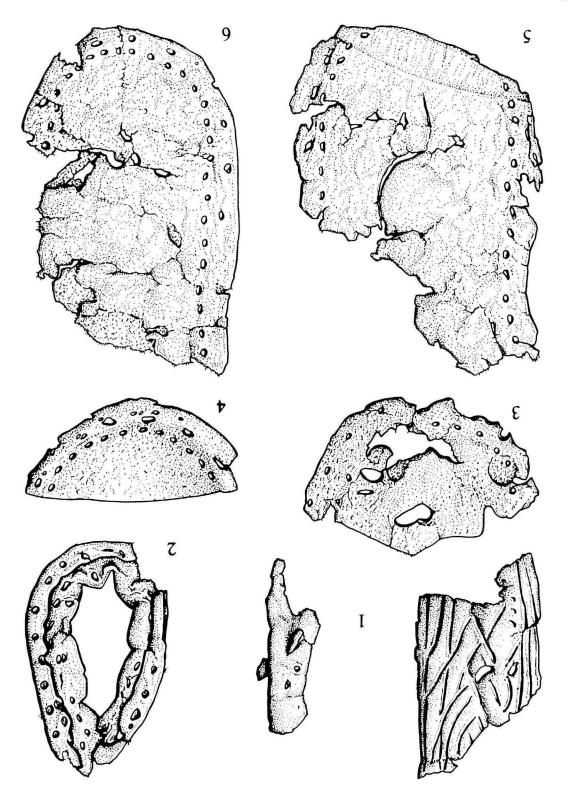
Fragment, approximately 55mm by 32mm, decorated with engraved lines by a blunt tool on wet leather. Decoration consists of simple curvilinear design, enclosed on long sides by vertical lines.

Fragment, approximately 45mm by 10mm, from one side of rear seam of sheath. Traces of four stitch holes and two holes with a short length of thong threaded through them: probably a repair. Primary infilling material (?late 17th century) in well in N range.

SHOES

- 2 Strip of leather, folded once, forming edge or sunken groove; stitched through edge and through both top and bottom surfaces, producing three almost identical stitching channels. One edge of strip loosely oversewn. Length approximately 125mm, width (folded) approximately 10mm. Delaminated. Shape suggests originally attached to seat or forepart. Possibly welt, designed to link together two or more pieces of leather. Stitching of oversewn edge might correspond to outer stitching on nos 3-7, for attachment of heel-piece. Does not correspond to other welts. Primary infilling material (Flate 17th century) in well in N range.
- 3 Fragment of outer sole, probably seat, with traces of two grain to flesh stitching channels; stitch lengths approximately 6.5mm and 8.5-10mm. Traces of other holes, possibly for attachment of heel-piece. Worn and delaminated. Length approximately 42mm; width approximately 62mm; thickness approximately 2.5mm. Primary infilling material (?late 17th century) in well in N range.
- 4 Approximately semi-circular fragment, probably seat of outer sole with two, possibly three, grain to flesh stitching channels.

illus 99 Leather, Scale 1:1.



146

Delaminated, only grain layer survives, very worn. Length approximately 26mm; width approximately 57mm; thickness 1mm. Also four very small fragments, two with traces of stitching. Primary infilling material (Plate 17th century) in well in N range.

- 5 Seat and part of waist of outer sole with grain to flesh stitching channel; stitch length 6mm. Second grain to flesh stitching channel on seat, between first stitching channel and edge; irregular stitch length. Possibly for attachment of heel-piece. Very worn, torn and delaminated. Faint traces of grain surface. Surviving length approximately 90mm; maximum width approximately 67mm. Very similar to no 6: probably delaminated segment of it. Stitching channels and additional holes almost identical. Primary infilling material (?late 17th century) in well in N range.
- 6 Seat and part of waist of outer welted sole with grain to flesh stitching channel; stitch length 5-6mm. Round seat, grain to flesh holes between main stitching channel and edge; stitch length approximately 10-12mm. Possible stitch holes in centre of seat, perhaps for attachment of heel-piece. Very worn and torn; delaminated. No grain surface survives. Length 93mm; surviving width approximately 56mm. Primary infilling material (?late 17th century) in well in N range.
- Approximately semi-circular fragment, probably seat of outer sole, with stitching channels very similar to those on no 4. Torn, very worn, delaminated, no grain surface. Length approximately 36mm; width approximately 65mm; thickness approximately 3.5-4mm. Probably not flesh layer of no 4, despite similarities: one stitch hole does not correspond. Primary infilling material (2late 17th century) in well in N range. Not illustrated.
- 8 Thick lump of leather, possibly from heel-piece, with several grain to flesh stitch holes; approximately 55mm by 30mm by 12mm. Worn and delaminated. Also three small delaminated fragments. Primary infilling material (?late 17th century) in well in N range. Not illustrated.
- 9 Two very small fragments of upper, approximately 35mm by 15mm and 30mm by 10mm, with lasting margin with grain to flesh stitching channel stitch length 8-8.5mm. Worn and delaminated. Also seven tiny scraps. Primary infilling material deposits (Flate 17th century) in well in N range. Not illustrated.
- 10 Small, delaminated fragment (of Pupper), approximately 57mm by 19mm, with traces of grain to flesh stitching channel;

- stitch length approximately 6mm. Primary infilling material (?late 17th century) in well in N range. Not illustrated.
- 11 Small fragment of upper with lasting margin with grain to flesh stitching channel; round holes, diameter 2.5mm, stitch length 7mm. Delaminated; approximately 55mm by 20mm. Primary infilling material (Plate 17th century) in well in N range. Not illustrated.
- 12 Small fragment with no signs of stitching, approximately 60mm by 50mm. Worn, torn and delaminated. Primary infilling material (?late 17th century) in well in N range. Not illustrated.

WALLET

13 Almost complete leather wallet, folded, approximately 145mm by 85mm. Post-abandonment debris within watergate passage. Within it was a gilded copper-alloy picture frame (4.2.4, no 90). Associated with an assemblage of 19th-century coins and medals.

Outer framework of one piece of calfskin leather, folded twice to form inner flap, rear panel, and outer flap. Inner flap decorated with two parallel engraved lines of punched dots forming three arches or domes; pale brown thread still in situ. Short outer edges of rear panel defined by two engraved lines with stitch holes as on inner flap. Each end of keeper on exterior of rear panel has pair of stamped, outward-facing brackets with central line (2and circles), surmounted by trilobed motif, possibly a fleur-de-lys. Outer flap also decorated with engraved lines. Flap defined by two parallel engraved lines with no stitching.

Inside of wallet consists of fine sheet of leather, folded four times, forming three pockets. First pocket bears eight semi-circular impressions; second has one long edge defined by a pair of engraved lines; one long edge of third pocket also defined by a pair of engraved lines. Inside are circular impressions, probably of coins.

Inner pocket of polished brown leather, probably goatskin; lined with thin sheet of leather forming back of pocket. Front of pocket formed by double thickness of leather, probably goatskin. Bottom of inner layer folded over bottom of rear of pocket, probably originally glued. Short edges stitched. In centre of flap is trademark 'T & R Co'. Not illustrated.

4.9 TEXTILESThea Gabra-Sanders

The excavations yielded 41 textile fragments and one compacted pad of wool fibres. One piece was recovered from a post-abandonment deposit in the S range, and the remainder from the W latrine tower, which also contained mammal and fish bones but no datable artefacts. In addition, one fragment comprising metal thread was retrieved from a recent level in the courtyard.

DESCRIPTION OF TEXTILES

Woven wool: plain weave

Twenty of the woollen fragments are in plain (tabby) weave, which is the simplest form. Nine are worked from combined Z- and S-spun single yarns, six from Z-spun single yarns and five from S-spun yarns. They are of medium coarse woollens and of

mediocre quality with a low thread-count but of sufficient weight for clothing. One fragment (9) is worsted, its fibres having been combed. The fibres in five fragments are very disintegrated.

After weaving, woollen fabrics can undergo a variety of treatments such as fulling, napping and dyeing, the general term 'felting' being used to describe these processes. Primary felting is caused by fulling: pounding whilst wet to shrink and hence thicken and condense the fabric. Secondary fulling is the result of frequent washing. One of the samples (14) is felted on both sides and two (21 & 33) on one side only. Five (5, 18, 20, 30 & 32) are slightly felted on both sides; two (21 & 33) are felted on one side; whilst nine (1, 8, 9, 22, 28, 29, 34, 35 & 36) are without finishing.

2/1 Twills

There are eight examples in 2/1 twill which are of similar quality to those of plain weave although most are very disintegrated. Six (3, 10, 16, 23, 25 & 26) have Z-spun single yarn in one system and S-spun single yarn in the other, one (19) is worked from Z-spun single yarn and one (38) from S-spun single yarn.

One (10) is felted on both sides, two (16 & 19) on one side, four (3, 25, 26 & 38) are slightly felted on one side and one (23) has no finishing.

2/2 Twills

Of the two fragments in this twill, one (24) was worked from Z-spun, single yarn and has a loose weave with a very fragmented selvedge. The other (4) is a fine, well-made twill worked from a Z-spun, single worsted yarn.

Unidentified fibres

Eight textile fragments (40) were associated with a 17th-century copper-alloy spoon (see above 4.2.1, no 7), retrieved from a post-abandonment deposit in the S range. The are woven from unidentified fibres in a 2/1 twill from Z-spun, single yarn in both systems.

Mixed fibres

Three fragments (41) were of mixed fibres: two of them are small and very frayed, and the other is rectangular and consists of two layers. The fabric, which is fragmented and frayed, comprises a 5-end satin weave worked from Z-spun single cotton yarn in system 1 and Z-spun single woollen worsted yarn in system 2. This weave is characterized by a smooth, lustrous surface and a silky appearance. The

stitching of vegetable fibres is very even and consists of three stitches per 10mm.

Pad of fibres

One sample (42) retrieved from the W latrine tower comprised a compacted pad of red-brown woollen fibres, some fine and some coarse.

Fragment of metal threads

This fragment (43), measuring 18mm by 7mm, was recovered from topsoil in the SW corner of the courtyard. It is very fragile and in poor condition, several of the threads being broken and corroded. It is shaped into a figure of eight loop and may have been part of a passement, a trimming of gold of silver lace, braid or beads used to embellish clothing, curtains or furniture.

DISCUSSION

Three fragments (12, 13 & 27) are too felted to identify the spin and weave. There were cut edges on 17 pieces, some of them being straight strips, offcuts or cut on the bias. A few show signs of sewing although all the stitching has disintegrated, probably indicating that flax thread was used. One fragment (30) has been oversewn to prevent fraying, another (18) has a hem, and fragment 9 consists of three pieces sewn together. The two edges of fragment 41 are stitched together, some of the thread (probably linen) surviving.

Measures had been taken to strengthen the selvedge, necessary for cloth subject to heavy fulling and stretching. The outermost eight warp threads on one fragment (9) are paired whilst a very small strip of selvedge (39) has been reinforced with two paired warp threads. The selvedge of fragment 24 is very loose and frayed.

Mistakes in the weaving process are visible on nine fragments (3, 9, 18, 22, 25, 28, 33, 34 & 36). In seven of them, a weft has passed twice through a shed or a warp has been incorrectly tied.

With the exception of the fragments of mixed fibres, all the textiles are in tabby and fundamental twills made from single yarns. Plain weaves predominate. The assemblage is of low quality except for no 4, which is of fine fabric of good quality. The thread-count is typical of everyday clothing and the presence of many weaving faults suggests they were produced locally, perhaps in an area where technical skills were poorly developed.

These textiles can best be interpreted as discarded remnants of worn-out clothing and tailor's waste. Some of the material may be sacking, similar to that recovered from 16th-century levels in Newcastle (Walton 1981, 197). On the evidence of their location in a latrine tower, most of the Spynie fragments could have been used for sanitary purposes. The mixed-fibre fragments (41) are perhaps remnants of a satin pouch which, on the evidence of circular green deposits nearby, held coins.

It is difficult to date small, simple woollen fragments although the use of carded varn for the majority of these pieces suggests they are of post-medieval origin (Bennett 1984).

CATALOGUE

The systems are referred to as 1 and 2 because the warp and weft cannot be identified. The direction of the spin of the yarn is indicated by 'Z' for clockwise and 'S' for counter-clockwise.

WOOLLEN FIBRES

1 Fragment, 60 x 55mm, of sandy tabby weave, stained brown. System 1: Z-spun; 8 threads per 10mm

System 2: Z-spun; 8 threads per 10mm

2 Fragment, approximately 90 x 80mm, of sandy to light brown tabby weave, very fragmented and disintegrated although the fibres retain their scales. Felted on one side.

System 1: Z-spun; 6 threads per 10mm

System 2: S-spun (low twist); 7 threads per 10mm

3 Fragment, approximately 40 x 35mm, of light brown 2/1 twill weave felted on one side; fibres very disintegrated. Weaving fault where weft passed twice through shed or warps incorrectly tied.

System 1: Z-spun; 8 threads per 10mm

System 2: S-spun; 8 threads per 10mm

4 Fragment, 16 x 10mm, of red-brown 2/2 twill weave; worsted. Fraved and worn in the centre. Fibres very disintegrated.

System 1: Z-spun (low twist); 24 threads per 10mm

System 2: Z-spun (low twist); 24 threads per 10mm

5 Two fragments, 100 x 40mm and 24 x 20mm, of sandy tabby weave, stained brown. Felted on both sides. Very fragmented and disintegrated.

System 1: Z-spun; 5 threads per 10mm

System 2: Z-spun; 5 threads per 10mm

6 Fragment, 23 x 8mm, of light brown tabby weave. Felted on one

System 1: Z-spun; 8 threads per 10mm

System 2: S-spun; 8 threads per 10mm

7 Three fragments, 80 x 50mm, 55 x 55mm and 50 x 45mm, of sandy? weave, stained and decayed light brown. Fibres in poor condition but probably wool. All felted on one side.

i System 1: ?-spun; ? threads per 10mm

System 2: S-spun; ? threads per 10mm

ii System 1: Z-spun; ? threads per 10mm

System 2: S-spun; ? threads per 10mm

iii System 1: ?-spun; ? threads per 10mm

System 2: ?-spun; ? threads per 10mm

8 Fragment, 19 x 17mm, of sandy brown tabby weave. Fibres very disintegrated.

System 1: Z-spun; 6 threads per 10mm

System 2: S-spun; 6 threads per 10mm

9 Three pieces sewn together; no trace of thread; 215 x 175mm of dark brown, worsted tabby weave, unevenly woven.

i Reinforced selvedge on one side, four pairs of two warp threads and three cut edges.

Warp: S-spun (high twist); 7 threads per 10mm

Weft: S-spun; 7 threads per 10mm

Several weaving faults.

ii System 1: S-spun; 7 threads per 10mm

System 2: S-spun; 7 threads per 10mm

Two weaving faults where a weft has passed twice through a shed and warps have been tied incorrectly.

iii System 1: S-spun; 7 threads per 10mm System 2: S-spun; 7 threads per 10mm

Two weaving faults where a weft has passed twice through a shed and warps have been tied incorrectly.

10 Strip, 145 x 10mm, of dark brown 2/1 twill weave; very felted on both sides; worn on one side; two cut edges on the bias.

System 1: Z-spun; 10 threads per 10mm

System 2: S-spun; 10 threads per 10mm

11 Strip, 140 x 10mm, of dark brown ?twill weave; very felted on both sides; two cut edge on the bias.

System 1: Z-spun; 6 threads per 10mm

System 2: S-spun; 6 threads per 10mm

12 Tapered strip, 105 x 8-3mm, of dark brown? weave; very felted on both sides; worn on one side; two edges cut.

System 1: ?-spun; ? threads per 10mm

System 2: ?-spun; ? threads per 10mm

13 Strip, 88 x 5mm, of dark brown? weave; very felted on both sides; two edges cut.

System 1: ?-spun; ? threads per 10mm

System 2: ?-spun; ? threads per 10mm

14 Fragment, 32 x 28mm, of dark brown tabby weave; very felted on both sides

System 1: S-spun; ? threads per 10mm

System 2: S-spun; ? threads per 10mm

15 Fragment, approximately 55 x 16mm, of dark brown, ? weave; very fragmented and felted on both sides; one edge cut.

System 1: S-spun (varn 2mm diam); ? threads per 10mm

System 2: S-spun (yarn 2mm diam); ? threads per 10mm

16 Fragment, 30 x 8mm, of brown 2/1 twill weave; very felted on one side; two edges cut.

System 1: Z-spun; 10 threads per 10mm

System 2: S-spun; 10 threads per 10mm

17 Fragment, 185 x 130mm, of stained, light brown tabby weave; decayed and fragmented; felted on one side.

System 1: S-spun; 5 threads per 10mm

System 2: S-spun; 5 threads per 10mm

18 Fragment, 104 x 63mm, of dark brown tabby weave; felted on both sides

System 1: Z-spun; 5 threads per 10mm

System 2: Z-spun; 5 threads per 10mm

Two weaving faults

19 Fragment, 110 x 85mm, of light brown 2/1 twill weave; very felted on one side; fibres very disintegrated; two edges cut.

System 1: Z-spun; 8 threads per 10mm System 2: Z-spun; 6 threads per 10mm

20 Fragment, 55 x 55mm, of sandy brown tabby weave; felted on both sides; fibres very disintegrated; six edges cut, one of them curved.

System 1: Z-spun; 12 threads per 10mm System 2: Z-spun; 10 threads per 10mm

21 Strip, 65 x 17mm, of dark brown tabby weave; very felted on one side; four edges cut on the bias; folded lengthwise in the middle.

System 1: Z-spun; 10-12 threads per 10mm System 2: S-spun; 12 threads per 10mm

22 Fragment, 75 x 70mm, of light brown tabby weave; very fragmented and worn; fibres disintegrated; weaving fault.

System 1: Z-spun; 6 threads per 10mm System 2: S-spun; 6 threads per 10mm

23 Fragment, approximately 70 x 50mm, of brown 2/1 twill weave; very fragmented; fibres disintegrated; one edge folded over once.

System 1: Z-spun; 10 threads per 10mm System 2: S-spun; 10 threads per 10mm

24 Fragment, 45×35 mm, of dark brown, loose 2/2 twill weave; very frayed selvedge.

Warp: Z-spun; 6 threads per 10mm Weft: Z-spun; 6 threads per 10mm

25 Fragment, approximately 160 x approximately 100mm, of light brown 2/1 twill weave; very fragmented and worn with holes; fibres very disintegrated; felted on one side; two edges cut, one of them curved; weaving fault.

System 1: Z-spun; 12 threads per 10mm System 2: S-spun; 10 threads per 10mm

26 Fragment, 45×30 mm, of light brown 2/1 twill weave; fibres very disintegrated; felted on one side.

System 1: Z-spun; 11 threads per 10mm System 2: S-spun; 9 threads per 10mm

27 Fragment, 55 x 40mm, of sandy brown ? weave; very fragmented; very felted on both sides.

System 1: Z-spun; ? threads per 10mm System 2: ?-spun; ? threads per 10mm

28 Fragment, 65 x 30-50mm, of sandy brown, loose tabby weave; two weaving faults.

System 1: S-spun; 6 threads per 10mm System 2: S-spun; 5 threads per 10mm

29 Fragments, largest 27 x 15mm, of sandy brown tabby weave.

System 1: Z-spun; 10 threads per 10mm System 2: Z-spun; 10 threads per 10mm

30 Fragment, 210 x 130mm, of sandy tabby weave; very fragmented; fibres very disintegrated; felted on both sides; two sides cut, one with a raw edge overcast.

System 1: Z-spun; 5 threads per 10mm System 2: Z-spun; 6 threads per 10mm

31 Fragment, 95 x 20mm, of light brown? weave; very fragmented and disintegrated; felted on both sides.

System 1: Z-spun; 5 threads per 10mm System 2: S-spun; 5 threads per 10mm

32 Fragment, 53 x 52mm, of light brown tabby weave; very disintegrated; worn on one side; felted on both sides.

System 1: Z-spun; 5 threads per 10mm System 2: S-spun; 5 threads per 10mm

33 Triangle, 75 x 70mm, of dark brown, tabby weave; very felted on one side; three edges cut; weaving fault.

System 1: Z-spun; 6/7 threads per 10mm System 2: S-spun; 5/6 threads per 10mm

34 Fragment, 85 x 45mm, of dark brown tabby weave; three edges cut, one curved; four holes; weaving fault.

System 1: S-spun; 13 threads per 10mm System 2: S-spun; 10 threads per 10mm

35 Fragments, largest 85 x 40mm, of dark brown tabby weave; very fragmented.

System 1: Z-spun, yarn uneven; 7 threads per 10mm

System 2: S-spun; 6 threads per 10mm

36 Fragments, 65 x 25mm & 50 x 10mm, of dark brown, loose tabby weave; weaving faults in both fragments.

System 1: Z-spun; 5 threads per 10mm System 2: S-spun; 5 threads per 10mm

37 Fragment, 105 x approximately 70mm, of disintegrated light brown ?twill weave; very fragmented; fibres in poor condition. System 1: Z-spun; ? threads per 10mm

System 1: Z-spun; ? threads per 10mm System 2: Z-spun; ? threads per 10mm

38 Strip, 70×10 mm, of brown 2/1 twill weave; felted on one side; edges cut on the bias.

System 1: S-spun; 10 threads per 10mm System 2: S-spun; 10 threads per 10mm

39 Fragment, 80 x 5mm, of brown reinforced selvedge, 4mm wide, comprising two paired warps; one pair red-brown; ? weave. Warp: Z-spun; 5 threads per 10mm

Weft: S-spun; ? threads per 10mm

UNIDENTIFIED FIBRES

40 Eight fragments, largest 50 x 15mm, of brown 2/1 twill weave; some green discolouration from contact with copper-alloy spoon. System 1: Z-spun; 10 threads per 10mm

System 1: Z-spun, 10 threads per 10mm System 2: Z-spun; 10 threads per 10mm

MIXED FIBRES

41 Three fragments, largest consisting of two fragments stitched together, 120 x 65mm, of brown five-end satin weave; very fragmented and frayed; cotton yarn disappeared in places; two stitched sides have raw edge turned under twice and hemmed with upright stitch of vegetable yarn; stitch holes, 3 per 10mm, along fold.

System 1: Z-spun; 40 very fine worsted threads per 10mm System 2: Z-spun; 44 cotton threads per 10mm

PAD OF FIBRES

42 Compacted pad of red-brown wool fibres; mixture of fine and coarse fibres.

METAL THREADS

43 Fragment, 18 x 7mm, of metal threads; very fragmented and corroded. Two different metal threads used.

i Core: light brown silk; Z-spun. Wrapping: S-twist; flattened metal, evenly wrapped. Only few traces of 'silver' remain. Wrapping width: ?mm; thread diameter 1mm.

ii Core: light brown silk; no twist.

Wrapping: S-twist; flattened metal, evenly wrapped. A few fragments of flattened metal remain. Wrapping width: approximately 0.26mm; thread diameter approximately 1mm.

4.10 ARCHITECTURAL FRAGMENTS

Mary Markus

DISCUSSION

Numerous architectural fragments were retrieved from the excavations, a selection of the most interesting ones and those with parallels at Elgin Cathedral being described here (illus 100-104). Their locations are not always reliable indicators of their original positions, particularly those (the majority) recovered from the N range where large quantities of debris was deposited after the palace was abandoned. In most cases their similarities to stonework *in situ* provide the most fruitful bases for interpreting functions, dates and original positions.

It is not surprising to find similarities between some of the Spynie stones and decorated pieces in Elgin Cathedral. The cathedral underwent rebuilding work following fires in 1270 and 1390 and continuing into the 16th century, and it would be surprising if the master masons responsible for that work did not practise their skills at Spynie. Fragment no 26, probably a section of a decorative string course, shows distinct similarities with masonry both in situ and ex situ at Elgin, including ELG/crn/1, ELG/x/22 and ELG/x/26 (Markus 1998). Its chamfered surface and low-relief zig-zag ornament resemble those on the string course of the presbytery and in the cornice work in the chapter house of the cathedral, both of which probably date to the 15th century. Fragment no 14 bears comparison with column capitals and bases attached to a different type of string course on displaced stones from the cathedral (Markus 1998, ELG/cb/8; ELG/cb/9; ELG/cc/19; ELG/cc/20). What links all of these pieces is the use of small rosettes at intervals along a hollow at the moulded edge of the stone. However, there is no evidence of attachment to column capitals or bases on the Spynie stone, which may have formed part of a decorative string course or perhaps part of a window or door jamb.

Although the profiles of fragments 14 and 26 are not related to any of those at Elgin, fragment 15 can be regarded as a scaled-down version of the jambs on the W door of the cathedral where a roll, fillet, chamfer, hollow and another chamfer are included in the profile. A late 13th-century date is likely for the Elgin work although the Spynie stone cannot be dated safely from its excavated source, the rubble infilling the N range.

There are a few pieces of window tracery in the Spynie assemblage. The profiles of at least four of them relate to the remnants of a traceried window in the W curtain wall, the outside wall of the Period 4 hall. This window includes part of a curved element (probably an encircled, cusped figure) whose profile comprises a broad frontal fillet with a hollow chamfer and a small rebate on each side. On one side this rebate dies into the window arch whilst on the other there is another hollow chamfer, the reveal with the remains of cusping and a rectangular rebate.

Although it is difficult to interpret the original pattern of the tracery, the absence of ogee forms in both the design and the profile suggests that it was geometric in shape and probably dates from the 14th century. The surviving tracery in the S choir aisle window of Elgin Cathedral is a more complex version of this, comprising four lights with six encircled cusped figures in the head, and is dated to the late 14th/early 15th century. The similarities between the profiles of Spynie fragments 9, 11, 16 (all recovered from near the W range) and 24 (retrieved from just outside the S range) and that of the window in the W curtain suggest that these pieces are also of 14th-century date. These stones also bear comparison with two pieces of displaced tracery from Elgin (Markus 1996, ELG/wt/10 and ELG/wt/11) which have two hollow chamfers separated by a small rectangular rebate and a broad frontal fillet.

Another piece of tracery (no 27), whose source is unknown, has a different type of profile with much larger and simpler forms although it too includes a sequence of a hollow chamfer and rebate. It has three curved tracery bars, each one cusped on the outer reveal, and was probably located at the junction of two lancets which supported a curved element such as an oculus, forming part of a larger design. The profile of this stone, which is probably from a window containing at least two lights, is unrelated to the window in the W curtain wall and perhaps belonged to one of the blocked windows in the S range or one in the N range.

Several other window elements were also recovered. Fragment 1 formed part of the outer frame of a small window, the slightly raised section on its upper surface being worked with splayed sides, one substantially larger than the other. It was probably either a sill or a lintel, the rectangular mortice hole in its centre accommodating ironwork for a secure and close junction with adjoining masonry. Fragment 31 is an incomplete example of such a stone. Neither

piece has a glazing check, which suggests that they had been abutted by other stones, similar to no 4. This well-finished block has a chamfer along one long edge, a glazing check in the reveal and one complete and one damaged rectangular hole, probably for fixing an iron grille. Similar window jambs occur at first-floor level and in the uppermost storey of David's tower.

Fragment 18, a window mullion, has an axial filleted roll and a glazing check along one side, the other side being damaged. Originally, it would have been symmetrical with another check on the opposite reveal. There is nothing *in situ* with a similar profile although it clearly formed part of a large window of at least two lights and may have come from the S range or the inner wall of the N range. It was recovered from rubble within the latter building although it could have been deposited there after the palace was abandoned.

Another possible window mullion is fragment 40 which, like no 18, has an axial filleted roll flanked by fillets and hollow chamfers. The rest of the profile has broken off so that details of the reveal, including glazing checks, are missing. The back of the stone has been worked and has a rectangular socket at one end, suggesting that this small fragment was originally part of a larger moulded sequence. It was recovered from the W range, which may be its source, although it could also have been built into the S and N range.

Although their mouldings differ, angled fragments nos 3 and 10 are similar in form and scale, each forming a section of an octagon with their inner surfaces well finished and angled in the same way as their outer, moulded faces. Furthermore, the upper and lower faces of each stone are roughly worked to a flat surface. Although their function is uncertain because there is nothing similar *in situ*, they are probably either column bases or capitals. Both were retrieved from the N range where attached columns could have been built into a blind arcade on the screen wall dividing the withdrawing room from the hall.

Another possible column base or capital is fragment 25, which is square in plan with its upper face worked flat and its underside broken. Its profile consists of two large hollow chamfers separated by a rectangular check. Unlike nos 3 and 10, this piece is moulded on all four sides and must therefore be from a free-standing pier. The most likely location for such a pier would have been the N range, which has

a very wide span and which had an arcade at hall level.

A few of the less complex fragments within this assemblage are worthy of mention because their original locations can be determined with reasonable accuracy. These include several pieces, such as fragments 23 and 38, which are moulded with an angle roll flanked by chamfers. Their profiles clearly suggest that they came from David's tower, which has similar stones as door jambs, although they were recovered from outside the S range (no 23) and the well in the N range (no 38).

One well-preserved fragment (no 29) is almost certainly from the N range. Its moulding returns around a right-angled corner, indicating that it came from a square or rectangular opening. The outer moulding of the square-headed window at the E end of the hall in the N range has a similar profile: a chamfer, hollow chamfer, fillet and a roll. In this case, at least, the context is relevant, for the stone was recovered from the base of the well at the E end of the building.

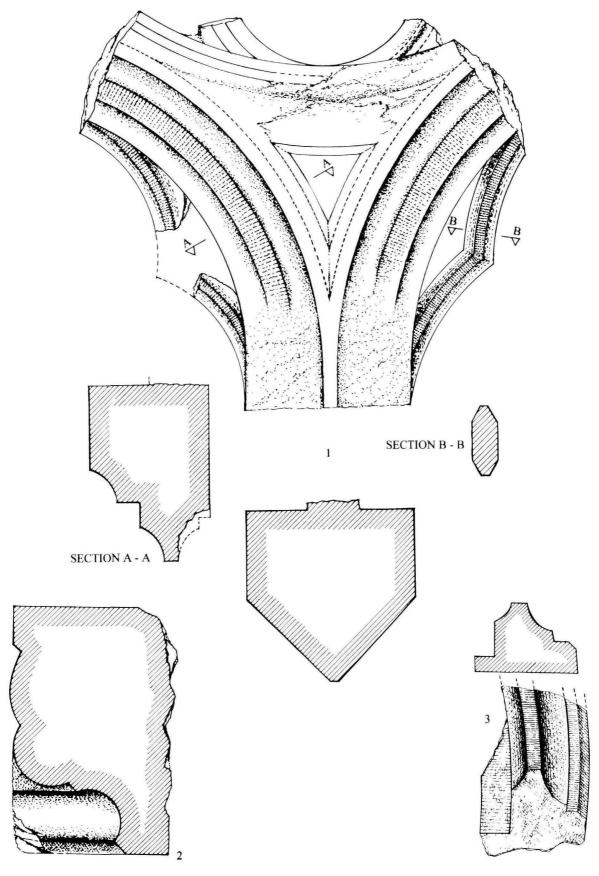
CATALOGUE

- 1 Fragment of window tracery. Length 430mm; width 400mm; depth 180mm. This fragment sprang from a central mullion, the cusps within the reveal perhaps forming the sides of cusped lancet windows. The third cusp tracery bar might have formed a fragment of a central roundel to the main window. Its profile is too eroded to be fully recorded but on one side includes the sequence of a cusped reveal, a pair of hollow chamfers separated by an offset, a fillet and possibly a third hollow chamfer. Unstratified.
- 2 Section of a window surround. Length 340mm; width 270mm; depth 180mm. This fragment comes from the corner of a square or rectangular opening, its moulded edge returning to form an L shape. Its damaged profile consists of a chamfer, hollow chamfer, fillet, filleted roll, heavily worn shallow roll, fillet and window reveal. The back of the stone is worked flat. Rubble within well in N range.
- 3 Arch moulding or window tracery? Length 170mm; width 110mm; depth 70mm. This is a curved fragment with a rebate on one side, possibly to receive glazing, and is moulded with a hollow chamfer, broad frontal fillet, a larger hollow chamfer, small offset, chamfer and small reveal. The back of the stone is worked flat. One end of the stone is broken whilst the other is chamfered at an angle of 30°. There is a trace of mortar on the chamfer indicating scarfing.

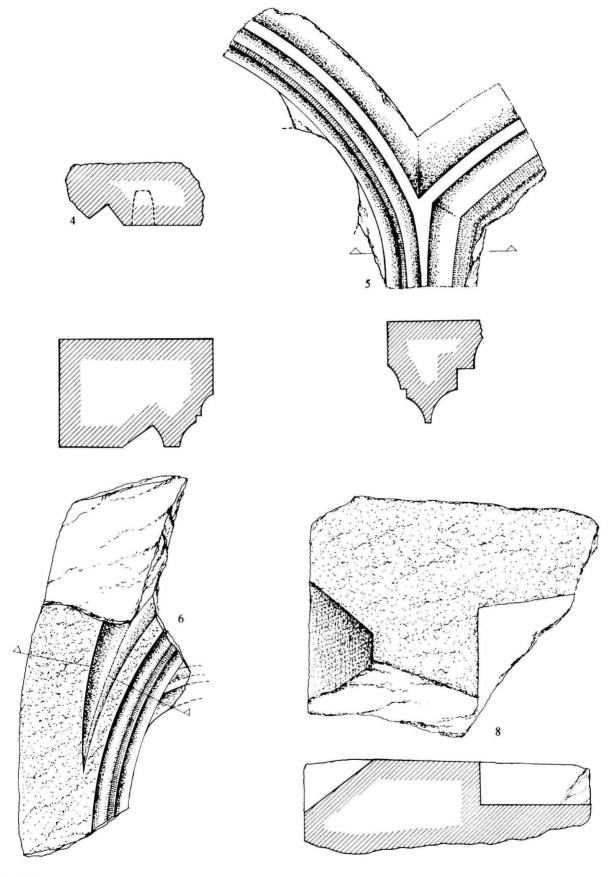
Upper debris outside S range.

4 Fragment of a window surround? Length 290mm; width 180mm; depth 70mm. A small rectangular rebate runs the length of this stone, both faces of which are worked flat. There is a rectangular hole alongside the rebate, probably to receive ironwork.

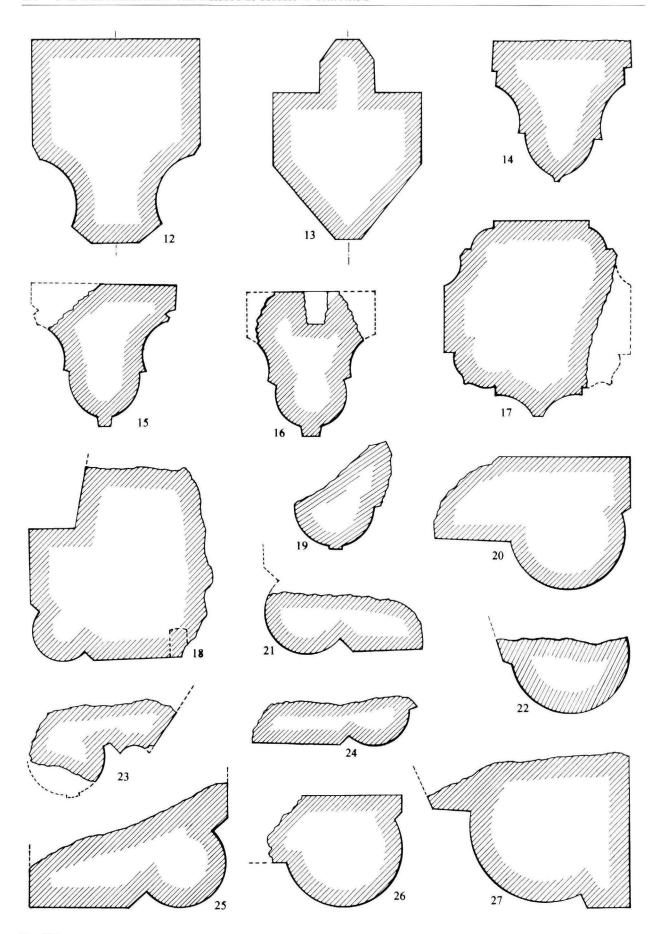
Rubble within well in N range.



illus 100 Architectural fragments, nos 1–3. Scale 1:2.



illus 101 Architectural fragments, nos 4–6, 8. Scale 1:2.



illus 102 Architectural fragments nos 12–27, Scale 1:2.

5 Window tracery? Length 350mm; width 190mm; height 120mm. This stone forms the junction of two tracery bars, one curved with the remains of cusping, the other straight with a shallower curve. There is no evidence of a glazing check. The back of the stone is worked flat. The profile of this fragment consists of the reveal, a pair of hollow chamfers separated by a small offset, a frontal fillet and a second pair of hollow chamfers separated by a rectangular rebate.

Rubble in NW corner of courtyard.

6 Fragment of window tracery? Length 340mm; width 170mm; depth 125mm. This is a curved fragment, forming the springing point of an arch, with the remains of a cusp attached to the reveal. The back of the stone is worked flat, its profile comprising a flat back, the reveal (with attached cusp), a hollow chamfer, a small rectangular check and another hollow chamfer leading to the front of the stone.

Rubble in NW corner of courtvard.

7 Window tracery. Length 170mm; width 150mm; height 40mm. This badly damaged fragment, which comes from the springing point of a window arch, is moulded with two hollow chamfers separated by a rectangular rebate, a broad frontal fillet and a pair of long chamfers. No 25 (which is probably a capital) has a similar profile but is much larger.

Rubble in NW of courtyard; not illustrated.

- 8 Fragment of a window sill. Length 310mm; width 250mm; depth 96mm. Two edges of the stone are worked flat, the external side is chamfered and the internal side is worked with a rebate. Rubble within well in N range.
- 9 Section of a window surround. Length 740mm; width 350mm; depth 260mm. The upper surface of the rectangular block is worked with splayed rebates along each long edge, one substantially larger than the other. A single rectangular hole is cut in the centre of this face, probably to receive ironwork. Upper debris in N range; not illustrated.
- 10 Section of a window surround. Length 700mm; width 300mm; depth 300mm. The rectangular block has a chamfered edge leading to the reveal which is worked with a glazing check. A rectangular hole, probably associated with ironwork, is cut alongside the glazing check. One end of the stone is broken; all other surfaces are worked flat.

Upper debris in E range; not illustrated.

11 Window surround. Length 1080mm; width 290mm; depth 170mm. The front edge of this long rectangular block is chamfered with a mason's mark incised in the centre; all other surfaces are worked flat. There are similar masons' marks on two other fragments, including no 6.

Upper debris in watergate passage; not illustrated.

12 Mullion. Length 265mm; width 176mm; depth 220mm. One end of the stone is worked flat, as is the back which is damaged. The symmetrical profile consists of a broad frontal fillet flanked on each side by a chamfer, a hollow chamfer, a small chamfer and

Upper debris at E end of N range.

13 Window mullion? Length 207mm; width 156mm; depth 207mm. Externally, this fragment has a flat fillet at its apex, flanked on both sides with broad chamfers leading to window reveals and internal rebates terminating in shallow chamfers and a flat fillet, forming a check for window frames.

Upper debris at W end of N range.

14 Fragment of a mullion? Length 275mm; width 155mm; height 145mm. One end of the stone is worked flat, the other broken. The back of the stone is also worked flat with mortar still adhering. Its profile, which is damaged, was probably symmetrical originally, consisting of a keeled roll flanked on each side by a fillet, hollow chamfer, small check and a flat surface. Rubble at W end of N range.

15 Fragment of a window mullion. Length 120mm; width 135mm; depth 155mm. The stone is damaged but its profile was probably symmetrical with an axial, filleted roll and, on its more complete side, a fillet, hollow chamfer with a mason's mark in the hollow and a reveal with a small groove, probably a glazing check. Rubble at W end of N range.

16 Fragment of a mullion? Length 170mm; width 120mm; depth 170mm. This stone has a symmetrical profile of a filleted roll flanked on each side by a fillet, hollow chamfer and the damaged side of the stone which was probably flat originally. The back of the stone had also been flat; it has a small socket cut at one end, probably to receive ironwork for bonding to adjoining stones. Upper debris in W range.

17 Fragment of a mullion or pillar. Length 200mm; width 160mm; height 240mm. One end of this stone is worked flat, the other is broken. The stone is moulded on three sides; the fourth side is broken. Anti-clockwise from the broken side, the profile consists of a fillet, quarter roll, fillet, flat surface 100mm long, fillet, quarter roll, fillet, small chamfer, hollow chamfer, flat surface 90mm long, fillet, keeled shallow roll, fillet, hollow chamfer, flat fillet, hollow chamfer, and fillet terminating on the broken edge. It is likely that the hollow chamfer and keel roll were repeated, ending on a flat surface, making the profile symmetrical about the central axis.

Rubble within well in N range.

18 Fragment of a door or window jamb. Length 230mm; width 220mm; depth 210mm. A roll moulding, flanked by chamfers, a reveal and a rebate, is carved on the angle of this stone. One end of the stone is worked flat, the other is broken. A rectangular rebated is cut in the external surface, probably to receive ironwork.

Rubble within well in N range.

19 Fragment of a fireplace or window jamb? Length 130mm; width 150mm; depth 150mm. One end of the stone is worked flat, the other is broken, as is its back. The remaining moulding - a filleted roll with a damaged projection on one side - probably comes from a larger moulded sequence.

Rubble within well in N range.

20 Fragment of a jamb or string course. Length 210mm; width 190mm; depth 120mm. A simple roll moulding is attached to a flat section of stone with a short chamfer on one side. One bedded face is worked flat; the other is broken.

Rubble within well in N range.

21 Fragment of a jamb? Length 160mm; width 160mm; depth 45mm. This fragment is worked flat across its back and has an angle roll moulding.

Upper rubble in W range.

22 Section of a door or window jamb? Height 150mm; width 160mm; depth 120mm. This is a simple half-roll with a fillet and a small chamfer on one side and a damaged surface on the other. One end is worked flat, the other is broken. The back of the stone is broken.

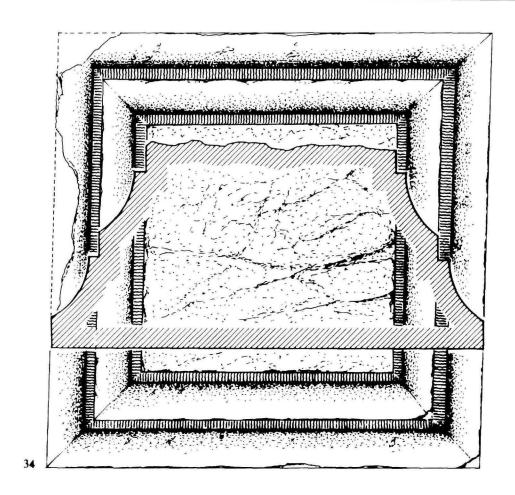
Rubble within well in N range.

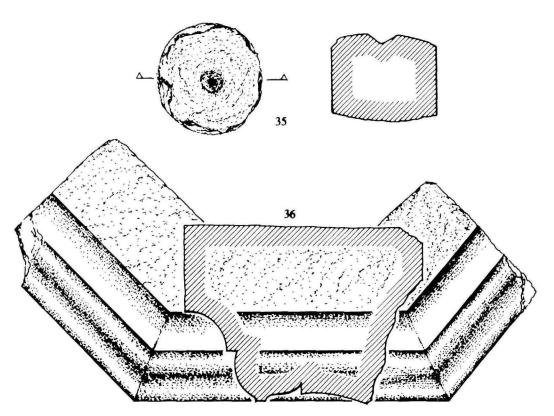
23 Fragment of a fireplace or window jamb? Length 210mm; width 160mm; height 80mm. It is moulded with a roll, fillet, chamfer and hollow leading to the reveal of the window or fireplace. The back is broken, as is one end, whilst the other is worked flat

Rubble at W end of N range.

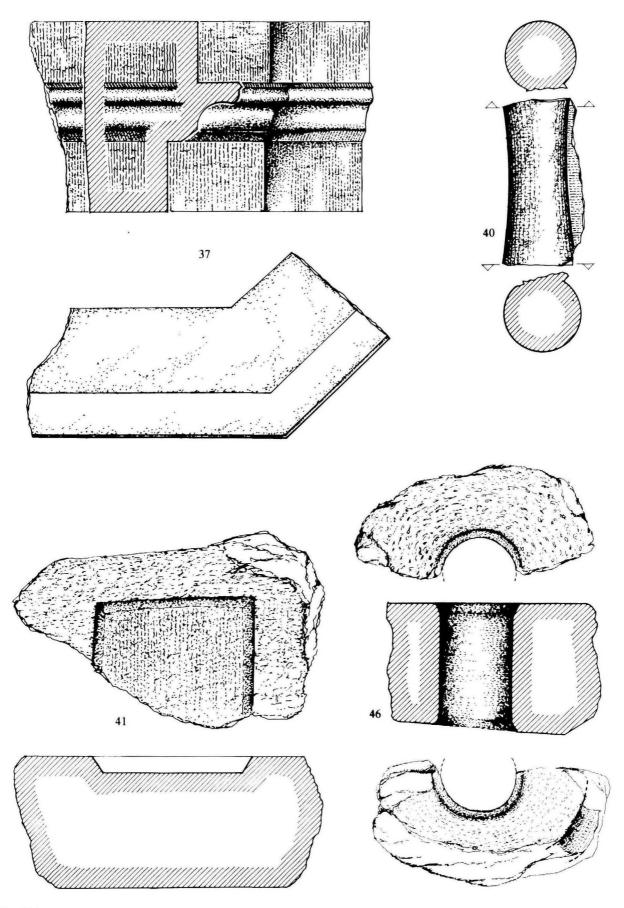
24 Fragment of a jamb? Length 175mm; width 145mm; depth 50mm. One bedded face is worked flat with mortar still adhering; the other is broken, as is the back of the stone. There is a roll moulding along the angle of the stone. The roll moulding has a flat, worn surface, possibly caused by knife sharpening.

Rubble at N end of courtyard.





illus 103 Architectural fragments, nos 34–36. Scale 1:2.



illus 104 Architectural fragments, nos 37, 40, 41, 46. Scale 1:2.

25 Section of a door jamb. Length 340mm; width 230mm; depth 110mm. One end of the stone is worked flat with a trace of mortar still adhering; the other is broken, as is its back. The front surface is moulded with an angle roll flanked on each side by a chamfer and a flat surface.

Upper debris outside S range.

26 Section of a jamb or string course? Height 250mm; width 150mm; depth 120mm. This stone is moulded with a simple half-roll with a fillet on one side and a dressed flat face on the other. The back of the stone is worked flat and one side is broken. Other, similar fragments were recovered, one of them also from the well.

Rubble within well in N range.

27 Section of a fireplace or window jamb? Length 170mm; width 155mm; depth 140mm. One end is worked flat. The profile consists of a small chamfer, quarter roll, larger chamfer and angled splay.

Rubble at N end of courtyard.

28 Section of a window jamb? Length 450mm; width 260mm; depth 200mm. One end and the back are worked flat and the stone is moulded with a flat surface, a chamfer, a half-roll on the angle, another chamfer, the reveal (?) and a long chamfer leading to the opposite side of the stone. Three holes have been cut in the moulding (two in the angle roll and one in the reveal), probably associated with ironwork.

Upper debris in N range; not illustrated.

29 Section of a jamb. Length 420mm; width 350mm; depth 310mm. Both bedded faces are worked flat; one of them has traces of mortar. The stone is moulded with a chamfer, a reveal with a small mason's mark and an offset with a rectangular hole, probably associated with ironwork.

Upper debris in watergate passage; not illustrated.

30 Fragment of a window jamb? Length 230mm; width 250mm; height 150mm. This stone is moulded with a chamfer and an unfinished rebate on the inner side of the reveal; its back is worked flat. It was probably never used for its intended purpose because of a flaw in the stone.

Rubble within well in N range; not illustrated.

31 Fragment of a window jamb? Length 260mm; width 260mm; height 100mm. It is worked with a rectangular offset; there is a glazing check cut in the reveal.

Rubble within well in N range; not illustrated.

32 Section of a string course? Length 920mm; width 260mm; height 160mm. This long rectangular slab is damaged at one end but two rosettes remain, carved in a hollow on its moulded front edge. The profile appears to have consisted of a small quirk, a filleted roll on the angle, a fillet and the hollow with the rosettes leading to a damaged surface. The back and one end of the stone are worked flat.

Topsoil and rubble adjacent to the 'Bishop's well'; not illustrated.

33 Section of a string course? Length 160mm; width 100mm; height 55mm. This is a small fragment with a chamfered front surface decorated with a row of zig-zag ornament formed by narrow leaf-like shapes carved in low relief. The stone is moulded with a chamfer, fillet, half-roll and the chamfered decorated surface. The upper surface and the undamaged back of the stone are worked flat.

Post-abandonment debris in NW range; not illustrated.

34 Column capital? Length 500mm; width 300mm; height 300mm. The stone is near-square in plan, its upper face worked flat and its underside broken. Its profile consists of two large hollow chamfers separated by a rectangular check.

Post-abandonment debris in SW corner of courtyard.

35 Column shaft. 100mm long; 115mm diameter. This plain

circular shaft, which is damaged, has a small circular hole cut in one end to allow for closer bonding to an adjacent section of the column.

Rubble in watergate passage.

36 Section of a column capital or base? Length 530mm; width 180mm; height 240mm. The stone is angled and forms three sides of an octagonal or semi-octagonal piece. The inner surface is also angled and well-finished to a flat surface. One bedded face is roughly worked flat, the other is broken. The profile consists of a hollow chamfer, fillet, filleted roll, fillet and another hollow chamfer leading to a broken surface. Upper debris in N range.

37 Section of a capital? Length 340mm; width 170mm; height 200mm. This stone is angled and originally was probably (semi-) octagonal with its inner face worked flat and its outer edge moulded with a fillet, chamfer, ogee, fillet and an offset. The upper surface is well finished, the underside roughly worked. Upper debris at W end of N range.

38 Fragment of an attached column base? Length 270mm; width 270mm; height 80mm. This is a very eroded block with remains of moulded edges on three sides.

Rubble within well in N range; not illustrated.

39 Column base? Length 90mm; width 40mm; height 140mm. This is a curved fragment with its upper and lower surfaces worked flat. A hollow chamfer and a straight chamfer connect these faces to the outer, curved surface.

Upper debris in W range; not illustrated.

40 Fragment of a curved roll moulding. Length 190mm; diameter 75mm. The stone is slightly curved along its length and the roll moulding tapers towards one end of it. There is evidence of further work at the broad end of the stone. The roll is attached to a broader fragment, broken across the back.

Upper debris in W range.

- 41 Fragment of drainage gully? Length 350mm; width 200mm; depth 140mm. This stone has a shallow rebate with sloping sides; its back and two undamaged sides are worked flat.
- 42 Fragment of drainage gully? Length 250mm; width 230mm; height 110mm. One edge of the stone is raised above the rebated surface which is roughly finished but flat, as is the back of the stone.

Rubble in watergate passage; not illustrated.

43 Fragment of drainage gully? Length 360mm; width 210mm; depth 80mm. This fragment has a shallow rebate with sloping sides; its back is worked flat. Mortar patches remain on the rebated surface and one chamfered side.

Rubble overlying W wall of N range; not illustrated.

44 Fragment of a drainage gully? Length 280mm; width 260mm; depth 110mm. This stone is worked with a shallow rebate; the back of the stone is worked flat.

Rubble within well in N range; not illustrated.

45 Fragment of a drainage gully? Length 275mm; width 140mm; depth 65mm. This fragment has a splayed rebated surface and may have formed part of a wall-head drainage gully. The back of the stone is worked flat.

Upper debris in W range; not illustrated.

46 Fragment of a millstone. Length 260mm; width 125mm; depth 130mm. This stone is roughly curved with one face dressed and worked flat with a chamfer on the edge of the curve. A semi-circular hollow, 80mm in diameter with chamfered edges, connects the dressed face to the other one, which is roughly pecked although its surface has been polished by grinding. Modern disturbance at E end of NW range.

4.11 BUILDING MATERIALS

Naomi Crowley

CERAMIC MATERIALS

Paving

The excavations yielded 856 fragments of plain glazed floor tile in a distinct red, sandy fabric with varying amounts of calcium carbonate inclusions. There are no complete tiles but two examples have widths of 255mm; they vary in thickness between 36mm and 50mm. Many of the fragments have worn surfaces although some are glazed, dark green or yellow over a white slip. One fragment has a black glaze, because of an excess of copper oxide (the cause of the green coloration). Where corner fragments are present, nail holes are visible under the glaze.

Glazed floor tiles were imported into Britain from the Low Countries from the late 14th to the late 15th or early 16th century, after which unglazed ceramic or stone floor tiles became more common. Imports can be identified by the glassy nature of their glaze and by the presence of nail holes in two or four of their corners. Low Countries tiles were manufactured differently from those produced in Britain during this period, nail holes being inserted when attaching leather-hard tiles to a board to be trimmed. The tiles were bisque-fired and then refired after glazing. Their fabrics are also distinct, often using inclusions of calcium carbonate or lighter clay streaks. On the evidence of their dimensions, the Spynie tiles were imported during the late 15th or early 16th century.

In the S range, 535 fragments of these tiles were recovered from post-abandonment levels, suggesting that at least part of this building (presumably the first-storey chapel) was floored with glazed tiles during its later years of use. Fragments retrieved from recent deposits to the west of this range may have formed part of the same floor. Very few ceramic fragments were recovered from elsewhere in the palace.

Roofing

The excavations also produced 108 fragments of ceramic roof tiles in a red fabric with light coloured

clay streaks, the source of which is unknown. They range in thickness from 13mm to 17mm. No complete examples were recovered. All the fragments appear to come from the bottom half of tiles, making it impossible to say if they were peg tiles or other types such as nib tiles. Many fragments have mortar attached to their surfaces, suggesting that they had been mortared into place. The majority came from the N range although several were retrieved from the NW and E ranges and from the SW corner of the courtyard.

STONE MATERIALS

Paving

There are three fragments of red sandstone which may have been paving. Two have a smooth surface and worked edges and are 30mm thick.

Roofing

A total of 163 fragments were recovered. The stone was of three different types, all of which occur around Spynie. Most of the material occurred in topsoil or other recent deposits in the vicinity of the N and S ranges and David's tower, suggesting that those buildings had stone roofs. The majority comprised low-grade grey slate, ranging in thickness from 6mm to 18mm, depending on how easily the slate could be cleaved. Only three fragments retained their complete widths of 145mm, 185mm and 300mm. Most fragments were small although many had either one or two round holes, either for wooden pegs or iron nails, held in place with mortar.

Some roof tiles are made of micaceous red sandstone with a slight schistosity which allowed the rock to be cleaved into fairly thick tiles. They range in thickness from 10mm to 34mm. Most fragments are small although many have nail holes. A few fragments of tiles were made of grey schist and vary in thickness from 7mm to 32mm. Most fragments are small although many have one or two round nail holes.

4.12 BURNT AND INDUSTRIAL DEBRIS

Mike Spearman

A range of concreted, burnt and industrial debris was recovered from the excavations, the majority of it being smithy waste derived from working iron blooms into wrought iron and from smithying. Although no smithy was identified during the excavations, almost certainly there was some such structure within, or more likely, close to the palace enclosure. The debris was cleaned, visually examined, weighed and sorted. Magnetic testing and microscopic examinations were carried out as necessary.

IRON-WORKING DEBRIS

Bloomworking debris: the waste resulting from working iron blooms into usable wrought iron by repeated heating, folding and hammering to force out impurities. Substantial quantities of this material, much of it robust lumps, were uncovered, most it from below the Period 5 cobbled road to the SE of the palace and in post-abandonment deposits in the N and the S ranges.

Hammerscale and prill: fine flakes of iron struck off during the hammering of hot wrought iron and blooms. This material was recovered from the NW range where it may have been associated with Period 6 Kiln 6.

Smithy concretions: bloomworking debris, hammerscale and fuel which becomes concreted on the smithy floor. Some of the concretions had become compacted with sandy floor material. No charcoal was intermixed with this material although small fragments of coal and coal cinder were present. It occurred in post-abandonment levels in the N and S ranges as well as outside the N range, where it may have been redeposited.

Vitrified stone: a few pieces of stone melted and fused into vitreous masses were recovered, mostly in

post-abandonment deposits in the N range. It may have been the result of a major fire rather than industrial activity.

Furnace structure: slag adhering to partially vitrified stone. Only one example was recovered from Spynie, below the cobbled road to the SE of the palace, where it was associated with bloomworking debris. Both materials are thought to have been redeposited, probably in Period 5.

Ore: one piece of haematite was retrieved from a modern disturbance in the S range.

OTHER DEBRIS

Lime: concretions of sand and comminuted animal and fish bones in an open, calcified matrix were recovered from the E latrine tower. This material may represent the calcification of midden material or, more probably, the result of mortar-making. Period 6.

Oven lining: heavily baked daub tempered with organic material, probably grass. One sample was retrieved from Period 6 Kiln 6 in the NW range.

DISCUSSION

Most of the debris is derived from an iron-working smithy, probably located in the vicinity of the palace; its scattered nature indicates there was a certain amount of selective redeposition. This is suggested by the substantial spread of slag, which may have been used as bedding for the cobbled road leading from the E gate of the palace. The only fuel associated with the slag was coal. The absence of cleaner fuels such as wood or peat charcoal should not necessarily be taken as evidence of low quality smithying.

4.13 FAUNAL REMAINS

It is a matter of regret that, during such a large-scale series of excavations over a considerable area, most of the faunal assemblage from Spynie was retrieved from residual contexts. An exception was a group of marine molluscs recovered from a series of pits lying below Castle Cottage, some 200m W of the palace. Another was an assemblage of bones (mainly

mammal) within a series of deposits set against the Period 5 retaining wall at the N end of the courtyard. Artefacts also recovered from those deposits date from the 13th to the 15th century, indicating that those bones had been redeposited although probably from a midden.

4.13.1 MAMMALS Tanya O'Sullivan

A total of 3,532 identifiable large mammal bone fragments were retained from the excavations. A high proportion of them were in contexts that were clearly residual, many of them containing artefacts of recent dates. This was particularly true within the N range and the watergate passage where large quantities of debris had been jettisoned well after the abandonment of the palace. Quite large amounts of mammal bones were recovered from a comparatively small trench outside the SE corner of the palace, where there may have been a midden, associated either with the palace or the toun of Spynie.

Cattle, sheep and deer bones were distributed throughout the site, whereas the majority of pig and dog bones and the only whale bones (pilot whale vertebrae) came from beyond the N range. Small whales could have been driven ashore through the sea loch and, together with occasional stranded whales, cut up for blubber and bone. Unfortunately, severe disruption by tree roots outside the N curtain wall has made it impossible to assign any of the bones or the artefacts associated with them to specific periods of the site.

Bones of both high and low meat yield were present. Not all carcasses had been cut lengthways into two sides of meat, as is the practice today. At Spynie, the majority of the vertebrae had had their transverse processes and occasionally the lateral edges of the centrum cut off, suggesting that the carcass lay on its back on the ground or a table and was not hung from its haunches. Most long bones had been broken in the mid-shaft region and three epiphyses had been chopped medially, probably to extract marrow.

Of the small number of cat bones within the rubble in the watergate passage, none displayed the characteristic cut marks associated with deliberate killing for pelts. The presence of several hare bones suggests that these animals formed a significant element in the diet at Spynie.

THE ASSEMBLAGE FROM THE NORTH END OF THE COURTYARD

Over 1,300 fragments of mammal bone were retrieved from a series of humic deposits which, together with layers of sand, had been used to fill in the space behind the retaining wall on the N side of the courtyard. The minimum number of individuals (MNI) was calculated on the basis of the method outlined by Chaplin (1971). The fragment total for each species is the sum of all identifiable fragments not including vertebrae, ribs or antlers. The bone measurements were taken using the guidelines suggested by von den Dreisch (1976).

Most of the fragments are from cattle although the MNI results show their relative overall importance to sheep/goat and pig more clearly. Cattle are marginally more important than sheep in this sample; whilst pig, although less common, are represented by quite substantial numbers compared with assemblages from other Scottish medieval sites (see Table 1). Small numbers of red deer, roe deer, cat and dog were also present.

Knife marks from primary and secondary butchering were common. Numerous fragments of industrial waste were in evidence, including sawn antlers from

Table 1	. AANT	comparisons	with athor	nitan in	Caatland
Table 1	- / / / / /	comparisons	with other	SHES III	SCOHAHO

Animal	Spynie	Rattray (all phases)	Castle Sween (all phases)	Edinburgh Castle (medieval)
Cattle	34	62	13	21
Sheep	29	56	9	28
Pig	18	23	7	10
Red deer	4	8	2	2
Roe deer	1	5	2	1
Cat	2	2	_	2
Dog	1	10	3	2

both red and roe deer, a cattle skull fragment with the horn sawn off and numerous miscellaneous sawn-off articular ends.

CATTLE

On the evidence of this assemblage, cattle provided most of the meat consumed at the palace. The high incidence of head and foot fragments implies that animals were brought to Spynie on the hoof or as complete carcasses. Skull fragments had been smashed in random fashion, making it difficult to determine whether the brains had been removed for consumption. The two hyoid bones in the sample show no trace of knife marks, suggesting that the tongues were not eaten. Most of the long bones had been shattered, as in bones from elsewhere on site, probably to obtain marrow.

Almost all of the cattle were slaughtered when mature, as at most other medieval sites (Hamilton-Dyer et al 1993a, 203; Hodgson & Jones 1982, 376; Hodgson & Jones 1983, 516; Chaplin & Barnetson 1976, 231). The mean reconstructed shoulder height, using Fock's conversion factor (von den Dreisch & Boessneck 1974), was 1.06m (as it was for cattle from the rest of the site). Throughout the medieval period, Scottish cattle, including plough oxen, were small with disproportionately large heads and gaunt frames. In England, heavy wooded ploughs were pulled by eight oxen whereas Scotland had the 'twal owsen' [twelve oxen] plough (Symon 1959, 322).

SHEEP

Sheep were also well represented in this sample although less so than at many sites in the south of Scotland, where wool production was more important than in the north of the country (Chaplin & Barnetson 1976, 233; Hodgson 1979). The

evidence from bone assemblages at Perth, Aberdeen and Elgin suggests that the townspeople kept sheep mainly for meat whilst wool and hides came mainly from stock raised in rural areas (Ewan 1991, 27). Both young and mature individuals were represented in the sample, the majority being about two years old at death, only one lamb being represented in this assemblage. Killing young animals would have been considered uneconomic and was a luxury available only to the élite.

PIG

Spynie has a high proportion of pig bones, as had the Bishop's Castle, Caithness (Noddle forthcoming), Castle Sween (McCormick 1996, 553) and Kildrummy Castle (Neill 1963, 223). At Spynie and Sween the pigs would have fed on oak mast from the adjacent woodland. Pigs were kept almost exclusively for meat and most were killed off when mature, the evidence from mandibles within the Spynie sample suggests a peak of just over two years.

OTHER MAMMALS

The presence of bones from red and roe deer indicates that the meat diet was supplemented by hunting. As well as venison, deer provided the raw materials for several craft industries. The few cat and dog bones within the assemblage were too small to provide any statistical data.

Unusually, there are no bones from any member of the Insectivora and few from any other small mammals: only three bones from water voles, one from a member of the Mustelidae (probably a stoat) and two from rabbits. The small number of rabbit bones suggests they are from burrowing animals rather than human food remains. This is supported by the presence of rabbits on the site during the excavations.

4.13.2 FISH Ruby Ceron-Carrasco & Sheila Hamilton-Dyer

Cod comprised the majority of identified fragments within the assemblage, other Gadidae making up most of the remainder. Cod ranged in size from small to very large, the latter indicating the probable use of long lines for fishing. Two examples (a cleithrum and a branchiostegal) had cut-marks, possibly from gutting and beheading. The retention

of the cleithrum suggests that at least some of the fish were preserved, either by salting or drying.

The largest range of species is represented in the midden deposits used to infill the area behind the retaining wall on the N side of the courtyard. They include cod, ling, haddock, hake, grey gurnard

(Eutriglia gurnardus), wolf-fish (Anarhichas lupus) and plaice. The total number of fragments retrieved from that area is 132, of which undiagnostic fragments and fin rays form just over half, although cod still dominates this group. The two wolf-fish bones were a left and right dentary, undoubtedly from the same individual although found in different contexts. These finds support the view that the

midden deposits are contemporaneous. The lack of other wolf-fish bones is not unexpected given the fragility of the rest of its skeleton compared with its massive jaws. The anatomical distribution of other species is also biased towards the larger and sturdier elements, smaller bones often surviving badly (Hamilton-Dyer *et al* 1993b, 206; Hamilton-Dyer 1996, 671).

4.13.3 BIRDS Tanya O'Sullivan

Of the 243 bird bones recovered from the excavations, the majority are of domestic chicken (Gallus gallus). However, few were retrieved from the midden deposits on the N side of the courtyard where the bones of game birds (wood-pigeon, red grouse, snipe, ?pheasant and duck) predominate; although the numbers of these were small. Other food birds, (and those possibly used for food)

include domestic goose, swan, shag and gannet. At Spynie, capons were more abundant than hens or cocks although the presence of bones from immature birds does point to chicken being reared on the site rather than being bought in. The majority of chicken bones were from mature specimens, suggesting that birds were kept for eggs, feathers and down as well as for meat.

4.13.4 MARINE MOLLUSCS Helen Smith

Marine shells with a total weight of 33 kg were recovered from excavation and wet-sieving of samples collected from a series of pits and a possible cooking pit below the demolished Castle Cottage. Some oyster shells were also retrieved from a narrow service trench running eastwards from Castle Cottage.

SPECIES AND HABITAT

Bivalves

Cerastoderma edule (common cockle): occurs just below the surface of gravel, sand and mud, from mid-tide to just below low water mark; common in sandy bays and river estuaries.

Mytilus edulis (edible mussel): abundant on firm substrata, from high intertidal zone to depths of a few fathoms; within sheltered harbours and estuaries and rocky shores of open coast.

Ostrea edulis (common European oyster): found below the low water mark and further offshore on

any firm substrata, including bottoms of rocks, gravel, sand and mud.

Venerupis pullastra (pullet carpet shell): occurs just below the surface of muddy gravel on the lower shore.

Venus striatula (striped venus): burrows in sandy gravel or clean to muddy sand from above the low water mark to depths of 55m.

Gastropods

Buccinum undatum (common whelk or buckie): mostly sublittoral, over sandy to muddy bottoms; larger specimens found in deeper water.

Nucella lapillus (common dog whelk): very common on mid-shore on rocks and in crevices.

Patella vulgata (common limpet): abundant on the upper half of all rocky shores and in pools.

Trivia monacha (spotted or European cowrie): found under ledges at low water.

unidentified small gastropods, < 5mm in height, probably *Littorina sp* (periwinkle).

In addition, land snails were present in two samples and shell fragments too small to identify accurately were present throughout.

The most abundant species were cockle, oyster and periwinkle. Oyster and common whelk shells were generally large (oyster valves up to 125mm long and whelks up to 120mm high). The majority of the oysters were adult.

DISCUSSION

The site lies close to the former shore of Spynie Loch, which was open to the sea at Lossiemouth until the 15th century. It is reasonable to assume that the shells were all collected close to the site, all the species present favouring the environment of the

intertidal zone of the loch.

Whilst the date of the excavated features is unknown, most probably they were prehistoric. Whilst some of the marine molluses could have served as fishing bait, they were more likely human food (the majority are edible species) and may have been cooked in the fire pit. Mesolithic sites with shell deposits in direct association with hearths have been recorded near Morton, Fife (Coles 1971). It should also be noted that a pit containing shells and Bronze Age pottery was uncovered within the palace courtyard and that deposits of shells were uncovered to the SE of the palace.

The oysters and whelk shells from the Castle Cottage area are mostly quite large, perhaps because of selective gathering which, in turn, suggests these species were in abundance and had not been over-exploited.

4.14 DENDROCHRONOLOGY OF TIMBERS

Coralie Mills

INTRODUCTION

Three oak (Quercus *sp*) timbers were retrieved from the N range of the palace for dendrochronological analysis. The timbers were remnants of joists from first-floor level in the withdrawing room at the E end of the range, which was remodelled in Period 5A. Two softwood (pine or larch) timbers were also retrieved from the NW tower. These timbers are known to have limited potential for dating because of the lack of suitable reference chronologies. Their sequence lengths proved to be short (55-56 years), further limiting the possibility of dating. The sequences were measured, however, to await further developments in softwood chronologies.

A slice, approximately 100mm wide, was taken from each oak timber using a hand saw, the samples being taken at the point at which a maximum number of outer rings were present. The surfaces of the slices were prepared by fine sanding and decayed or narrow-ringed areas pared. The tree-ring patterns were enhanced with powdered chalk. The sequences were measured on a Henson measuring table under a low-power microscope. The largest timber was Sample A; the smallest two B and C. Cracks resulted in Samples A and B both being in two pieces and were measured separately as A1 and A2, and B1 and B2.

RESULTS

The oak timbers were generally slow grown and produced reasonably long sequences. No sapwood was present on any of the samples. Where two radii of one timber were measured, these matched each other extremely closely (Table 1) and therefore each pair of radii was averaged to form a single sequence per timber. Sequence A is 163 years, B is 99 years and C (from a single radius) 96 years.

Table 1: correlation between radii

1st radius	2nd radius	't' value
A1 (152 years)	A2 (114 years)	16.39
B1 (96 years)	B2 (99 years)	18.21

The three sequences (A, B and C) matched each other extremely closely (Table 2). The very high 't' value and the visual similarity of the curves indicate that they probably derive from the same tree.

Table 2: correlation between oak timbers ('t' values)

	A	В
В	23.00	-
C	15.02	14.25

The three sequences were combined to form a master chronology for Spynie (SPYNMEAN) of 163 years which was compared statistically with a suite of Scottish, Irish and English reference chronologies of known date. High 't' values were produced in comparison with chronologies from the hammerbeam roof at Darnaway Castle (Stell & Baillie 1983) and from timbers reused as lintels in the chapel royal at Stirling Castle (Crone unpublished). The 't' values of 9.18 and 9.11 respectively indicated a position of best match at AD 1236. There were no significant matches with other reference chronologies, including the south-central Scottish master SCOTLAND (Baillie 1977) and a master from Perth, PERTHMEAN (Baillie forthcoming).

DISCUSSION

The absence of sapwood on the Spynie samples limits the precision of the dating because only a terminus post quem can be obtained for felling. The number of sapwood rings can vary greatly between oak trees but a range of 10-55 years is generally applicable in Britain (Hillam et al 1987). Therefore, a minimum of 10 rings are missing from the Spynie timbers and, if the three timbers derive from the same tree, the earliest felling date for all three is 1246. The precise date is difficult to determine because it is not known how many heartwood rings are missing from the outer edges of the samples. If it is accepted that medieval carpenters were economical with their timber and trimmed very little off when shaping them, the felling date probably lies in the late 13th or early 14th century. This is

considerably earlier than the mid- to late 16th-century date proposed for the remodelling of the N range, probably because the timbers had been reused.

The inner rings of Sample A were very close to the centre of the tree and it is estimated that only about five rings are missing from the inner end of the sequence. This indicates that the tree started to grow in the second half of the 11th century.

The close match between the Darnaway and Spynic master chronologies supports the idea that both sets of samples derive from north-east Scotland. It has also been reasoned that timbers from the royal chapel at Stirling derive from this area because of their close match with Darnaway and their relatively poor matches with more southern chronologies (Crone & Fawcett 1998). The close match between the Spynie and Stirling timbers adds weight to this argument. The Stirling timbers could have originated from the royal forest at Darnaway, a well-documented source of structural timbers (Anderson 1967, 127, 202, 225, 477). The Spynie timbers could have been brought from Darnaway but sources closer to the palace are also possible (see Gilbert 1979, figs 9 & 10, 360-67).

The lack of matches between Spynie and the south/central Scottish and Perth chronologies indicates that north-east Scotland has distinctive climatic characteristics which influence tree-ring patterns. It also suggests that development of regional chronologies is a desirable goal for dendrochronology in Scotland.

GENERAL DISCUSSION

5.1 SPYNIE IN PREHISTORY (PERIOD 1)

The sheltered inlet that was Spynie Loch before it was cut off from the sea in late medieval times would have provided safe fishing both by boat and from the shore; and, on the evidence of numerous shell mounds around the edges of the loch, shellfish were also readily available. Neither those mounds nor the shell-filled pits near the palace have been dated but it would be reasonable to assume that both fish and shellfish have been exploited around Spynie from at least Neolithic times and probably earlier.

As well as the early occupation identified at and near the palace, several other prehistoric (or probable prehistoric) sites have been noted on or close to the former edge of the loch (illus 105). Many of them have been discovered only in recent years and it would be no surprise if others in similar situations were to come to light in the future. The known sites are:

1 earthworks at Caysbriggs, 2km N of the palace (NJ 2455 6732:

2 more than 20 circular huts at Balormie, 2km W of Spynie (NJ 220 675) (*DES 1996*, 74);

3 numerous presumed prehistoric features at Muirton, 2.5km N of the palace (NJ 223 681) (*DES* 1996, 74);

4 ring ditches, oval enclosures, pits and other features at Lower Mains, 3.5km W of the palace (NJ 193 655) (*DES* 1997, 55);

5 ring ditches, an enclosure and a possible square barrow at Midtown, 3km W of the palace (NJ 198 657) (DES 1989, 25; DES 1995, 37);

6 two faint cropmarks, at Lochside, 2.5km W of the palace (NJ 209 655) (DES 1995, 37);

7 circular enclosure, 600m W of the palace (NJ 224

658) (DES 1992, 38);

8 ring ditch, 1.5km W of the palace (NJ 217 655) (*DES* 1991, 40);

9 kerb cairn, 4.2km SW of the palace (NJ 190 647) (DES 1996, 76);

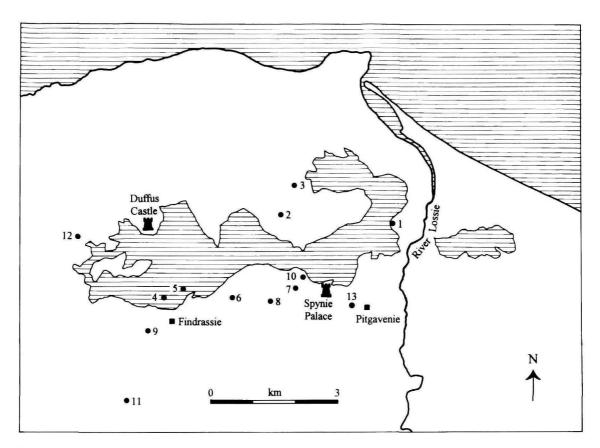
10 shell midden, just N of no 7, up to 0.35m thick and exposed over a length of 40m in a gas pipeline trench (NJ 225 660) (*DES 1980*, 15);

11 quarrywood henge, some 5km SW of the palace (NJ 186 631);

12 cropmarks of at least two circular enclosures, 1.5km W of Duffus Castle (NJ 172 670) (*DES 1996*, 74); and

13 enclosures, 800m SE of the palace, just W of Pitgavenie (NJ 237 653) (DES 1991, 40).

Two of these sites (4 and 5) appear to have been in the loch itself, and it can probably be assumed that they were located on two of the several small islands known to have been within it. The post-pits in the SW corner of the palace courtyard may represent the truncated remains of another such site; the presence of probable Bronze Age pottery and shells within a nearby pit supports such an argument although the explanation for this assemblage remains a mystery. It may simply have been the result of a children's game. The other Bronze Age artefacts retrieved from Spynie, including an urn and three bronze axes (see Chapter 3.2.1), are also strong indicators of prehistoric occupation within the palace area (Elgin nd, 74; Forres Gazette, 17 January 1877). Although there was no trace of any structures associated with the hearth and cooking pits adjacent to Castle Cottage, this should not be taken as evidence that there is none nearby.



illus 105 Map of Spynic Loch, showing the locations of prehistoric sites (after Omand 1976).

5.2 SPYNIE DURING THE 12TH AND 13TH CENTURIES (PERIODS 2 AND 3)

Only tantalizing glimpses have been revealed of Spynie's occupation during the first two centuries of the bishopric. Those features identified and investigated include the shallow ditch outside the S and W curtain walls, which was visible before excavation began, as well as some remains of timber and stone buildings enclosed by it. These scanty remains suggest that the earliest phase of the palace consisted of a group of buildings, mostly of timber but latterly including some of stone, enclosed by a rectangular or sub-rectangular ringwork and ditch. Pottery recovered from the bottom of the ditch suggests a date of initial construction in the 12th century. It could be expected that the buildings within the enclosure would have included the bishop's residence (comprising a hall, chamber and chapel), a brewhouse, a bakehouse and other service buildings. However, very little is known of the early arrangement at Spynie.

Although the full course of the ditch and its presumed associated bank remain uncertain, they appear to have enclosed an area similar to that defined by the

14th-century curtain wall, thus creating a ringwork of moderate proportions, measuring perhaps 45-65m across within the palisade. Whilst this is considerably smaller than the circular ringwork, 100m in diameter, at Camphill, near Glasgow (Fairhurst & Scott 1951, 148), it dwarfs many of the medieval ringworks found elsewhere in Britain, notably in Glamorgan where many survive (RCAHMW 1991, 80). Medieval ringworks are relatively uncommon in Scotland although several have been recognized in the Glasgow area (Talbot 1974). Unlike mottes, many would have been levelled by ploughing and are now visible only as crop marks. Others may have preceded the stone-built castles that now occupy some sites, such as those at Rothesay, on Bute, and Skipness, in Argvll (Pringle 1998, 150; RCAHMS 1971, 165). Curiously, the remains of Spynie's earliest defences probably survived because of the protection afforded by the buildings that superseded them.

No rampart has been identified at Spynie, although it may well have been levelled during the rebuilding of the 14th-century palace, and the material from it

perhaps used to level up part of the enclosure, particularly its NW corner. Alternatively, there may have been just a timber palisade behind the ditch although this explanation begs the question of why the spoil from the ditch was not utilized. There were numerous post-pits of probable early medieval date in the SW part of the palace courtyard and within the bounds of the later W range. Some of them might have been associated with a palisade or with timber formwork inside a rampart, but most of them probably belonged to timber buildings set against or near to the rampart or palisade. The concentration of pits in the W and SW parts of the site suggests either that buildings were clustered in that area or simply that later developments had removed all trace of similar structures elsewhere.

Whilst the 12th-century pottery recovered from the bottom of the ditch may not be a wholly reliable indicator of the date of its excavation, it does at least suggest that the site was occupied during that period. Because there is no reason to believe that the ditch belonged to a fortification predating the 12th century, it is reasonable to suggest that these defences were erected by one of the bishops of Moray.

The first Bishops of Moray appear to have had no fixed seat, moving instead between the churches on their manors of Birnie, Kinneddar and Spynie (Chapter 1). The precise form of those early residences remains unknown, although almost certainly the buildings would have been largely of timber. At first there may have been no need for strong defences. However, following the revolt by Angus, Earl of Moray in 1130, David I moved to incorporate Moray into his kingdom, granting lands and castles there to a number of his followers, including Freskyn, the builder of Duffus Castle (c 1150). It may have been William (1152/3-62), the first Bishop of Moray with a clearly Anglo-Norman name and perhaps another whom the king could trust, who set about building a well-defended residence at Spynie. Indeed, the need for security is alluded to in Pope Innocent III's mandate of 1207/8 (RM, 40-43).

The choice of a ringwork, rather than a motte like that at Duffus, might reflect the shortage of suitable materials around Spynie, where glacial and beach deposits are generally quite thin (cf Higham & Barker 1992, 65). However, the palace would have been easily defended on its N side by the loch. It also afforded ready access for boats and small ships transporting people and supplies and facilitating trade. In addition, the site appears to have had a reliable source of fresh water, which was perhaps not

readily available elsewhere in the area.

Although the bishop's residence at Spynie had developed initially as a fortified manor, by 1172/4 it seems that the nearby church of the Holy Trinity was serving as the cathedral for the diocese. At that point, the manor house would have become the bishop's official residence (or see palace) associated with the cathedral. The quarter mile separating palace and church might seem inconvenient but it should be remembered that from 1207/8 onwards, if not before, the upkeep of the cathedral and the saving of the daily offices in it would have been the responsibility of the dean and chapter, rather than the bishop. The physical separation of the cathedral precinct from the see palace would therefore have mirrored the distinction between the spiritual, administrative and financial responsibilities of the bishop for his diocese on the one hand and of the dean and chapter for the cathedral church on the other. When the cathedral was moved to Elgin in 1224, this distinction became even more obvious. So far as is known, the bishop never acquired a private residence there; the building that lies within the cathedral precinct and is known traditionally as the 'Bishop's House' is identified more plausibly as the precentor's manse (Simpson & Stevenson 1982, 28; McKean 1987, 14-15). The bishop's residence in Spynie would therefore have continued to serve both as his see palace, close to Elgin, and as the manor house or castle on his Spynie estate until the end of the 17th century.

Spynie, however, was not the only residence of the Bishops of Moray. Barely 3.5km away, on the opposite side of Spynie Loch, is Kinneddar, the site of an early monastic settlement where evidence of a later bishop's castle have also been discerned. That evidence comprises the remains of a tower, which stood within a hexagonal enclosure defined by walls, banks and ditches. The site was finally levelled in the early 19th century although it is still recognizable from aerial photographs (NSA XIII, 151-3; Shepherd 1993, 82). Geophysical surveys undertaken in 1988 and 1995 together with exploratory excavations in 1995 confirmed the presence of the ditch around the enclosure and the remains of buildings within it (DES 1995, 36; CFA 1995, 16). Judging from the number of episcopal acts issued from Kinneddar, it, rather than Spynie, seems to have been the bishop's favoured residence during the later 13th century. The nature of the medieval bishop's residence at Birnie is uncertain although aerial photography has revealed traces of a polygonal enclosure lying to the E of the oval enclosure that surrounded the Romanesque church (Jones et al 1993, 71; pl XI). The head court of the bishop's barony continued to meet at Birnie into the 16th century and also at Loch Laggan in Glen Spean, where the Bishops of Moray had a tower house on King Alexander's, or King Fergus's, Isle.

Elsewhere in Britain, bishops' see palaces were not usually fortified at all in the 12th century, although it was not uncommon for castles to be built on episcopal manors (Thompson 1998, 14, 84-103). In Scotland, however, medieval episcopal residences seem to have borne a closer resemblance to contemporary baronial ones (Thompson 1998, 156). In St Andrews and Glasgow, for example, the bishops had strongly fortified castles located close to, though outside, their respective cathedral precincts (Cruden 1958; Fawcett 1992; Durkan 1986, 2).

Whatever the date of construction of the earth and timber palace at Spynie, it appears to have continued in use for well over a century (and perhaps considerably more), during which time several generations of timber buildings doubtless came and went. Latterly, the timber structures were replaced, or at least augmented, by stone buildings, for evidence of two of them (Structures 1 and 2) were uncovered by excavation. Structure 2 was a small building and is unlikely to have stood above two storeys. There were few clues as to its function, other than the fragmentary remains of a hearth, suggesting that it had a domestic use.

The scant remains of Structure 1 serve to illustrate how much information may have been lost as a result of the later remodelling of the palace. Neither its size, orientation nor function is known although the *grisaille* window glass associated with it is an indication of the building's high status. Such glass was by no means restricted to ecclesiastical

buildings; indeed, the probable N/S orientation of Structure 1 suggests that it contained a hall or chambers rather than a chapel. However, in an age when there would have been chapels even in secular establishments of Spynie's size, it is inconceivable that a bishop's residence would have been without one (cf Thompson 1998). From the 14th century onwards, the chapel was on the S side of Spynie's courtyard, and an earlier one may also have been located there. Supporting this argument is the grisaille window glass, similar to that retrieved from Structure 1, that was recovered from a residual context at the E end of the Period 4 S range. The similarity of Spynie's grisaille glass with material recovered from Elgin Cathedral and sites farther afield suggests that Structure 1 was built in the second or third quarter of the 13th century. The marked similarity of its masonry to that of Structure 2 suggests that both buildings belong to the same period.

We know little of the setting of Spynie Palace in this early period although a comparison could perhaps be drawn with the early stone phase of Skipness Castle, Argyll, whose principal buildings consisted of a hall-house and a chapel (RCAHMS 1971, 165-8). If its main entrance lay on the S, facing the church and road to Elgin as it did in the 14th century, access to the palace enclosure must have been over the ditch, using a timber bridge rather than a causeway. From the outset the loch was probably exploited for fish, as well as for transport and trade. The palace, as manor house, would also have been associated with a township of free or servile tenants from whose economic activities as cultivators and fishermen the bishop derived his income. However, the location of the toun of Spynie, in this as in later periods, remains something of a mystery.

5.3 THE 14TH AND EARLY 15TH CENTURIES (PERIOD 4)

The replacement of the palace's timber buildings with ones of mortared masonry was probably a gradual process, continuing well beyond the 13th century. However, despite the reference to Spynie as a castle (castrum) around 1296, there is no evidence for it having had a stone curtain wall before the 14th century when the first of its great rebuilding programmes began. By that time there was no longer any point in constructing massive defensive complexes typical of the 13th century. The Wars of Independence had demonstrated that, no matter how impressive a castle's defences might appear, they could be breached by an army suitably equipped with men and war machines or with enough patience

to sit out a long siege and force its occupants to surrender. During the 14th century more attention was paid to the comfort and convenience of castle dwellers, and, whilst security was still an important issue, new castles were not usually designed to withstand a besieging army. In contrast, in England and Wales from the 14th century onwards, bishop's palaces were being built with a greater concern for security than in earlier times. This was because of a general rise in the level of violent crime and social instability resulting from the effects of war and demographic change in the decades before and after the Black Death of 1349-51 (Thompson 1998, 104-24).



illus 106
The inside face of the west curtain wall in 1963, prior to masonry consolidation. Note the breach in the wall at its south end.

The first stone-built castle at Spynie was roughly square in plan with right angles on its NW, NE and SE corners and an obtuse angle on the SW. Its shape appears to have been dictated somewhat by the cliff and a gentle slope on the N and E sides respectively, and by the line of the earlier ditch on the west and south. Its 7m-high curtain walls would have presented a face of some strength, yet on at least two sides they were pierced by the large first-floor windows of the ranges of buildings that lined them (illus 106). What was probably the main entrance was simply a lightly-defended gate in the S wall, leading through the basement of what was probably chapel range. Nevertheless, a substantial rectangular tower, equipped with embrasures for archers in its lower storeys, projected from the SE corner, providing flanking cover to the S and E walls. A smaller tower at the NW corner covered the N wall. There is also evidence to suggest that the obtuse south-western angle was strengthened by a rounded tower, rising from the bottom of the ditch and covering the adjacent curtains.

It is not known who inspired the building of this new castle. Its few surviving diagnostic features, in particular the windows in the S and W ranges and the arrow-slits in the SE tower, suggest that it was built during the 14th century although it is difficult to date it more closely. The motivation for this work could have come from Bishop David of Moray (1299-1326) who may have found Spynie in a state of dereliction on his return from exile in 1307. The decay might have been hastened by Edward I, during one of his sorties into Moray in 1296 or 1303, or by Robert Bruce who, as well as besieging Elgin in 1307, perhaps slighted Spynie to prevent its use by the enemy. For just such a reason, Andrew Moray, Warden of Scotland, seized the castle of the Bishop of St Andrews in 1337, after which it lay in ruins for the next 50 years (Cruden 1958, 3). However, it is also possible that Spynie was relatively neglected as an episcopal residence during the 13th century when the bishop may have spent more of his time at Kinneddar, on the opposite side of the loch. Whilst reconstruction may have started during Bishop David's episcopate, it is unlikely to have been completed until some time after his death in 1326. In all likelihood, building and rebuilding of the palace continued well into the 15th century.

The boundaries of the Period 4 castle were roughly the same as those of the later palace. The curtain wall, the S, W and NW ranges and the NW and SE corner towers were all established in this phase, although all were modified later. There is no evidence for any masonry buildings on the E side of the courtyard in the 14th century, and any that might have stood in the NE corner would have been swept away when the N range was built in the early 16th century.

The S range was obviously a structure of some quality and displays many of the characteristics of a hall range associated with the principal gate. However, its E/W orientation and the fact that its first storey was definitely used as a chapel in Period 5 suggests that this had always been its function. At St Andrews Castle during the 14th century, the bishop's chapel was also on the first floor of the S range, adjacent to the gate-tower (Cruden 1958, 11-12). A more likely location for the bishop's hall at Spynie is in the W range.

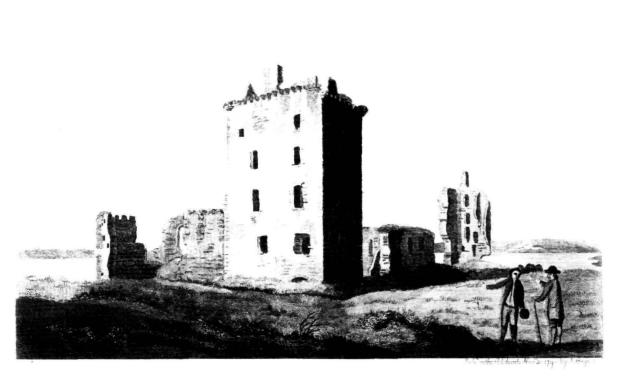
Little now remains of the W range other than its W wall, which corresponds to the curtain wall, and what may possibly be part of its S wall (F3783). Its three surviving first-floor windows, although somewhat smaller than those in the S range, evidently belonged to another imposing building, most probably a hall. Unfortunately, the building's width is unknown, although, if wall F3783 was indeed its S wall, it would have been at least 20m long internally. The absence of any trace of an E wall might suggest that, as in the late 14th-century S and SW ranges of Doune Castle, Perthshire, the curtain wall was the only part of Spynie's W range to be built. However, the presence of a kiln or oven, set against the W wall of the range, is surely evidence that it was. The ground floor of the W range probably contained cellarage and offices serving the hall above but, unfortunately, later developments have removed most of the original arrangement. Other services, including a bakehouse and brewhouse, were probably housed in the NW range, as in later times.

One important question that remains to be resolved concerns the location of the bishop's private chamber before the massive SW tower (David's tower) was built. If, as seems likely, the principal hall was contained within the W range, the bishop's chamber (or chambers) would most probably have been located at its upper end, either within the same block, in an attached tower, or both. Such was the arrangement in the 12th-century palace of the Bishop of Orkney in Kirkwall where the principal chamber at the N end of the hall range

communicated with another located in a tower (later known as 'the Manse Tower') attached to the NE corner (Simpson 1961, 66-77; Simpson 1965; Pringle 1999, 33-6, figs 10-11). It has been noted that the circular cellar in the basement of David's tower originally may have formed part of an earlier rounded tower, attached to the obtuse SW corner of the enceinte. The cellar is 5.3m in diameter, making it comparable in size to a number of 13th-century castle towers, or donjons, attached to hall ranges, including those at Dunstaffnage (RCAHMS 1975, 198-211; Lewis 1996), Rothesay (Pringle 1998, 153, 164, pls XIIIa, XIVc, XVIb), Dirleton (RCAHMS 1924, 17-21, fig 55, pl 57; Cruden 1981, 80-83) and Inverlochy (Cruden 1981, 58-61, fig 6b). Round towers might have been considered inconvenient for most lordly residences by the 14th century but it should be noted that Bishop Reid added one (albeit rectangular internally) to the NW corner of the bishop's hall in Kirkwall as late as the 1540s (Simpson 1965; Pringle 1999, 36).

Although having defensive only moderate capabilities, with a two-leaf timber door probably reinforced by an internal iron yett, the gate in the S range seems to have been considered adequate to serve as the principal entrance to the palace. It seems unlikely that this was the only gate during this period and it would be reasonable to suppose that there was also an entrance on the side facing the loch. As a precursor to the existing Period 5 watergate, there could have been a sally port in the original N curtain wall, perhaps in the stretch that was rebuilt as part of the N range. In this period there were also two ranges of lean-to structures built against the outer face of the N curtain and separated by the latrine tower. The interpretation of these structures is uncertain although their presence implies that there was some form of entrance into the palace near to them. Possibly they were used for storing timber or peat, of which the palace would have required great quantities, especially in winter. Alternatively, they may have been associated in some way with the nearby loch. The smithy concretions recovered from this area may be evidence of iron-working in one or both of these buildings but this industrial waste was found in disturbed layers and could well have been redeposited from elsewhere.

There were also substantial deposits of iron-working debris, as well as what appeared to be kitchen waste, beyond the SE corner of the palace. Although these materials could indicate the site of a kitchen midden, they might also be taken as evidence that there were domestic offices and workshops immediately outside the enclosure.



SPYNIE PALACE.

illus 107
An engraving of Spynie Palace in the late 18th century (from Grose 1791) (reproduced by permission of the National Library of Scotland).

5.4 THE LATER 15TH AND 16TH CENTURIES (PERIOD 5)

The major rebuilding programme that began at Spynie in the later 15th century and continued into the early 16th resulted in the palace's final layout, which is still evident today. Although the changes were interconnected and quite possibly formed part of a planned scheme, it is extremely difficult to distinguish the precise sequence in which they occurred or to date them accurately.

The main elements of the reorganization of the castle-palace were: the removal of the principal gateway from the S side to the E side of the courtyard; the consequent remodelling and extension of the chapel in the S range; the construction of a massive new residential tower containing the bishop's private apartments at the SW corner of the *enceinte*; the construction of the N range, with its new great hall, and the associated E range containing domestic apartments; and the conversion of the old hall in the W range into a kitchen, to serve the new towerhouse.

The principal effect of this reorganization was to define more clearly the separation of the private residence of the bishop and his immediate household, contained in the new SW tower, from the more public areas set around the central courtyard. Such physical demarcation appears to have been not only a response to the bishop's personal wish to separate his private and public lives, but also a reflection of the different roles that the palace was required to serve. As well as being the bishop's principal residence and the administrative centre from which he ran his diocese (cf Thompson 1998, 8-10), the palace was also a manor house, the legal and administrative centre of a temporal estate that the bishop held of the crown. As such, it was required to fulfil a number of additional secular functions, in the same way that other castles held by tenants-in-chief of the crown were required to do at that time. For example, from 1451/2 the temporal court of the barony and free regality of Spynie would have been held in the palace under the aegis of the bishop or, during episcopal vacancies, of the king's appointed officers. From time to time, the palace was also required to provide accommodation for the king and for his household. By providing a separate hall and associated chambers, the burden of such visits falling on the bishop's own household would have been eased. In 1470 there is also the first mention of the appointment of a palace constable who would also have required suitable accommodation, perhaps in the range associated with the new E gate and the SE tower.

The monumental changes that were undertaken in Period 5 could only have been achieved in a climate of political and economic stability. The finances of the bishopric would certainly have been enhanced when the lands of the church of Moray were erected into the barony of Spynie and the toun elevated into a free burgh of barony in 1451. These changes occurred at the request of Bishop John of Winchester (1435-60), a former royal clerk who had worked for James I on his palace-building projects at Linlithgow and Stirling and from 1455 onwards served James II as 'master of the work' for the building programme at the royal castle of Inverness (MacGibbon & Ross 1892, V, 531; Dunbar 1999, 8). It is not impossible that Bishop John was also acquainted with the ambitious building projects that successive Bishops of Winchester, William of Wykeham (1367-1404) and Henry Beaufort (1405-47), were undertaking at Bishop's Waltham and Wolvesey Palace, Winchester (Hare 1988). But, while it seems very likely that it was John of Winchester who initiated the reorganization of Spynie, the works were certainly not completed until several decades after his death.

Although it is uncertain precisely when the new gateway was inserted into the E wall of the palace, architectural parallels suggest that it was built some time in the late 14th century or in the first half of the 15th century. As Simpson (1927, 13-15) suggests, the arms that surmount the doorway may well be those of John of Winchester himself. Not only did this gate present a more architecturally refined and imposing approach to the castle-palace than its predecessor, but its portcullis, arrow-slits and murder holes rendered it more defensible than the old gate in the S wall.

A concern for greater security may also be discerned in the remodelling of the S range that followed the blocking of the S gate. Although the curtain was still pierced by windows at first-floor level, they were much narrower than its earlier ones had been, and one of the original windows was totally blocked. In the W range the large Period 4 windows were also blocked or reduced in size during this period. The

only independent grounds for dating the alterations to the S range (apart from the logical one that they followed the construction of the new E gate), is provided by the form of the ogee-arched window inserted into the building's westernmost opening. In England, ogee arches appeared in doors and windows in the first half of the 14th century (Wood 1983, 340, 354) but they are not common in France until after the mid-15th century. They are not common at all in Scotland although several ogival mouldings may be seen in Crichton Collegiate Church, which was built around the middle of the 15th century (RCAHMS 1929, 45 & figs 64-66). An indication of date for the rebuilding of the upper parts of the SE tower, which was integral with the remodelling of the S range, is provided by its corbelled wallhead parapet and recessed corner turret. These mirror the arrangement on the SW tower that is dated to the episcopate of William Tulloch (1477-82). Similarly, the conversion of the east-facing arrow-slit in the lower part of this tower into an inverted keyhole shot-hole should be dated on technological and stylistic grounds to c 1480 or shortly afterwards. Thus, the sequence of operations that comprised the construction of the E gate, the blocking of the S gate and the remodelling of the S range and SE corner tower may be placed between the 1430s and the 1480s.

In Period 5 we have the first definitive evidence of the chapel being located in the S range although, as has been shown, there are grounds for thinking that it had been in that area since the 13th century. A chapel was an important feature of a bishop's residence, being used not only for worship but also for certain functions of a more administrative nature, such as the admission of clergy. In England and Wales the chapels of episcopal houses were often two-storeyed, with the principal chapel on the first floor and a crypt or secondary chapel below (Thompson 1998, 65-6). At Spynie the chapel was also at first-floor level although there was nothing to indicate how the ground floor had been used. An external pentice-roofed, timber gallery, or transe, gave access to it from the courtyard, probably through a door at the W end of its N wall. The same gallery also communicated with a passage behind the altar leading to a chamber in the SE corner tower. This arrangement is somewhat similar to that within the chapel built for James IV (1488-1513) in Linlithgow Palace in the 1490s (Pringle 1989, 11-13; Dunbar 1999, 15-16, 121-30). The chapel in the bishop's castle in Glasgow was also at first-floor level and was accessible from the courtyard by a large external stair, referred to in 1735/6 (Murray 1995, 1159).

The works that affected the other parts of the castle-palace in this period can also be arranged in a hypothetical sequence, albeit independent of the one just discussed. If, as has been suggested, the bishop's hall had been located in the W range, it would be logical to expect the new great hall to be built before the W range was converted into a kitchen range. It is also possible that the great hall was built at the same time as (or even before) the SW tower and that the conversion of the old hall into a kitchen range came last in this sequence of events. A similar kind of transformation may be seen in the palace of the Bishop of St David's, in Pembrokeshire. In the 1330s Bishop Henry de Gower (1328-47), having already built himself a hall and solar in the E range, proceeded to construct a larger and more lavish great hall and chamber, with an adjoining chapel, in the S range. The old hall, to which a kitchen and chapel were added, remained in service for the bishop's more private use (Evans & Turner 1999; Turner et al 2000; cf Thompson 1998, 59-63, figs 39-40). By the end of the 14th century the Bishop of Winchester's moated manor house at Bishop's Waltham, in Hampshire (like Spynie, the bishop's principal residence in this period), as rebuilt by William of Wykeham (1367-1404), also contained a great hall as well as a smaller hall (or 'great chamber'), reserved for more private use (Hare 1988, 226-32, figs 1-2; Thompson 1998, 95-6, fig 61). At St Andrews the castle that was rebuilt by Bishop Walter Traill (1385-1401) is thought to have contained a large hall range on its E side. Unfortunately, the subsequent collapse into the sea of the whole of this range, apart from the N (kitchen) tower, means that any reconstruction of its layout can now be little more than hypothetical (Cruden 1958, 6, 11; Fawcett 1992, 4-5). However, it is possible that the bishop's chamber lav at the S end of the range, adjacent to the chapel in the S range and to a now-lost SE tower, an arrangement remarkably similar to that in the castle of the bishop of St David's at Llawhaden, in Pembrokeshire (Radford 1960; Turner 1991, 39-40; Thompson 1998, 120, fig 79). Alternatively, it may have been within the gate-tower, adjoining the W end of the chapel although such an arrangement would not have been particularly convenient until the 1520s when the gate was blocked and the tower extensively remodelled as a residence.

At Spynie, there are few clues as to the date of construction of the great hall and its associated chambers. Remains of floor joists recovered from the E gable wall have been dated by dendrochronology to the late 13th or early 14th century and clearly they represent reused timbers. Indeed, they appear to relate to the Period 5A floor rather than to that of

Period 5. From what is known of its roof construction, the N range appears to have been built some time between the late 14th century and mid-15th century. We are on firmer ground in dating the SW tower although its attribution to Bishop David Stewart (1462-76) is first attested only in the late 17th century. However, Stewart's arms appear next to those of Patrick Hepburn (1538-73) on the S front of the tower, presumably to indicate that it was he who began it and Hepburn who remodelled it. The arms of William Tulloch (1477-82) set below the battalling suggest that the structure was essentially complete by the end of his episcopate.

David's tower, as it has come to be known, has a monumental and austere appearance similar to those of Threave (1390), Borthwick (after Elphinstone and Comlongon, the latter two perhaps built a half-century later than the mid-15th-century date often applied to them (Maxwell-Irving 1996). Security was given a high priority in castles dating from the late 14th and 15th centuries; as well as in those, such as Bothwell, Dirleton and Balgonie, that were rebuilt or remodelled during that period. Although the principal function of the tower was to provide residential accommodation for the bishop and his immediate household, its height and projection forward beyond the curtain walls would have enhanced its defensive appearance. That said, it was not itself a highly defensible structure. Although the original windows may have been smaller than the present ones (many of which appear to date from the mid-16th century), the main door at first-floor level was defended by no more than an iron vett. Security was compromised further by the doorways, inside and outside the curtain wall, which gave access from ground level to the building's basement and first floor respectively. These considerations suggest that the tower was designed as much, or more, for architectural effect than for defensibility.

The accommodation inside David's tower was spacious, yet it had no kitchen. According to the inventory of its contents made for Bishop Alexander Douglas in 1607 (Appendix 1, no 1), there was a wine cellar below the hall, probably the larger, rectangular room on the S side of the building. Although this room communicated with the hall through a small trap-door in the floor of an adjacent mural chamber (which may have served as a buttery), more usually it was entered from outside the tower. The circular cellar next to it is evidently the 'salt hous' mentioned in the same inventory in which salted meat and fish would have been stored. On the first floor lay the bishop's hall and above it four storeys of residential accommodation, more than in any other tower in Scotland.

The first-floor bishop's hall is identified as such by the 1607 inventory, by its position and layout and by a large fireplace in the centre of the W wall. Somewhat unusually, the hall did not control access to the upper floors, as was the case in many Scottish tower houses. Instead, the turnpike stair was accessed from the lobby just inside the tower's first-floor entrance and guarded by the porter's lodge, which lay opposite. The large chambers on the four floors above were also reached independently from the stair. All these rooms had roughly the same ground plan with no obvious indications of sub-divisions although there were variations in the positions of windows and closets. This makes it difficult to assign specific functions to these rooms although it may be assumed that there would have been some form of vertical hierarchy with the more private rooms located above the more public ones. The bishop's inner chambers were probably located on the second and third floors, the second floor housing his private dining room and the third floor perhaps being used as occasional guest accommodation. The fourth-floor room, which was barrel-vaulted and appears to have contained an oratory in a bay on its E side, may have been the bishop's bed-chamber. The vault above the fifth-floor garret might have housed accommodation for servants. However, this interpretation remains speculative: it is unlikely that the functions of these rooms were ever fixed, some probably being put to a number of different uses. Whatever the intentions of the original builders, subsequent occupiers may well have had other ideas.

Additional closets and store rooms were provided within the thickness of the tower's walls, a practice also found in other towers of this period such as Elphinstone, Comlongon and Sauchie (RCAHMS 1924, 121; Maxwell-Irving 1996, 871; RCAHMS 1933, 311). Doubtless, some would have been used to store household furnishings and other materials and as sleeping quarters for domestic staff whilst others contained latrines. As well as increasing the amount of space available, such closets also reduced the quantity of stone required to build the massive walls. Unfortunately, their inclusion also caused serious structural problems, which required the tower at Comlongon to be stabilized internally and the one at Elphinstone to be demolished eventually (Maxwell-Irving 1996, 871). In David's tower the construction of a barrel-vault at fifth-floor level eventually proved too much for the hollowed-out E wall which collapsed internally some time after the abandonment of the palace, leaving nothing standing but its outer face.

The closest known parallel for David's tower in a Scottish episcopal palace is the Great Tower that

Bishop Cameron added to the Bishop's Castle in Glasgow between 1426 and 1446. Although this tower no longer survives, its general characteristics may be reconstructed from the body of evidence (documentary, pictorial and cartographic) that has been usefully brought together by Athol Murray (1995). Murray's interpretation of this building, however, may be questioned, particularly with regard to his contention that the tower had five floors and that there was an upper and lower hall within it (cf Murray 1995, 1146, 1154 n14). Drawings of 1789 and c 1790 (Murray 1995, illus 4-5) suggest that there were only four floors in all, including a vaulted basement and a garret. The opening in the E wall between ground- and first-floor levels, which Murray believes is evidence of the existence of another floor, would have been obscured internally by the basement vault and seems more likely to have related to a mural stair ascending from north to south. It may even have been a later insertion, intended to give access from such a stair to the battlemented wall-walk of the enclosure wall that was built against the E side of the tower by Archbishop James Beaton (1508-23). Similarly, although the reference made in a report of 1693 to a 'Heigh Hall' with eight 'great windows' implies the existence, or former existence, of a lower or 'laigh' hall, it does not necessarily follow that the latter would also have been inside the tower. The example of Spynie suggests that the lower hall might well have been located elsewhere within the palace enclosure. It is alternatively possible that what was referred to in 1693 as the 'Heigh Hall' of the Bishop's Palace in Glasgow lay not on the first floor of the Great Tower but on its second. The illustrations referred to above, as well as Slezer's of 1693 (Murray 1995, illus 1) indicate that this floor was more generously fenestrated than the one below it.

Sources indicate that the Great Tower at Glasgow also had a jamb tower attached to the southern part of its W wall and rising one storey above it. It is uncertain whether this was an original feature or a later addition although by 1693, when the jamb tower and the Great Tower are referred to as 'the higher and louer tours' respectively (Murray 1995, 1157), they formed an integrated interconnected unit. The function of the vaulted basement of the Great Tower is unknown although it may have been used for storage, as at Spynie, or possibly even as a kitchen. Its first-floor room, however, was evidently the 'great hall' referred to in 1693. This room probably has a large fireplace in the centre of its longer S wall, from which a flue rose to the 'long necked chimneyhead' which is documented in 1693 (albeit attributed, probably incorrectly, to the room above) and was illustrated by Slezer in the same

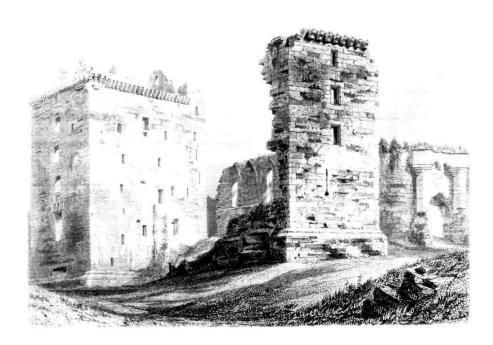
year. The hall was entered from outside the tower on the W by a 'Great Blistered' [balustraded] stair that goes from the Court' (Murray 1995, 1146, 1157). The sequence of rooms given in an item on the 1693 report relating to window repairs suggest that the adjoining first floor of the jamb tower may have contained the chapel; if so, the 'large staire of the Cheppel' mentioned in 1736 (Murray 1995, 1159) may have been the same as the stair to the hall. After the chapel, the repair item mentions the 'Great Chamber above the hall'. This was evidently in the Great Tower. It seems to have been reached up a turnpike stair, which was located between the chapel and the hall and was probably accessed from the entrance lobby, as at Spynie. After the bed-chamber, the repair item then proceeds to 'the 3 Jamb-Chambers', which presumably were arranged in vertical sequence and reached off the same staircase.

Despite its more modest size, the similarities between this tower and David's tower at Spynic are striking. Both have a first-floor hall built over a vaulted basement. In both cases the main entrance from the court led into the hall through a lobby (inferred at Glasgow), from which a stair led up to the principal bed-chamber and to other smaller chambers at Glasgow and to two large chambers and the main bed-chamber at Spynie. An unusual feature of both towers, which contrasts with normal tower-building practice of this period, was that in neither of them was it necessary to enter the hall in order to gain access to the stair. In both towers, the bishop's bed-chamber had direct access to the chapel, but here there were also differences. In Glasgow the chapel communicated with both the hall and the bed-chamber, whereas in Spynie, where the main palace chapel was in a separate building, the bishop's bed-chamber seems to have been provided with a small oratory of its own. The relatively small number of rooms in the main tower at Glasgow probably accounts for the need to add a 'neu dyning roume' with a slated roof to its N side some time before 1693, thus filling the space between it, the adjacent curtain wall (1508x23) and the gate-tower that is attributed to Bishop Gavin Dunbar (1523-47) (Murray 1995, 1145, 1147, 1157). This room was probably located at first-floor level, communicating directly with the hall, and would have mirrored the function of the second-floor room at Spynie. The 'neu fore roumes' with a flat roof coated with pitch and shell, which are also mentioned in 1693, seem to have occupied corresponding positions against the curtain wall on the S side of the tower, below the 'long necked chimneyhead' (cf Murray 1995, 1157). As their roof had never been watertight, they may perhaps best be

interpreted as larders, a buttery, a pantry or even a kitchen, rather than chambers.

The lack of a kitchen inside the tower was compensated for by providing a new kitchen in the first storey of the adjacent W range of the palace. The S end of the W range would have had to be rebuilt following the construction of David's tower and it appears that the first floor of the range was made into a kitchen at this point, with a fireplace and a slop-drain inserted into its W wall. It is referred to as the 'new kitchine' in 1607 (Appendix 1, no 1), presumably to distinguish it from the old kitchen in the NW quarter. The new kitchen block communicated directly with the cellars beneath the tower but there was no direct route to the bishop's table. Food that was not cooked in the hall itself would have had to be brought in through the main entrance to the tower. The only alternative route was through a small door at ground level just outside the curtain wall and up the narrow stair that led into the bishop's private hall. Photographs dating from the 1960s (illus 23 and 106) and earlier show a large void in the S end of the W curtain wall which has been rebuilt since. However, the hole was too far above ground level to have marked the position of an intermediate door in that position. Indeed, the outside entrance to the tower was probably never intended as anything more than a convenient 'back door', albeit a rather insecure one.

The hall in the N range measured about 19.5m by 7.5m internally, an area of about 146m² which is comparable to those in the castles of Dirleton (140m²) and Doune (167m²) but smaller than those of Bothwell (about 200m²), Linlithgow (225m²) and Darnaway (285m²). At the E end of the range was a dais chamber or withdrawing room which is referred to in the 1607 inventory as the 'chalmer within the said hall' (Appendix 1, no 1). It is not known how the hall and chamber were heated initially. There may have been central braziers, as in the halls at Bothwell and Doune (Tabraham 1994, 22; Tabraham 1997, fig 38), or perhaps fireplaces in the now-lost partition wall between the two rooms. The hall would have been entered from the courtvard, through the open gallery or transe that lined its S side. The main door was most likely at the W end where it would have led into a screens passage, separated from the rest of the hall by a timber partition. Above there was probably a gallery, perhaps reached by means of a timber stair built into either the W or N wall. No doubt there were windows high up in the S wall to augment the rather meagre amount of light that would have filtered through those in the N wall.



illus 108
Drawing of Spynie Palace in the mid-19th century. Note the beginning of the mound of debris outside the east face of David's tower.

Although the hall lay at the same level as the courtyard, its timber floor was in fact suspended over a sunken basement, very possibly on stone or timber posts (cf Thompson 1998, fig 45) although no trace of them now survives. Gone too is all trace of the S wall that separated the basement from the corridor below the transe; the latter would have provided access to the basement or 'laiche sellar' and to the 'wellhous' below the hall and dais chamber respectively (Appendix 1, no 1).

At the W end of the hall, beyond the screens passage, lay a service area in which dishes were given their final touches before being carried to the table. Most of the cooking and food preparation must have taken place in the NW range. However, it is difficult to interpret precisely how various parts of the range functioned, particularly as their roles appear to have changed with the passage of time. According to the 1607 inventory, the NW range included a 'pantrie' containing amongst other things a meat cupboard, a 'laiche kitchinge' containing an 'almrie' (aumbry or cupboard), a 'brewhous', a 'baikhous', possibly another brewhouse and 'the laich chalmer'. Except for the number of rooms, the description corresponds reasonably well with the excavated evidence. The most likely location for the Period 5 kitchen was at the E end of the NW range, its fireplace perhaps being in the S wall of which nothing now remains. The 'laich chalmer' may have been the ground-floor room inside the NW tower (or 'Watter tower').

The N and E ranges were clearly integral structures. They were connected by a small vaulted lobby, which provided access between the E range and the transe on the S side of the hall and the dais chamber at its E end. There was a similar connection between the first floor of the E range and the room above the dais chamber. On the evidence of fireplaces surviving at two levels in its N wall, the E range originally contained lodgings supplementing the chambers in the hall range. There are references to chambers in the 'east Quarter' in the 1607 inventory, some of them apparently in the upper storeys of the SE tower, these rooms being linked to the E range via the curtain wall and gatehouse. By that time there had been a change in function in at least part of the E range, as is clearly shown by the gun-loop that was inserted at ground-floor level in the mid-16th century. The hay loft and dovecot mentioned in the 1607 inventory and the stable recorded by Lachlan Shaw (1882, III, 299) may well represent later arrangements.

Although Spynic was erected into a free burgh of barony in 1451, the settlement that bore that

designation probably consisted of little more than a small township. As at Rattray in Aberdeenshire, where there are also signs of attempted nucleation (Murray & Murray 1993), the legal status of 'burgh' does not necessarily imply that the settlement had any of the other features normally associated with a town. However, surface finds recovered from the ploughsoil in the field to the S of the palace appear to

indicate a concentration of late medieval occupation of some kind in that area. This interpretation is supported by Blaeu's map of 1654 (illus 2) which depicts 'Spynietoun' lying to the E of the church and SE of the palace, although Pont's original manuscript of some 60 years earlier shows neither the toun nor the church. These were probably added to Pont's map by Robert Gordon (Stone 1989, 202).

5.5 THE FINAL ADDITIONS TO THE PALACE AND ITS SUBSEQUENT DECLINE (PERIODS 5A AND 6)

From the completion of the great rebuilding programmes of the late 15th and early 16th centuries until its final abandonment towards the end of the 17th century, the palace must have undergone many repairs and alterations, many of them minor but some quite substantial. Those whose marks have been left on the architectural and archaeological records include: replacing the W range with two smaller buildings; remodelling the E end of the N range; redesigning the watergate and its passage; inserting wide-mouth gun-loops in all the corner towers and in the E curtain wall; and constructing a crude defensive wall around at least the SW part of the palace.

Although it is difficult to date most of these alterations, it would be reasonable to conclude that few major works were instigated after the death of Bishop George Douglas in 1589. Spynie's final century of occupation was a troubled one, characterized by the unremitting conflict between those in the church who favoured episcopacy and those who opposed it, and for much of the period the palace lay empty or in the hands of constables. It is difficult to imagine major campaigns of rebuilding or renovation being enacted during such a period. Indeed, it is quite likely that most of the work listed above was carried out well before Douglas, most probably under the direction of Patrick Hepburn (1538–73).

The insertion of the wide-mouth gun-loops is usually attributed to Hepburn (Stell 1983, 2; Zeune 1992, 81) which, on the evidence of accepted typologies, seems reasonable. This work was probably a localized response to the turmoil that gripped Scotland in the wake of the Reformation. Narrowing the watergate may have been included in Hepburn's upgrading of the palace defences although this might well date to the 17th century. The erection of the crude wall outside David's tower would have blocked Hepburn's new gun-loops and thus seems to be a

later feature, probably a response to the threatened attack by Monro in 1640 or by allies of Montrose five years later.

During his 35 years in office, Hepburn was probably responsible for other, less security-driven alterations such as redesigning the E end of the N range and replacing the old W range with two new buildings. The last of the Roman Catholic Bishops of Moray, Hepburn continued to live at Spynie despite the Reformation and it would not be surprising if he did all in his power to make Spynie as safe, comfortable and as palatial as possible whilst he was able to enjoy his status.

It is not clear from the 1607 inventory precisely where the 'chalmer under the new kitchine' might have been within 'the west quarter'. The kitchen was probably in the first floor of Structure 3 whilst the 'southhouse under the bell' was perhaps Structure 4. It is possible that the N wall of Structure 3 was widened when the new kitchen was added (Lenoir 1996, 114), but the building's barrel-vaulted basement is a clear indication that it had always comprised at least two floors.

There is conflicting evidence as to whether Structure 3 was a free-standing building. On the evidence of the drain in the passage floor and the windows in the S wall of Structure 4, there was an open area, albeit a narrow one, around Structure 3, whereas a pen and wash drawing by John Nattes (1799) (illus 47) shows the remains of a steeply-pitched roof projecting from the inside face of the curtain wall. This suggests that the upper floor of Structure 3 had been carried over the passage. However, this element may have been a figment of the artist's imagination which, evidently, Nattes employed quite freely (Grant 1898, 178). The curtain wall was in a parlous state prior to its repair in the 1960s. Discerning any relevant clues from early photographs of it is impossible, and the problem remains unresolved.

There is little surviving evidence for pre-Reformation gardens associated with Scottish castles, and, indeed, many of those that post-date the Reformation have left few visible traces (cf Hynd 1984). One of these is Spynie although references to its gardens are few. The earliest of these, which describes the bishop's gardens and orchards, dates from 1556 (RM, 429). In 1565, the garden was valued at £4 per annum and provided winter fruits for the bishop (RM, 435); in 1568 Spynie's gardens, orchards, 'little gardens', greens, herbaria and 'lie garding' are recorded (RMS IV, 489). According to the first Statistical Account (OSA 1794, 628), the palace had the '... best fruit, said to be reared from plants of foreign countries . . .' although the precise source of this information is not known.

There are also references to rabbit warrens (providing a reliable source of fresh meat) in 1568 and 1569 (RMS IV, 489). No archaeological evidence of a warren has been identified, only the burrows still in use in the natural cliff on the old loch side. Furthermore, there were only two rabbit bones within the faunal assemblage and these could represent burrowing animals of relatively recent origin. However, it is also clear from the small number of animal bones recovered from several seasons of excavation that only a small percentage of Spynie's middens have been uncovered.

According to Francis Grose (1791, 113), Spynie had '. . . a spacious tennis court, and parallel to it on the inside, a chapel . . .'. All trace of it may have disappeared by the time of Grose's visit and he may well have been repeating local stories. However, there is a clear reference to this court in Alexander Douglas's 1607 inventory which states that '. . . the kaitspall door is away . . .', cachepell being the 16th-/17th-century Scots word for a tennis court. Its precise location is not clear from the inventory although its position in the text is close to those of the 'garding', the 'laiche gardin' 'the mid littell stabill in the greine', 'the barn', 'the east barnis', 'the foir barnis' and 'the auld yeard', indicating that, as Grose suggests, it probably lay just beyond the S range. The oldest surviving tennis court in Britain is at

Falkland Palace, Fife; it dates from 1539–41 and was restored in the 1890s and 1990s (Dunbar 1999, 205-8). The extant court at Hampton Court dates from 1625 although tennis was played there well before that, by Henry VIII among others (Colvin IV, 144). The Falkland court is of a type known as a *jeu carré* which has a simpler arrangement than the *jeu à dedans*, the most common today which incorporates a large, open gallery across one end and an angled buttress (the tambour) on the side wall. In all likelihood, Spynie's court was a *jeu carré* type.

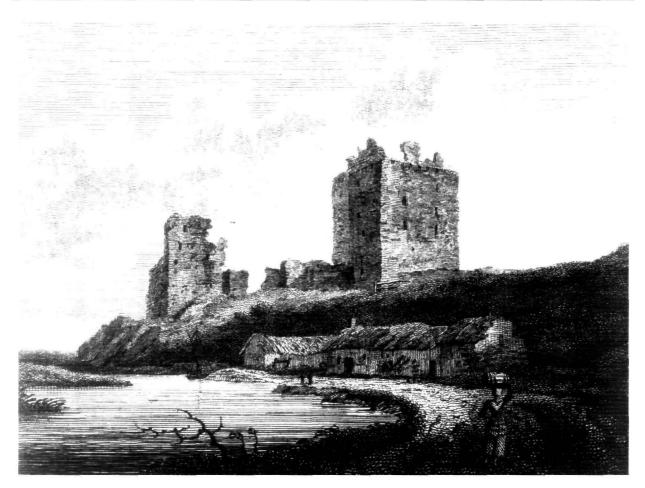
Much of the 17th century was a rather dismal time for Spynie. The palace was unoccupied or in the hands of laymen for a considerable part of that time and would have seen few improvements other than the most essential of repairs and the construction of some hastily erected defences around the S and W sides of David's tower. On the evidence of minimal rubble adjacent to it, this defensive wall may never have been completed, perhaps because of the speed of Montrose's advance in May 1645, arriving in Elgin just two days after defeating a host of covenanters at Auldearn, some 20 miles to the west. However, although the palace was then besieged by the Earl of Huntly (acting for the Marquis of Montrose), he failed to take it. The full extent of the wall (either actual or intended) is not known although it seems not to have extended far beyond the tower, suggesting that even if it had been completed its construction was an ill-conceived venture.

The hall in David's tower would have been adequate for the needs of the Protestant bishops or others who were installed periodically as keepers. As a result, the hall in the N range fell out of use. Consequently, at least some of the rooms within the NW range would have been modified or even abandoned altogether. It appears that new kilns were built there during Period 6, one of them perhaps for iron-working (the excavated evidence was too slight to be certain of this) although the others might have been associated with brewing. The W latrine tower also appears to have fallen out of use around this time, possibly because of the diminished use of the NW range or perhaps simply because its masonry was crumbling.

5.6 THE PALACE ABANDONED

After Spynie ceased to be the bishop's residence, it was stripped of much of its ironwork, doors, timber joists and flooring (Shaw 1882, III, 359). Although dating from well before the final abandonment of the palace, the inventory compiled for Bishop Alexander Douglas in 1607 provides clues to at least some of

the fitments that were removed (Appendix 1, no 1). The stripping implies that the palace was uninhabited although squatters may well have taken advantage of the situation whilst some of the buildings may have been used to house farm animals. Eventually, the palace became prey to



illus 109
An illustration of Spynie Palace at the turn of the 19th century, showing fishermen's cottages at the edge of the loch. Structure 5 is thought to have been one of these houses (reproduced by permission of the National Library of Scotland).

stone-robbers, only David's tower and the small NW tower remaining more or less intact. In the 19th century, the NW tower was converted into a dovecot but none of the other buildings was used again to any effect.

The fishermen's cottages, which stood to the W of the palace in the late 18th century, were a testament to the continuing efforts being made to maintain some navigability in the loch which had become choked by weeds as far back as 1526 (Young 1871, 7). These houses were perhaps the last remnants of the burgh of Spynie, although such a term probably meant little to its inhabitants.

From the 18th century, Spynie's crumbling ruins proved an attraction to antiquarians and others

seduced by a romantic setting (illus 108). The construction of a keeper's lodge (Castle Cottage) by the Barons of the Exchequer in 1828 marked the first stage in the history of the palace as an official ancient monument. Unfortunately, this initial phase of state interest proved short-lived because the barons sold the property in 1838, and it was not until 1963 that the piecemeal consolidation of its masonry began. In 1973 the palace finally came into state care and from 1986 Historic Scotland undertook a comprehensive programme of repair to its remains, which were then laid out as a visitor attraction. Although the vista that now greets visitors is essentially one of deserted and ruined buildings, it takes little imagination to realise that Spynie was once home to a succession of important lords ensconced by its owner, the wealthy and powerful medieval Church.

APPENDIX 1

THE FURNISHING OF SPYNIE PALACE IN THE 17TH CENTURY

by Dennis Gallagher

Among the Guthrie papers, preserved in the National Archives of Scotland, Edinburgh, are several inventories of the contents of Spynie Palace taken during the first half of the 17th century. The earliest of these (NAS GD 188/2/9/1) (below, no 1) was compiled for Bishop Alexander Douglas in 1607, when the palace was in a state of considerable dereliction, having had no bishop in residence since c 1589. It consists of a room-by-room survey of all the palace buildings, its emphasis being on security by detailing the conditions of doors and windows. The furniture listed in this inventory is not that of a household in residence but of permanent utilitarian fittings, such as benches, tables, cupboards and bed frames, that remained when more expensive items had been removed by the previous occupants.

The furnishings listed in the 1607 inventory included those in the old 'laich' hall in the north range, where there was a high table with a form and a 'bak seatt with the standane stuill', two long side tables with fixed forms and two trestle tables. This arrangement enabled all the household to eat together, with the bishop at their head and others seated according to their status within the household. This practice had not been customary for over a century in England, where the head of a household tended always to dine in private, whereas it continued much later in Scotland. A similar arrangement is recorded at Hamilton Palace in 1607 (Marshall 1987, 16). The trappings within the old hall remained in place. It probably continued in use for large feasts and may have served as the dining area for servants and also perhaps as their sleeping quarters. The term 'laich' indicated both its topographical position and its status in relation to the bishop's private hall within David's tower.

Another shorter inventory of the palace (NAS GD 188/2/9/1) (below, no 2) was compiled in 1624, a year after John Guthrie was elected Bishop of

Moray. As with the 1607 inventory, its main concern was security, particularly the condition of the main doors of buildings, although there are occasional references to items of furniture in David's tower. In the hall of the 'gryit tower' were two tables ('buirdis'), one of them described as the high table, together with their forms and two chairs. The existence of a high table implies that the traditional arrangement, whereby the bishop sat at the head of the household, was still practised in the early 17th century. It is possible that the principal dining area of the palace had switched from the N range to David's tower although, as only two tables are mentioned, it seems unlikely that the entire household could have sat there.

Several inventories were taken after Bishop John Guthrie surrendered the palace to Covenanting forces under Major-General Monro in July 1640. At that time Spynie was the residence of the Guthrie family which consisted of the bishop, his wife (Nicola Wood), his three sons (John, Andrew and Patrick) and his three daughters (Bethis, Nicola and Lucretia). The eldest son, John, was minister of the nearby parish of Duffus and in the inventories he is often referred to as the 'parson of Duffus'. The two youngest daughters were married to clergymen: Nicola to Joseph Brodie, minister of Forres, and Lucretia to David Collace, minister of Kinneddar. Every member of the family had some possessions in the palace, even though they may have stayed there only on occasion.

Monro recorded the contents of the palace (NAS GD 188/19/1/11) (below, no 5) immediately after its surrender. His inventory describes the furniture in each room of the great tower, following which is a list of tableware and kitchenware. The rest of the palace is excluded from this inventory. Monro may have thought it wise to omit those parts of the palace occupied by his garrison, who are said to have

plundered its stables (Spalding 1828, 54) and may have engaged in more extensive looting. The contents of David's tower seem to have been left undisturbed by the troubles. When the bishop's final plea to be left in an ecclesiastical capacity in the area failed in 1624, he resigned himself to moving to the Guthrie family estate in Angus and his wife 'causit transport out of Spynnie her haill goodis, geir, inficht and plenishing' (Spalding 1828, 43).

A list (NAS GI) 188/24/12/2) (below, no 7) of objects to be shipped to Dundee is undated although it is probably contemporary with another (NAS GD 188/19/1/12) (below, no 6) compiled in May 1642 by the bishop's eldest son, John, which itemizes those furnishings that were left in David's tower, the chapel and the kitchen. The latter highlights those furnishings that were considered not worth removing. These include the case for the house clock, the stand for a virginal and large wooden objects such as tables, beds and cupboards which could be replaced easily by local craftsmen. Eighteen chairs were packed for transit but ten were left in the palace; the latter were all marked 'Spynnie' with the exception of one 'old big chaire' and 'ane great chaire' which may not have been considered as valuable as the rest. All the soft furnishings and imported goods, such as metalwork which could not be easily replaced, were removed by the Guthrie family. These even included household items as mundane as 'the irons for uplifting timber upon the fires'.

Another list comprises a summary of the goods despatched for shipment to Dundee in William Fraser's bark (NAS GD 188/2/9/12) (below, no 8). This, together with the other inventories of 1642, adds details to Monro's earlier account. In turn, they enable a picture to be built of how the palace looked in the second quarter of the 17th century.

In 1640 the hall of the great tower was furnished with three tables, one having a green cloth whilst the other two had embroidered ('of neidle warke') coverings. Here the bishop's prestige tableware would be displayed. The Guthrie silver included two salt containers, 'a saltfatt double ovirgilt' and a 'litle saltfatt with ane covir double ovirgilt'. Also prominent among the silverware were a flagon for vinegar and 'ane high cup of silver for aquavite'. There were also six silver cups and 20 silver spoons. Other tableware included 'four basens and two lavers' of unspecified material, along with 93 pewter plates. There were 14 chairs, each having an embroidered cushion ('of sewit werke'). Six were great chairs of oak and five were covered with leather. Five of the chairs had arms and were marked

'Spynnie'. There was also a 'little oak chayre', possibly a nursing chair. Other seating included at least one 'hard forme'. At meal times, extra persons could be accommodated at a trestle table, although the presence of small tables, a virginal, a clock 'with the case' and a case with glasses suggests that this chamber was now a dining/drawing room for the family and guests, whilst the 'cloath with uther necessissis for serving of the bairns' adds a more homely note. The clock was driven by falling weights, the 'weightis of the hous clock' being mentioned in one of the inventories. Its case was abandoned when the family departed Spynie, suggesting that it was a narrow, long case clock, a type introduced in the early 17th century (Edwards 1954, II, 82). The term 'virginal' was used at this period to refer to any type of stringed keyboard instrument (Edwards 1954, II, 373). Four pairs of antlers hung on the walls of the hall, a common decoration in Scottish aristocratic houses even at that

The room above the hall in the great tower may have been the bishop's 'study' which is mentioned in the later inventories. This term did not necessarily have its narrow modern meaning but was used to describe the private room or office of the master of a house. It was furnished as a multi-purpose bedroom/living room and study and contained two beds of wainscot and 'carved werke', a settle, a round oak table with three chairs and cushions and a cabinet containing legal papers. The round table may have been a gateleg table, a style popular in early 17th-century England (Edwards 1954, III, 220). The walls of the room were probably panelled because they were hung not with tapestry but with 'a gritt many' maps, including a highly prized universal map, and portraits. Other objects in this room included a telescope ('prospect'), a rare item at this date, and a looking glass. In the adjacent room were two beds and, in 1640, trunks belonging to various members of the Guthrie family, possibly kept in readiness for a rapid departure and perhaps an indication of the troubled times. The trunks mostly held clothes and bedding although one was a 'black gritt trunk conteyning thrie barrell of aquavite'.

Above the study was a room referred to in 1640 as the 'principal' chamber, which was distinguished by the coral-coloured hangings on its wall. Its bed was hung with embroidered curtains and its sheets were also decorated with embroidery. This may have been the equivalent of a 'state' room reserved for important guests. The rooms on the next two floors were also furnished as bed chambers for the family or their guests, rather than servants, as even the two apartments 'above the vault' contained feather beds

hung with curtains and decorated with embroidered bolsters.

Beds were regarded as prime status symbols in a 17th-century house. During the previous century carved, 'four-poster' beds were in vogue, and an old bed head and bed foot which lay in the chamber above the hall in 1607 may have been in this style. In the 17th century bed frames became fashionable: simpler, more utilitarian structures which were hidden by hangings whose richness indicated the owner's wealth. Several are described as 'wenscot' beds: that is, beds having heads made of wooden panels, a style which came into use in England in the early 16th century (Edwards 1954, I, 39). There were 19 beds in the great tower in 1640, at least one in all the rooms except the hall and several presumably in the small, mural chambers. The bed in the bishop's chamber had embroidered hangings. Other details of bed furnishings are known only from the list referring to items for transit and therefore cannot be assigned to any particular room or person. Two beds had yellow curtains, while another had 'pirned' (striped) cushions and an embroidered valance, another had a set of gingham cushions and valance. At the other extreme, two low beds, described in 1640 as 'for servandis', shared the limited space within a mural chamber 'at the principall chalmer duir' with a disused standing bed without its curtains. This is the only mention of servants' beds in the great tower.

Evidence of sleeping accommodation elsewhere in the palace consists of a list of furnishings in the chapel chamber and in the SE tower (in 1640 the latter contained two beds). The commonest coverings for beds were blankets in the form of plaids, although sheets and 'wovin coverings' are also mentioned. Many are not listed as separate items in the inventories but are covered by such general references as 'linnings for bed and boord'. In the 1642 inventory of items packed for transit are specific references to 24 pairs of plaids, 11 pairs of blankets, 13 coverings and 24 pairs of sheets. Another necessary item in a bedchamber was a chamber pot, and 11 were listed in the 1640 inventory.

In 1607 the chapel, which was long out of use, contained a pulpit and a small desk. An oratory 'within the chapel door' is mentioned at this date. The inventory of 1624 mentions 'some broken tymber werke', possibly the remains of pre-Reformation fitting. By 1640 the furnishings are clearly those of the reformed church: a pulpit, a table of wainscot and eight 'deskes' (pews or seats) of fir covered in green. Such fittings are comparable to the

'deskis, stallis, laftis and other necessaris' which were placed in the chapel of Holyroodhouse for the visit of James VI in 1617 (McIvor & Petersen 1984, 260).

The basic furniture of the kitchen in 1640 consisted of 'ane table for dressing', 'a great armoir' and an oven 'for service'. Details of other kitchenware appear in the list of items to be transported to Dundee in 1642 (below, no 7). Utilitarian tableware included pewter trenchers ('trunschoris'), flagons ('stoups') and dishes of various sizes. Most were imported from the Netherlands, being described as 'of flanders wark' although two 'stoups' were from England and another four were Scottish. There were some wooden vessels as well as pewter ones, for the inventory included nine 'tymber stoups lytle and meikle'. No ceramic vessels are listed among the kitchenware and tableware although this does not mean there were none. The only pottery vessels listed in the inventories were two inkwells ('pygs with ink') which were packed along with some of the bishop's papers. Other kitchen equipment included a variety of pots, pans and cauldrons of both brass and iron, including a large cauldron containing 18 gallons of ale ('maskatt') in 1640. There were five spits and an assortment of other kitchen miscellanea, such as two pot hooks and two ladles. The 1640 inventory excludes mention of the contents of the cellars which may have already been seized by the occupying force. Certain provisions remained intact, however, and when the Guthrie family departed they took with them four bacon hams, three mutton hams, six smoked herrings and a pack of butter.

The palace contained a variety of items connected with textile production. These included two spinning wheels ('wool wheelis'), three pairs of 'yeirnewinds' (reels for winding yarn into skeins) and a warping vatt and warping 'stairks' (around which the yarn was wound during warping). Another box contained a loom, ineptly described as 'the haik wheron they weave finges with the great weightes, balles and boodis', and two small hampers held an assortment of distaffs, 'reiles and wheeles'. All of this equipment was packed for removal from Spynie, which suggests that it was used by the family rather than by servants.

The bishop's books were carefully packed in a trunk for transit in 1642 along with 'divers otheris scattered paperis, pamphlets, and thesis'. These were mostly of a religious nature and included two bibles, one belonging to the bishop and the other to his daughter, Bethis. There was a psalm book, 'The Imitation of Christ', together with volumes of 'observances', the latter perhaps the bishop's diaries. Other chests held a history of the Council of Trent, the episcopal register and an 'old Register'.

None of the inventories mentions items of dress in any detail although there are occasional references to articles of clothing. The 1640 inventory lists a 'goane of sutherland grayis for ane man', while that of 1642 has a 'sorset of pleat slerves', the bishop's 'gray gowne' and two 'pitterobes' belonging to his wife.

Six pieces of 16th-century artillery were still within the great tower in 1607, some in various casements and two 'upone the heade of the tower'. At least five of them were made of iron and four lacked their chambers.

DOCUMENTS RELATING TO SPYNIE PALACE

(transcribed by Dennis Gallagher)

1 INVENTORY OF THE CONTENTS OF THE HOUSE OF SPYNIE (1607) (NAS: GD 188/2/9/1)

The inventar of the hous of Spynie delyverit be Georg Dunbar in Spynie at demand of the Bishop of morayis precept invest to him and delyverit be the said georg to James Douglas of Cauldhame In name and behalf of awr Reverend father in god The Bishope of Moray the aithtene day of februair the yeir of god jaj vi^e and sevin yeiris befoir thir witenessis George Duglas burgess of Elgin James Cronnin in Spynie Thomas Sibbald thair Thomas Dunbar thair Thomas Bunk thair and James Law notar public

Laiche hall

Item all the windowis wantis bandis stanchionis ceassis broddis and glassis The hall door lacks lock and key

Imprimis in the auld laiche hall ane hie buird with the forme and bak seatt with the standane stuill tua syde buirdis with the formes fixt thairto Item tua traislis ane fixt firme wantane the leaffis

ane rivin cop buirde wantane doors lokis and key Item ane revin skelf

The chalmer within the said hall Item tua standard tymmer bedis ane of aik the uthe fir with out lastinge ane fir presis but lokis or keyis ane easement thair of aik ane litle settill of aik Item ane door upon the case huit with ane barrel wantane lokis The easement door wantane slot and bande the tua windowis The ane but broddis the uther emptie of irne stanchionis and all the door of the fore chalmer but lok and key

The pantrie

Item ane door but lok and key ane meat almerie with bandis and leaffe but lockis Item ane fixt skelf of fir ane fixt scat wantane the biurde Item ane cheisis radill wantane the shuit abone

The laiche sellar

Item the door thair of lokit but key Item the auld gantrie tree with the trinkit stiull

The laich kichinge

Item ane auld rivin almric but leaff lok or bandis ane kiching door with bandis but the iron door with ane bandis but lok Item tua lousis jestis Item ane clossing window with bandis Item the uter window with tua bandis

The brewhousis

Item ane auld mask fatt with ane stane trothe wantane the door of the hous

Baikhous

Item ane auld troth ane baik house burde ane door with ane

Irne bande wantan lock except ane Rivin [] of lok Beill housis

Item the door with a bar but lok or key thrie fattis ane but a caldrone. Ane auld dryvair panscheon but caldrine ane auld brew heidis

The laich chalmer

Item ane meikill beif fat, ane covir of fir thair ane hakstuk to brek beif tua ither leaffis to covir the fatt ane door but lok bandis or key with ane irne chaiyne The window stachionis The wellhous wantane a door

The Watter tower

Item the chalmer abone the parssonnis housis a door with ane bande but lok

or key but stanchiones to the windowis Item the capehous but door Item the parsonnis hous ane door with ane Iron bande with

The West Quarter

Item in the southhous under the bell ane rivin bed of firr wanton a door the windowis with stanchionis or broddis

The chalmer under the new kitchine

with ane bande of Irne

Item ane door with ane bande wantane door lok or uther clossing buird

Item the new kitchine door wanton a bande lok and key The window thairof emptie of all thingis

The two portall loftis emptie of doors and all

Thingis except ane door and ane bande Item ane bandis tymber yet of fir the enteris to the wyne sellar

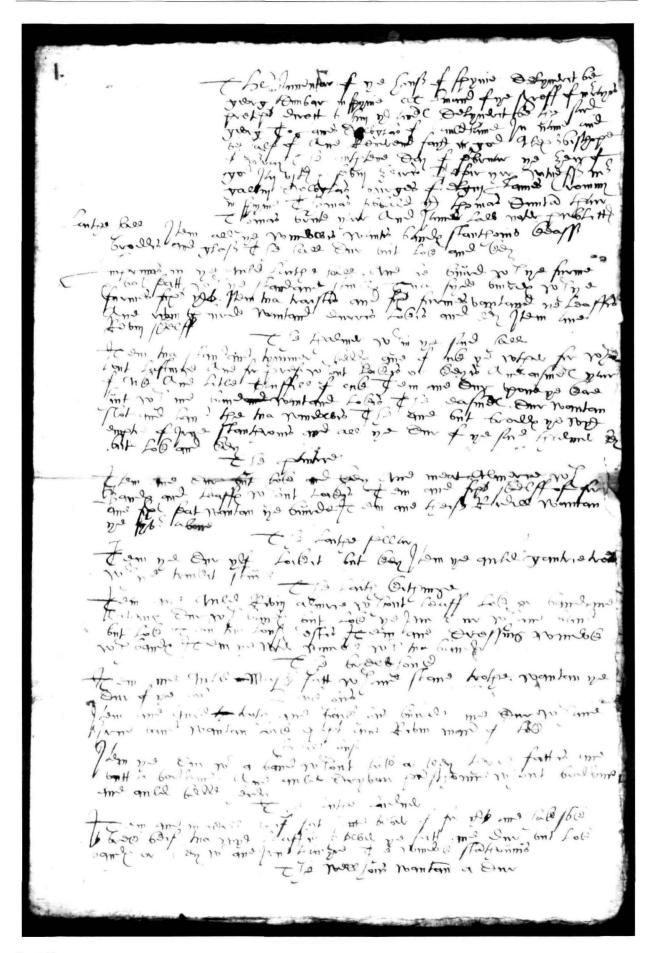
The wyne sellar under Davids tower tem are uter doubill door with two bands and a slot

Item ane uter doubill door with two bandis and a slot but lok or key
Item ane inner Irne yet with ane slot Item the salt hous door lokit

but key Item ane tymber door upone the wyne sellar with two bandis and ane slot but lok Item ane gantreis trie Item the uter tower door of davids tower with lok key and bandis Item the irne yet with ane chayne and ane slot upon the bak thairof

The hall of Davids tower

Item ane doubbill door lokit and bandit Item in the hall ane forme of asche Item ane rivin fir kist with two bandis wanton lok and key Item ane flanders coffer lokit Item ane Irne barrit yet with ane lock wantane key Item the windowis with the Irne stanchionis haill but broik The Caphous with a door wanton lok and key Item the trap door thairof Item ane Irne yet lockit but key that passis to the wall heid Item ane door upon the casehout with ane bande with lok and key The windowis thairof wantane the stanchionnis and broddis



illus 110
First page of 1607 inventory describing the contents of the house of Spynie (reproduced by permission of the National Archive of Scotland).

The chalmer abone the tower hall Item ane doubbill door with lok and key Item ane Case hous at the theik of it with ane door with ane bande wantane ane

and key the windowis is wantane stanchionnis and broik Item ane faldane counter of Aike wanton lok and key Item ane uther counter of ashe but brodis lok or key Item tua aikin chairis Item ane meikill fir press with the bandis wantane two lostingis lok and key Item ane auld bed heide and ane bed fot Item ane forme of fir Item ane parpoune wall wanton some daillis Item within the inner chalmer ane aikin bed Ane Aiken lang seddill Item the door of the parpoune withine with ane snek wantan lok Item the door of the cape hous with door with the Bandis

wantan lok Item the uther capehous with door and bandis and ane casmetis thair with thrie greit bandis The windowis haill wantane glassis Thrie skelffis Item the case hous of the mid chalmer ane door with two bandis wantan lok and key Item ane window but stanchionnis and uther

The mid chalmer the door thairof doubill but lok or key the windowis with irne stanchionnis Item two irne gunnis but a chalmer to the gunnis Item ane uthir Irne gunnis in the casehous chalmeris Item the case hous thairof ane door

but the bandis Item the window thairof wantan stanchionnis and broik

Item the casehous at the theik of the next chalmer with door and bandis with

lok the window thairof wantane irne stanchionnis

The next chalmer

Item the door thairof doubbill aik with bandis wantane ane lok Item ane gunnis with a chalmer Item thrie capehiuttis thairof ane hes

a door wantane lok all the windowis of this housis plenissisit with Irne stanchionnis but broik Item ane uther capehous out with this chalmer with ane door and bande but lok and key the window but stanchionnis or uther tymber warke Item the next window that passis

up the stair wantane Irne warke and uther Item the next windowis sua Item the umest chalmer within the caphous wantis door lok windowis and key The haill windowis wantis stanchionnis and broddis except

ane with stanchionnis Item thrie casehousis with dooris lok and keyis

Item upone the heade of the tower two irne gunnis but chalmeris Item the ceaphous emptie thrie jeastis that cuver the hous selling away and the hous liklie to fall ane singell broken door wantane lok and key with two bandis Item two chalmeris upone the ceaphousis

Item the hous under the bellhous a door with two bandis and the housis rivin

The South Quarter

Item ane doubbill door of aik with two bandis wantan lok and key Item a portall of aik wantan the door Item ane littell aikin counter wantan lok and key Item ane traisle of ane burde Item two auld [paper damaged] for bedis Item ane of the windows needis ane

Irne stanchionnis and the rest haill Item ane fensis door with bandis

The chappell chalmer

Item ane aikin door with lok slot but key Item ane aikin bed but curtinis Item in the bak chalmer thairof ane bed with ane top burd of aik with ane dry easindis[?] thair Item two dooris with bandis

but loks Item ane portall door that passis to the chappell stair wantan lok and key Item ane door with two lidis wantan lok Item the pettie landin with ane door and ane irne bande Item the mart hous with a door wantan lok and key Item the wark hous door with two bandis with ane key but lok the windis but stanchionnis Item the wardrop door of buirdis bandit but lok or key and nothing within it Item the bak wardrop door ane Bandis wantane lok and key Item ane window but a brod

Item the chappell stair ane bandit door with a snek ane lok but key Item ane bandit lokit door that passis to the chappell chalmer with the key

Item the chappell door with lok key and bandis Item ane pulpit Item ane litle desk Item thrie windowis but aucht except Glassis Item the oratour within the chappell door and barrit but lok

Item ane fixt bowier with the dooris with bandis but lok Item the laich stabill with door and bandis a lok but key Item the I[..] But door the meikle loft emptie but door Item the bak wardrope abone the chappell hall ane door but lok bandis or key Item ane uther door on the east gavill with two bandis but lok or key

The east Quarter

[marginal entry: foir tower]

Item in John Douglasis chalmer ane door two bandes but lok and key

Item ane auld fir bed ane aikin chaire and dry close stool ane litel fir coffer windowis but glasis Item the small chalmer ane door but lok key or bande Item the cap hous but loftis Item the dovcatt a fir door with two bandis but lok and key Item the hay loft emptie of door lok windowis and all Item the mid chalmer thairof ane doubbill door with two bandis ane portall door with bandis and snek Item ane auld bed of aik ane uthir of fir with ane presis of aik but leaff or bandis windowis with irne and broik the ane is ane maner of a yett Ane traisle doubbill Item ane singall door Item the midmost hous of the foirtower ane door with ane bande but lok

Item the meikel next chalmer withane door two bandis but lok and key ane bed and bed heidis Item the girnell door lokit the key init and nothing within it Item the litell wald chalmer a door two bandis but lokis thrie auld fir bedis ane fir coffer ane auld portall but door the window but stanchionnis Item the meikel east chalmer door with two bandis but lok and key Item ane portall and snek of irne Item ane bed of aik Item ane parpoune wall with thrie dooris and bandis Item ane door closet stool Item the portall of the inner chalmer but lok key or snek Item ane door of the iner chalmer with two bandis but lok or key Item in the said chalmer ane aik bed Item ane aikin lang stoole ane aikin coffer ane cloisis doubill bed ane auld portall that passes to the [?]well hous but lok key and snek Item the foir stair rivin

Item the littell east chalmer door with bandis but lok or key Item ane brokin portell but bandis Item ane aiken bed Item ane aikin lang stuill Item ane littill coffer of aik Item the window wantane ane stanchionnis Item ane bak portell with bandis Item north ane uther door

Item the foir irne yet with the pertinents Item the tymber yet thairof

with ane rivin lok but key or sprint [?] Item the water yet ane irne yet but lok or slott Item the uter doubbill door of aik lok and key with aicht keyis that oppenis lokis within the place delyverit with twa that wantis lokis

The garding yet out with the place with lokis keyis and bandis

Item the laiche gardin chalmer with lok key and bandis Item the laich

gardin chalmer with door lok and key Item the mid littell stabill in the

greine with door and two bandis but lok or key Item the barne emptic and Thomas Duncan promeiss to delyver the door[is] bandis but lok and

keyis ane still ressantit thair Item the east barnis yet the ane half is with

Thomas Duncan with ane bandeand the uther half away Item the foir barnis yet

with bandis thairof Item the auld yeard yet with two irne bandis Item the kaitspall door is away and the rebettis brokin

This is the [words deleted] inventar abone thairin faithfully collarat

with the principall be me James Law notar publick.

2 INVENTORY OF THE CONTENTS OF THE HOUSE OF SPYNIE (1624) (NAS: GD 188/2/9/1)

Imprimis on the Utter yett ane Iron yet with hinge fastened In ane of the quarters with ane catband Item the tymber yet with ane catband and wantane the key Item In the lytel tower ane aik bed and ane wans... fixit to the portell with ane faltie foir door wantane lok and keyis

lok and keyis

In the small chalmber thairof ane door wantane lok and key and thairin ane aik bed / The caphous above the yet wa tane the ruff / The cheppell loft wantane door lok key and and all ruinous. In the ruff

Item in the small kitchine nar the gryit tower ane aik dressin buirde In the gryit tower ane utter tymber door with lok key and barrs and ane Iron yet within [marginal entry: ane lytel iron yet that goes forth to the ?bartasery]

Item two hall buirdis with thair formes except the hie

buird neadin ane s[paper damaged] and top brak ane [paper damaged]

two chairs ane uther hes top brak ane lytil cist lockit but ane key In the second chalmber ane press In the Inner chalmber of ane tymber bed ane lang settel In the lytel chalmber In the wall ane bed ilk chalmber ane portall

In the first chalmber In aik standand bedis
In the chalmber next the caphous nothing and wantane ane door
In the cheppell ane door lokit with key and some broken tymber

Item the bakyet to the loche lokit [paper damaged] key ane Iron yet within but ane slot

3 TESTAMENT OF JOHN GUTHRIE, BISHOP OF MORAY (1638) (NAS: GD 188/31/1/7)

wark

'The castel and planting be keeped in good order, till my successor peaciablic receive the same, no timber work, destinate for the hous, be removed, and the register with the wreittes, as thei ar in severall boxes be trewlie and without fraude deliverit to him.

Spynic 10 feb 1638'

4 COPY ORDERS REGARDING THE GARRISON OF SPYNIE (15 July 1640) (NAS: GD 188/19/1/8)

Leutennant you sall remaine [with]in this castille of Spynie [with] a

Segant a corprall and twentie three [?]ninscommitties and keep eight men

on the watch nyghtlie and the rest to ly nyghtlie in the tower beside the

utergate you keeping the keys of both gates your selfe being lochet from ten a clock at night till sex in the morning and sie ther be no abuse committat within or without the house as the weill be unfavorable conforme to the articles of Warrand if anie sich abuse do happin punishe the soldiors accordinglie with imprisonment on the gat house

Nixt suffr no min to ly in the tower at any tyme above ten persones and

aspeciallic bewarr to suffer these men formerlie in the house to remain

or enter therin except for onie to tak their leive viz Patrick

[?]Collare

Guthrie and John Rattray

Bot when I ame gone you may deliver ther swords to the Bishope to be givein them being [with]out the gates at their way going

Bot gif anie frend come to the bishop for a visit you may let the [paper missing] at the gate befor thair entae to be redelivered at thair

returnes

Thriddlie be careful that the soldiers get thair dew pay in victuall and moneys and that thay may be furnished and payed by the bishopes in meat drink and good moneyies

Fourthlie if anic forrane enemie happen to come in the countrie you may

take in supplie be ordar from the Committee of War at Elgin being in..

Robert Monro

5 INVENTORY OF FURNITURE IN THE CASTLE OF SPYNIE AS LISTED BY COLONEL MONRO (July 1640) (NAS: GD 188/19/1/11)

Inventar of the moveables within the castle of Spynie the xviii day of July 1640

In the first in the hall thric buirds[word crossed out] gritt buirds with ane grein counter cloth and two of neidle warke
Item thair thric cupburds with ane barcais table and ane uther litle table
Item thair four gritt with a litle ane

Item ane paire of virginalls with thair stand

Item six gritt chayres of oak

Item fyve Inglis leather chayres

Item a litle oak chayre

Item twar oak charis and a footstool

Item fourtein cuscheons of sewit werk

Item a clock with the caisse

Item a caisse with glasses and a hart horne

Item a gritt cist of asch lockit and barrit

Item behind the portell door with cutt and bucatt Item cloath w[ith] uther necessisis for serving of the bairns

Item ane wyne sellar or cave with glasses

Item in the inmost chalmer above the hall ane furnisht standing bed with ane lang settle and ane bed furnisht Item ane aiken counter with the cloath Item a round table of oak with the cloathes Item thrie oaken chaires with the cuscheonis Item thrie gritt leather trunkes with a litle ane quairof thrie of them full of gowns and uther ornanmentis for the bodie and the uther w s.....[?]theris

Item a cabinet of oak with writs Item the universall card with a gritt many mapps and talliduces hanging about the chalmer with a long iron candlestick and a prospect lectroun sandglas with a leathir maill with a drawing candlestick of tymber with werk and a looking glasse In the litle chalmer above the hall [line crossed out]

Item ane candle cist

ane standing furnisht bed with curtein

is with ane wand bed furnisht Item ane table with the cloath Item ane gritt aik chaire and ane inglis leathir chaire and a litle aik

chaire, ane litle furnis with thrie cuscheons

Item ane gritt waster or presse with thric rowins furnisht with cusheonnnis linningis for bed and biurd cods glasses and some uther houshold stuffe

Item ane black gritt trunk conteyning thrie barrells of aquavite

Item ane firre cist belonging to Lucret

ia Guthrie with hir cloathis

Item ane lesser firre cist with naprie

Item ane firre cist with lyning

belonging to Mr Andro Guthrie

Item ane verie litle coffer belonging

to Nicolas Wood with thir lynningis

Item ane litle wyht cist with ane lectron

belonging to Mr Patrick Guthrie Item ane litle cist belonging to Jon

Guthrie

Item two candlesticks quairof ane schort and ane uther long with ane mirrour and a bed with a bedstuill

Item in the principall chalmer ane stand ing bed with curteins furnisht and two feathir beds in the same Item ane roand bed furnisht mair a table with the cloath and two oak chairs with the cusheonnis Item ane inglis clossstuill with some turllis

hanging about the wall

Item in the chalmer within the principall chalmer two standing furnisht beds with ane furnisht lang settle

Item within ane roand hamper twelf

sewit cusheonnis

Item within the hamper nyne sewit

covering for beds

Item ane sewit biurd cloath to serve

the hall

Item ten wovin coverings for beds with thric stand of curtings and ane pand Item ane grein Inglis B... Item fiftein pair of bed playdis

Item ane firre cist full of cloaths for bed and buird with two gritt oak chaires

Item ane cist belonging to Catherin Craig with hir cloathis with ane countercloath above

Item four feathir beds with thir bolsters belonging to the parson of Duffus

Item ane gentle womans sadle with a

greitt padde sadle

Item ane seek and a pack full of wooll

Item ane goane of sutherland gravis

for ane man

Item mair thrie pair of bedplaydis Item in the cabinet within the said chalmer

ane standing furnisht bed

Item thair ane womans sadle with some suitts of old cloaths for bed and back Item in that cabinet ane pair of

bedplaydis with two wovin coveringis Item in the cabinet at the principall chalmer

duir ane furnisht bed bot wanting courtings with two laigh beds for ser

vandis with some old cloaths thairin

Item in the vault chalmer two standing furnisht beds with ane standan bed furn isht

Item two tables with the cloathis with two gritt oak chairs with thir cusheonnis Item thir a pair of bedplaydis Item four gritt cists with thrie Inglis coffers belonging to the personn of Duffus

Item in the cabinet within the said chalmer ane furnisht standing bed, ane table with the cloath and a gritt oak chavre with the cusheon

Item in that cabinet ane Inglis coffer with ane lectroun belonging to the personn of

Item in ane uthir cabinett within the said chalmer ane standing furnisht bed Item ane litle bandit coffer belonging

to Mr Patrick Guthrie

Item in the two chalmers above the vault in the innermost chalmer two standing beds with pandis and courtings with two feathir beds and two bolsters with ane sewit covering ane pair bed playds and a bolster

Item a buird and a gritt oak chaire Item in the uttir chalmer thrie standing beds and a pair courtings two feathir beds two bolsters and a pair of playds and ane aik chair with a table

Item allevin chalmer pottis Item ten brasse chandleris and ane

Item four basens and two lavers Item a dussen of pewtir trunschoris Item two pewtir quart stoups ane pynt stoup ane chopin ane mutchkyn and half mutchkyne stoups all of

flanders wark

Item two Inglis quart stoups of pewtir

Item two pynt stoups and a chopin stoup of Scots pewtir and ane uthir Scots chopin stoup Item nyne tymber stoups lytle and meikle

Item two pewtir dishes and threttein

saucers

Item a mortar and a pistoll belonging to the hous with a mortar belonging

to the persoun of Keith

Item sevin iron potts and ane meikil

brasse pott Item fyve spitts Item a coppir kettle

Item aight brasse panis gritt and
small
Item a frying pan two iron juigis
thrie pair of tongs two iron
cruxis with a brander
Item a caldroun conteinning aig
tein gallons with maskatt and
breeing vessel efferand thairto
Item two ladles and a pair of pott
boullis

Item two gilt silver cups
Item ane uther gilt silver cup with
ane cover

Item thrie litle silver cups but gilt
Item ane high cup of silver for aquavite
Item ane double saltfatt double ovirgilt
Item ane litle saltfatt with ane covir double ovirgilt
Item ane silver flagon for vineger double ovirgilt

Item twentie silver spoonis Item sevin dussen and nyne pew dir plaittis

To Bishop of Moray

Robert Monro

6 INVENTORY OF FURNITURE IN THE HOUSE OF SPYNIE, BY JOHN GUTHRIE, PARSON OF DUFFUS (3 May 1642) (NAS: GD 188/19/1/12)

The inventarie of the undere marked, and othiris things in the houis of Spynie

- - Item ane long table of wenscott upon standeris with ane back and seat, and long frame for the forsyd.

Item ane case for ane houis clock, [?]thrie also.
Item thair ane supportis for virginals.
Item thair six hac[?].... for spe [paper damaged] and g[?]s

- 2 Item in the two chalmberis above the hall thrie beds quhairof two ar wenscott and carved werk. Item thair ane counter of wenscott newwrought Item thair thrie chalmber tables of firr. Item thair fyve chairs with arms being big and having Spynnie upon them. Item ane litle chaire with the same marke all of wenscott Item ane old big chaire thair.
- 3 Item in the two chalmers nixt above that four beds whereof two ar wenscott Item in the cabinet within, ane bed with ane chaire marked Spynie. Item ane great chaire Item ane chalmber table.
 Item in the Cabinet at the door of utmaist Chalmber ane bed with some remainderis of two beds the boyes
 - wer accustomed to lye into
- 4 Item in the vault chamber, two beds of wenscott Item two beds within two Cabinets, ane chaire marked Spynie and thrie chalmber tables.
- 5 Item in the two chalmbers above the vault chalmber fyve beds, and ane table Item upon the great Tower four Iron gates.

Item in the little Tower two beds

Item ane Iron gate on the entrie, Item ane uther Iron gate called the Water gate.

Item in the chappell ane pulpit and table of wenscott. Item thair eight deskes of firr covered all uver with greene.

Item in the Kitchen ane table for dressing, and great armoir, with ane uven for service.

Item all the furn [?]sis with the cope hous and thae cabinets mae ar undre locke and key except the chappell and kitchen

In.... in what con... the houis was for glasse werkes of windowes – and the repair off the wallis

Item ane portal above the hall.
Item portall on the chalmber above that
Item four litle, put in the chalmber above the hall
.... ane great in the chalmber above the hall

Summa of the what is material
Tables great and small — 12
[deleted] — 20
Chaires — 10
Iron gaites — 6
Item the chappell —
Item the repaire of the houis in the windowe
the wallis etc
Item 8
Victals — 3
Chope burds — 3

The inventarie holds of all the keyes ar in John Guthrie his in....., except these of the uter gait, entrie gait, and the chalmber above the vault whiche James Ca... of Crichton James Dunbar chamberlane to my Lord the Erle of Moray, and Mr John Guthrie parsone of Duffus

day and place forsaid signed John Guthrie James Spen James dunbar

7 INVENTORY OF ARTICLES SENT TO DUNDEE FROM SPYNIE (April 1642) (NAS: GD 188/24/12/2)

Inventar of John Guthrie his gear sent to Dundee [and] delivered

Inventarie of these things that be gods grace ar to goe to Dundie from the hous

Imprimis in the p[a]nschione marked with A upoun the head - sevin dishes of pewter vessels Item eight chand leirs Item two paire fynning combes

Item in the panschione marked with B ar sevin yron and brasse potts

Item in the panschione C — ten chamber potts — nine stoupes of tinn, great and small - six stoupes of timber - the mustard dish and skillet Item in the panschione D a yetlene of copper. —

— six pannes — thrie paire of yeirnewinds foot

- and a bed stool

Item in a great dry waire E — thritie and two cushions Item the cards and whole portraits. — Item in sevin boxes that wer in the study with wreates, - with the covering of a bed.

Item in the panschione marked F four bacon hamms. — thrie mutton hamms — six herringes reisted — ane crame full of butter - stookes of offire[?] thrie. - ane panschione rint in two and takin assunder for use Item in the panschione G. trinkets and trers, with the haik wheron they weave finges with the great weightes, balles and brodis

Item in the panschione H ane girdle ane brander two curtaines, ane paire longe, some small timber worke ane little bowie that holds them and some small things, ane sorset with pleat slerves ect

Item in the panschione marked I Nicholas Woods coffer fath[e]r his sache and bridle my fatheris gray gowne ane old plaid and some things belonging to Katine[?] two paire of bed plaides two [deleted] pitterobes belonging to Nicholas Wood Item a panschione the masking fast

The packes ar marked with the letter N ar infra Item in that pack marked with yellow - four fether beds - four bolsters - eight codds - eight paire of plaids - four paire of blankets - four coverings two stand of yellow curtains with there pends – a stand of pirned cushions with a sowet pend - with thric paire of shoes and a canvas wherin they are packed Item in the packe maked with red - four feather beds four bolsters - sixteine cods - eight paire plaids four paire blankets - four covering - a sute of gingelene couchons of fyve leaves with the pand packed in a canvas and thrie paire of sheeves Item in a packe marked with blue thrie feather beds thrie bolsters a dissen of cods - the sewed curtaines with the pand and sewet work of the sheetes of the bed of the principal chamber – thrie coverings – six paire of plaides - thric paire of blankets packed in a canvas a paire of scheetes [and] a covering Item ane packe marked with greene - fyve feather beds thrie bolsters - two cods - the stalk of my fatheris his candlestickes - four basons Packed in a caise ane paire of scheetes and two coverings

Things be themselves ar infra

- The great universall map bind with small cords
- Item two litle hamperis with rocks, reiles, and wheeles
- Item nine chaires with armes of wainscot Item two chaires of ashe Item fyve inglise chaires with ane litle wainscot chaire In whole sevinteine chaires Item ane Inglis chair
- Item an paire of grate Boxes

- Item fyve spitts
- Item the iron for upholding timber for fire
- Item ane warping fatt with the staickes
- Item thrie wand beds
- Item my father his round tasse
- Item ane maund for carving bread
- Item ane case for glasses that hang on the wall
- Item the hard forme wes in the hall with the other thrie 12
- 13 Item ane great hamprie wherin is my fatheris tass with mor sarkes and a packe ane paire of scheetes, and two
- 14 Item two wool wheelis with the storkes
- Item the Caldron 15
- Item barrells seven 16
- 17 Item the lid of the fatt with two masking shooles and two maunds
- Item ane brod
- 19 Item two bowies
- Item Thrie tubs and a cod 20
- 21 Item the backhousbord
- Item the bowting fatt
- 23 Item two fraw lids

The number of Chists and trunkis momento in the little trunke that god willing is to goe along with anuther Is the silver work, the litle rid coffer with the wreates etc

Imprimis in the Bathia fir chist as that in service wer in the studie, with divers otheris scattered paperis, pamphlets, and thesis ane packe with anniserars My father and goodsires great Bible My goodshire his psalme book The Imitation of Christ Mr Boyd Mr Wm Strinthers ane of the volumes of observances with Bathias Bible Item in the longest candle chist capes dishes trincinn and timber etc with the weightis of the hous clock under the locker the head of the candlestickes that fword obscured] in my

fathers window ane close chamber stoole ane case with glasses my motheris band box ten cushions nine glasses My father his sandglass and greene clothe with other trashe with the brone cap under the locker Item in the trunks marked BIM My father his cabinet Item clothes etc the old Register with the litle lectrine for supporting a

book

Item in the trunck that is banded marked MIG linnings wherin amongst otheris ar two and twentie pair of schetes Item ane chist full of linnings for bed and boord, that wes above my father his chalmer in Gen Ma Munro his tyme Item Kathrine Craike hir chist Item Mr Patrick his Chist

Item in the Chist belonged to linres In the locker and packet box with wreates the cover of the great bason ane mortar with two pestells ane bell two porringers ane leanne dishe, under the locker two pygs with ink Item in the body of the chist some bookes and paperis viz hist Coun Trent Reg Moray Artes of parl[?] thrie volumes of spala.. my father and motheris pertinentis bookes worsteds plaides

- Item the litle bandit chist wlith candlestick Item the trunke marked MIG w[ith]out bandes my mother hir clothes for hir bodie Item curtaines pands cover... table The thrie of sewet werke
- Item the trunke banded with iron plaid coverings scheetes etc
- 13 Item in chist called Mr Androrves, plaids coverings schets etc
- The chist wesWoods divers trash

8 NOTE OF THE BISHOP'S FURNITURE SHIPPED (?May 1642) (NAS: GD 188/2/9/12)

Inventar of those things sent by gods assistanned to goe to Dundie in William fraser his barke, fraighted be william kinn..is in Dundie, and intreisted to Johne balfour, The barke is named the William

The Lord in hevine preserve all Item of puncheons sealed and marked

Item of packs

Item trunks covered with black leather

four

Item chests small and great

eight

Item candle chests

Item chaires eighteine Item things put severallie be them selves

Imprimis the universall mapp Item hamperis three

Item raxes

a pair

fyve Item spitts

Item the irons for uplifting timber upon the fires Item the warping fatt with the stairks

Item wand beds

Item the glasse keas that hang on the wall

Item the harthorne hang in the hall with uther three more

Item two woolwheeles with thair starks

Item a caldroun

Item barrells

Item the lid of the fatt with tua masking s...[paper missing]

Item two maunds Item ane creill Item two bowies

Item thrie tubs and a coa [paper missing]

Item the baickhous bourd Item the bowling fatt Item two small lids

GLOSSARY

abone	above	maill	travelling bag; trunk
bande	hinge	maskatt	brew: ale etc
bandit	strengthened with iron bands	maund	basket made of wicker or wooden slats;
barcais	wooden trestle or support		or a platter, made of wooden slats, for
bartasery	battlement; parapet		oatcakes
boullis	pot handles	mutchkyn	Scots quarter-pint (three-quarters imperial
bowie	broad, shallow dish, bowl or small tub;	W	pint)
	barrel for holding water or ale	oratour	oratory
bowier	piscina	pand	canopy over bed
boyes	in this context, probably servants	parpoune	partition
brod	board, shutter	plenissisit	furnished with, provided with
bucatt	fine buckram	prospect	telescope
buird	table	radill	riddle
but	without, lacking	raxes	set of bars to support a spit
card	map	reisted	smoked
catband	iron strap or bar	rock	distaff
cave	case for holding bottles	ruff	roof
chopin	Scots half-pint (1.5 imperial pints)	sadle	settle
cod	pillow or cushion	skelf	shelf
cope hous	store for table ware	slerves	sleeves
crame	pack	sorset	sark, shirt, shift
cutt	length of cloth; quantity of linen or	stairks	wooden uprights around which varn is
	woollen yarn		wound during warping
daillis	deals, planks	talliduces	taille-douce: type of metal engraving
dry waire	cask for transport at sea	trers	trash
fatt	vat	troth	trough
fensis	?fences	trunschoris	trenchers
fraw	basket	turllis	ornaments
gavill	gable	umest	uppermost
haik	heck, part of spinning wheel	warping fatt	tub or trough in which chews of yarn
hakstuk	chopping block		are laid for warping
jestis	joist	woolwheele	spinning wheel
lectroun	lectern	wreates	writs, legal documents
lousis	loose	yetlene	three-legged stool

APPENDIX 2

CACHE OF OBJECTS IN THE WATERGATE PASSAGE

During the removal of infill from the watergate passage a cache of numismatic objects and jewellery and two associated wallets and a textile bag were recovered. Many of the objects are now missing although all are listed here. The latest datable object is a coin of 1886, indicating the *terminus ante quem* of this assemblage, thought to comprise a burglar's cache which was never retrieved. A search in local

newspapers of the late 19th and early 20th centuries failed to uncover any reports of a burglary around that time.

The list is divided into those objects now deposited in the National Museums of Scotland and those mislaid during conservation.

OBJECTS NOW IN THE NATIONAL MUSEUMS OF SCOTLAND

SF refers to object number in small finds report	George III copper penny (1797) (C37)	
C refers to object number in numismatic report	George III copper halfpenny (1806-7) (C38)	
Leather wallet (see Chapter 4.8, no 13)	Copper or copper-alloy forgery of George III silver 1s 6d bank token (1811) (C39)	
Gilded copper-alloy picture frame (SF92), found within wallet	George IV copper farthing (1826) (C40)	
Copper-alloy, leather and cloth purse (SF91)	Victoria bronze penny (1861) (C41)	
	Victoria bronze penny (1861) (C42)	
Textile jewellery pouch	Victoria bronze penny (1862) (C43)	
Silver, glass and stone brooch (SF88)	Victoria bronze penny (1866) (C44)	
Silver, glass and stone earring (SF89)	Victoria bronze farthing (1866) (C45)	
Copper-alloy and glass earring (SF90)		
Charles I turner (1642-50) (C28)	Victoria bronze penny (1872) (C46)	
Charles II copper bawbee (1677-9) (C32)	Unidentified copper-alloy coin (possibly 1862 penny) (C47)	
William II (III of England) copper bawbee (1695-7) (C33)	Franz II of Austria base silver 6 kreutzer (1802) (C49)	
George III copper halfpenny (1770-5) (C36)	Leopold II of Belgium copper 2 centimes (1886)	

(C50)

Chinese copper coin of uncertain type (C51)

Christian VII of Denmark copper 1 skilling (1771) (C52)

Frederik VII of Denmark bronze rigsmontskilling (1863) (C53)

Napoleon III of France bronze 10 centimes (1854) (C54)

Friedrich Wilhelm III of Prussia silver 1 silber groschen (1821–40) (C56)

Friedrich Wilhelm IV of Prussia copper 1 pfennig (1857) (C57)

Friedrich Wilhelm IV of Prussia copper 1 pfennig (1858) (C58)

Friedrich Wilhelm IV of Prussia copper 1 pfennig (1858) (C59)

British Indian Bengal copper quarter-anna (1809–17) (C60)

Victoria (Jersey) copper 1/26 of a shilling (1841) (C61)

Victoria (Jersey) copper 1/26 of a shilling (1841) (C62)

Joao, Regent for Maria I of Portugal, copper 5 reis (1813) (C65)

Nicholas I of Russia copper 5 kopecks (1836) (C66)

Copper halfpenny token of Sherborne, Dorset (1793) (C67)

Bronze medal of Albert Edward, Prince of Wales (1868) (C68)

Victorian copper model half-farthing (1848) (C69)

Copper-alloy toy coin by S G Onions of Birmingham (c 1843) (C70)

Copper-alloy medallion or counter by H Kettle, showing heads of George III and George IV(C71)

Copper-alloy medallion or counter by H Kettle, showing heads of George III and George IV (C72)

Copper-alloy toy coin or counter, based on gold half friedrich d'or of Friedrich Wilhelm III of Prussia (C73)

Brass decorative sequin, probably of middle-eastern origin (C74)

MISSING OBJECTS

Iron and mother-of-pearl buckle

Incomplete iron and mother-of-pearl buckle

Glass, or perhaps plastic, pendant with wolf's head impressed into reverse

Silver and cut glass brooch with large central stone surrounded by six smaller stones

Copper-alloy, glass and ?shell brooch with central round cut glass stone

Oval amethyst-coloured glass brooch with metal attachment

Silver earring with small, central, yellow glass gem above a crescent moon comprising three white polished stones or shells Iron and copper-alloy binding

Copper-alloy coin - Charles I or II turner

Copper-alloy coin with crown over thistle on reverse

Victoria (Jersey) copper-alloy 1/26 of a shilling (1844)

Copper-alloy coin, possibly a penny, with small, round hole and small, square hole

Copper-alloy, double-headed coin with inscription 'KETTL' below the head on one side

Napoleon III copper-alloy 10 centimes (185?)

Napoleon III copper-alloy 10 centimes (1854)

Copper-alloy coin showing Britannia and winged beast with inscription 'IONIKON KPATOE 1819'

Copper-alloy coin with inscription 'SHIEDE MUNZE' (1845 or 1846)

White metal 5 kreutzer (183?)

?Schilling from Hamburg

East India Company copper-alloy half-anna (1845)

Copper-alloy coin with arabic design

2 copper-alloy coins with square hole in centre, probably Chinese

Copper-alloy 1 Canadian cent (1859)

18 unidentified coins

Copper-alloy one halfpenny bank token from Bank of Upper Canada

East India Company copper-alloy token with arabic lettering on reverse over inscription 'X.CASH' (1808)

Copper-alloy medal of Professor Holloway of London, advertising Holloway's Pills and Ointments (1857)

Copper-alloy and glass military-style badge

Copper-alloy token inscribed 'W Gry--n 27 Lombard St', publisher of the National Society and other medals

GLOSSARY

Arris	The external angle at the meeting of two surfaces	Raggle	A groove cut in masonry to receive the edge of a roof
Ashlar	Masonry dressed to an even face and square edges	Rebate	Check or recess cut in a jamb or lintel to receive a door or window
Aumbry	A small cupboard or recess in a wall	Reveal	The plane of a jamb, between the wall
Barrel-vault	A vault of continuous rounded or semicircular profile	Roll	and the frame of a door or window An ornamental strip with a part-circular
Chamfer	The bevelled surface left by cutting away an angle	moulding Saddle-and-	section Capping of a wall-head in which ridged
Corbel	A projecting stone which supports a super-incumbent weight	Stone	saddle-stones alternate with and overlap grooved trough-stones leading to spouts which discharge water through the parapet wall
Extrados	The outer curve of an arch or vault		
Feu	Land held by feudal tenure	Sasine	Seisin, possession
Feuferm	Rent or duty paid for a feudal tenancy	Scarcement	Horizontal ledge in a building, eg to
Gairding	Garden, enclosed land	01	support a timber floor
Groin-vault	Vault formed by the intersection of two barrel-vaults	Slapping Soffit	Secondary opening made in a wall The exposed underside of an overhead
Intrados	The inner curve of an arch	compoi	component of a building, such as an arch, balcony, lintel etc
Jamb	A vertical member at each side of a door-frame or window-frame	Tacksman	Tenant, lessee
Lie	Uncultivated land, used as pasture	Teind	Tithe
Merk	Mark, two-thirds of a pound (13s 4d)	Toun	Town or hamlet
Murder hole	A hole above an entrance through which missiles could be dropped	Transe	Covered passage or gallery
		Truss	Braced timber framework for a roof
Ogee	A double curve, formed by the union of a convex and concave line, resembling an S-shape	Turnpike	Spiral stair
		Tusking	Stones left projecting from a wall-face to allow the bonding of another wall
Oratory	A private chapel in a house	Voussoirs	The wedge-like stones that form an arch
Piscina	A stone basin in which church vessels are washed, usually set in a wall-niche near an altar	Weather stone	Stone projection on a gable or chimney stack just above its junction with the roof, intended to prevent water ingress
Plinth	The projecting base of a wall	Yett	Gate, usually of iron
Portcullis	A defensive gate designed to move vertically in retaining grooves cut in the jambs of a fortified gateway		

REFERENCES

Aberdeen Art Gallery 1987 From Elgin to Aberdeen. The Watercolours of Sophie, Lady Dunbar (1814–1909). Aberdeen.

ALC 1932 Acts of the Lords of Council in Public Affairs, 1501–1554, Hannay, R K (ed). Edinburgh.

ALHTS 1877–1978 Accounts of the Lord High Treasurer of Scotland, (Compota Thesauriorum Regum Scotorum). Paul, J B (ed). Edinburgh.

Anderson, M. L. 1967 A History of Scottish Forestry, 1. London.

Andrews, J 1991 'Pipemakers of the City of York', Clay Pipe Research, 2 (1991), 67-95.

APS Acts of the Parliament of Scotland, 11 vols, 1814-44. London.

Ashurst, D 1987 'Excavations at the 17th-18th-century Glasshouse at Bolsterstone and the 18th-century Bolsterstone Pothouse, Stocksbridge, Yorkshire', *Post-Medieval Archaeol*, 21 (1987), 147-226.

Babelon, J-P (ed) 1986 Le Château en France. Paris.

Baillie, M. G. L. 1977 'An oak chronology for South Central Scotland', Tree-Ring Bulletin, 37(1977), 33-44.

Baillie, M G I. forthcoming 'Appendix A – The Dendrochronology', in Perth High Street Excavations, 1975–1978, SUAT monogr.

Barnard, F P 1981 The Casting-Counter and the Counting Board. Repr Castle Cary.

Bell, R C 1963 Commercial Coins 1787-1804. Edinburgh.

Bennett, H M 1984 'Textiles', in Murray, H, 'Excavation at 45-47 Gallowgate, Aberdeen', *Proc Soc Antiq Scot*, 114 (1984), fiche 3:G5.

Biddle, M & Hunter, J 1990 'Early Medieval Window Glass', in Biddle, M (ed) Object and Economy in Medieval Winchester: artefacts from Medieval Winchester, 1, 44-83. Oxford. (=Winchester Stud, 7ii).

Blaeu, J 1654 Theatrum Orbis Terrarum, sive Atlas Novus. Pars Quinta. Amsterdam.

Blanchet, A & Dicudonné, A 1969 Manuel de numismatique française, 3. Paris.

Bower, W Scotichronicon, Watt, D E R (ed) (9 vols). Edinburgh.

Breeze, D J (ed) 1984 Studies in Scottish Antiquity Presented to Stewart Cruden. Edinburgh.

Brevis Descriptio Regni Scotiae 1847 Miscellany of the Maitland Club, IV, 1, 21-34. Glasgow.

Brinkerink, J P & Veen, M C W 1988 'Gorinchem', in Tymstra & Meulen 1988, 50-63.

Brook, H 1991 'A re-used stem fragment', Society for Clay Pipe Research Newsletter, 32, October 1991, 29-30.

Burns, E 1887 The Coinage of Scotland. Edinburgh.

Caldwell, D H 1991 'Tantallon Castle, East Lothian: a catalogue of the finds', *Proc Soc Antiq Scot*, 121 (1991), 335-57.

Caldwell, D H & Dean, V E 1992 'The pottery industry at Throsk, Stirlingshire, in the 17th and early 18th century', *Post-Medieval Archaeol*, 26 (1992), 1-46.

Caple, C 1983 'Pins and wires', in Mayes, P & Butler, L A S, Sandal Castle Excavations 1964–1973, 269-78. Leeds.

CFA 1995 Unpublished report of resistivity survey and exploratory excavations at Kinneddar (Report no 243).

Chaplin, R E 1971 The study of animal bones from archaeological sites. London.

Chaplin, R E & Barnetson, L 1976 'The animal bones', in Schofield, J 'Excavations south of Edinburgh High Street', *Proc Soc Antiq Scot*, 107 (1976), 229-39.

Charleston, R J 1984 'The Glass', in Allan, J P, Medieval and post-medieval finds from Exeter, 1971–80. (= Exeter Archaeological Reports, 3), 258-78. Exeter.

Coles, J M 1971 'The early settlement of Scotland: excavations at Morton, Fife', *Proc Prehist Soc*, 37 (1971), 284-366.

Colvin, H M (ed) 1963-82 The History of the King's Works, 6 vols. London.

Cordiner, C 1795 Remarkable Ruins and Romantic Prospects of North Britain with Ancient Monuments and Singular Subjects of Natural History. London.

Corre, P 1980 Corpus de jetons armoriés de personnage français, 2 vols. Paris.

Craig, W D 1966 Coins of the World 1750–1850. Racine, Wisconsin.

Cramond, W 1903 The Records of Elgin, 1234-1800, 2 vols. New Spalding Club. Aberdeen.

Crone, A & Fawcett, R 1998 'Dendrochronology, Documents and the Timber Trade: New Evidence for the Building History of Stirling Castle, Scotland', *Medieval Archaeol*, 42 (1998), 68-87.

Crossley, D W 1968 'Glassmaking in Bagot's Park, Staffordshire, in the Sixteenth Century', *Post-Medieval Archaeol*, 1 (1968), 44-83.

Crossley, D W 1990 Post-medieval archaeology in Britain. Leicester.

Crossley, D W & Aberg, F A 1972 'Sixteenth-Century Glass-Making in Yorkshire: Excavations at Furnaces at Hutton and Rosedale, North Riding, 1968–1971', *Post-Medieval Archaeol*, 6 (1972), 107-59.

Cruden, S 1958 St Andrews Castle, Fife, 2nd ed. Edinburgh.

Cruden, S 1981 The Scottish Castle, 3rd ed. Edinburgh.

CSP 1898- Calendar of State Papers Relating to Scotland and Mary, Queen of Scots, 1547–1603, Bain, J (ed). Edinburgh.

Cunninghame, J 1859 The Church History of Scotland, 1. Edinburgh.

Dalton, R & Hamer, S H 1910-17 The Provincial Token-Coinage of the Eighteenth Century. London.

Daniels, J S 1950 The Woodchester Glass. Gloucester.

Davey, P J 1981 'Guidelines for the processing and publication of clay pipes from excavations', *Medieval and Later Pottery in Wales*, 4 (1981), 65-88.

Davey, P J (ed) 1987a The Archaeology of the Clay Tobacco Pipe, 10 (= BAR, Brit Ser 178). Oxford.

Davey, P J 1987b 'Aberdeen', in Davey 1987a, 253-62.

Day, L F 1909 Windows: A Book about Stained and Painted Glass. London.

DES Discovery & Excavation in Scotland.

Didsbury, P & Watkins, J G 1992 'The Pottery from Eastgate, Beverley', in Evans, D H & Tomlinson, D G (eds) Excavations at 33-35 Eastgate, Beverley, 1983–86, 81-120. Sheffield Excav Rept 3, 1992. Dorchester.

Donaldson, G 1974 'The Foundation of Elgin Cathedral', in Maclean 1974, 1-2.

Donaldson, G 1978 Scotland: James V - James VII, Edinburgh History of Scotland, vol 3. Edinburgh.

von den Dreisch, A 1976 A Guide to the Measurement of Animal Bones from Archaeological Sites. Harvard.

von den Dreisch, A & Boessneck, J A 1974 'Kritische Anmerkungen Zurweid eristhoherterechnung aus Langemassen vor und Fruhgeschichtlicher Tierknochen', *Saugertierkundliche Meitteilunge*, 22 (1974), 325-48.

Duco, D H 1981 'De kleipipi in de zeventiende eeuwse Nederlanden', *The Archaeology of the Clay Tobacco Pipe*, 5 (= BAR, Int Ser 106). Oxford.

Duco, D H 1987 De Nederlandsee kleipipj: handboek voor dateren en determineren. Leiden.

Duco D H 1988 'Rotterdam en Schiedam', in Tymstra & Meulen 1988, 143-9.

Dumas, F 1966 'Trouville de Prat-Loas en Plouzane (Finisterre) (Jetons du XVIe siècle)', Bulletin de la Société française de Numismatique, 21, 9 (1966), 96.

Dunbar, J G 1999 Scottish Royal Palaces: The Architecture of the Royal Residences during the Late Medieval and Early Renaissance Periods. East Linton.

Duplessy, J 1966 'Trouvelle de jetons du XVe siècle a Coussay (Vienne)', Bulletin de la Société française de Numismatique, 21, 9 (1966), 96-7.

Durkan, J 1986 Glasgow Cathedral. The Precinct of Glasgow Cathedral. Glasgow.

Edwards, R 1954 The Dictionary of English Furniture from the Middle Ages to the late Georgian period. London.

Egan, G & Pritchard, F 1991 Medieval Finds from Excavations in London, 3: Dress Accessories c1150-c1450. London.

Elgin n d The Album of the Elgin Museum.

Elgin Courant, 13th February 1863.

Engelen, J P A M 1988 'Nijmagen', in Tymstra & Meulen 1988, 135-42.

ER 1878–1908 Rotuli Scacarii Regum Scotorum: The Exchequer Rolls of Scotland, 23 vols, Stewart, J et al (ed). Edinburgh.

Evans, J W & Turner, R 1999 St Davids Bishop's Palace, revised edition. Cardiff.

Ewan, E 1990 Townlife in Fourteenth-Century Scotland. Edinburgh.

Fairhurst, H & Scott, J G 1951 'The Earthwork at Camphill in Glasgow', *Proc Soc Antiq Scot*, 85 (1950–51), 146-57.

Farmer, P G 1979 An Introduction to Scarborough Ware and a Reassessment of Knight Jugs. Hove.

Faulkner, P A 1970 'Some Medieval Archiepiscopal Palaces', Archaeol J, 127 (1970), 130-46.

Fawcett, R 1984 'Scottish Medieval Window Tracery', in Breeze, D J, 148-86.

Fawcett, R 1991 Elgin Cathedral. Edinburgh.

Fawcett, R 1992 St Andrews Castle. Edinburgh.

Fawcett, R 2001 Elgin Cathedral. Edinburgh.

Fawcett, R 1994 Scottish Architecture from the Accession of the Stewarts to the Reformation, 1371–1560. Edinburgh.

Fawcett, R 2001 Elgin Cathedral. Edinburgh.

Feuardent, F 1904–15 Jetons et mereaux depuis Louis IX jusqu'à la fin du consulat de Bonaparte, 3 vols. Paris.

Fleming, A 1948 Scottish and Jacobite Glass. Glasgow.

Forres Gazette, 17th January 1877.

Forsyth, R 1807 The Beauties of Scotland vol 4. Edinburgh.

Fraser, W 1885a The Frasers of Philorth, 2 vols.

Fraser, W 1885b Report on the Muniments of the Right Honourable Archibald William Montgomerie, Earl of Eglinton and Winton, at Eglinton Castle, in the County of Ayr. (=Historical Manuscript Commission, 10th rep, appendix, 1-58). London.

Furgol, E M 1987 'The Scottish Itinerary of Mary Queen of Scots, 1542–8 and 1561–8', *Proc Soc Antiq Scot*, 117 (1987), 219-31 & fiche 1; C1-D6.

Gagnière, S 1974 Le Palais des Papes d'Avignon. Paris.

Gallagher, D B 1987 'Elgin', in Davey 1987a, 272-8.

Gallagher, D B & Price R 1987 'Thomas Davidson & Co, Glasgow', in Davey 1987a, 110-38.

Gilbert, J M 1979 Hunting and hunting reserves in Medieval Scotland. Edinburgh.

Goodall, A R 1983 'Non-ferrous metal objects (except military finds, spurs and pins)', in Mayes P & Butler L A S, Sandal Castle Excavations 1964–1973, 240-52. Leeds.

Grant, A 1993 'The Wolf of Badenoch', in Sellar 1993, 143-61.

Grant, E 1898 Memoirs of a Highland Lady, 1992 edition, Tod, A (ed). Edinburgh.

Graves, C P 1985 Scottish Medieval Stained and Painted Glass, MA Thesis, Department of Archaeology, University of Glasgow.

Graves, C P 1995 'Window Glass', in Lewis, J & Ewart, G Jedburgh Abbey: the Archaeology and Architecture of a Border Abbey, 110-13. Edinburgh. (=Soc Antiq Monogr Ser 10)

Graves, C P 1996 'The window glass', in Foreman, M Further Excavations at the Dominican Friary, Beverley, 1986–89, Sheffield Excavation Reports, 4, 126-44.

Grose, F 1791 The Antiquities of Scotland, 2 vols. London.

Grundy, J, McCombie, G, Ryder, P, Welfare, H & Pevsner, N 1992 Northumberland (=The Buildings of England). London.

Hamilton-Dyer, S 1996 'Bird and Fish Bones', in Lewis, J 'Excavations at St Andrews, Castlecliffe, 1988-90', Proc Soc Antiq Scot, 126 (1996), 671-2.

Hamilton-Dyer, S, McCormick, F, Murray, H K & Murray, J C 1993a 'The bone assemblage and animal husbandry', in Murray, H K & Murray J C 1993, 203-5.

Hamilton-Dyer, S, McCormick, F, Murray, H K & Murray, J C 1993b 'Hunting and fishing', in Murray, H K & Murray, J C 1993, 205-6.

Hare, J N 1988 'Bishop's Waltham Palace, Hampshire: William of Wykeham, Henry Beaufort and the Transformation of the Medieval Episcopal Palace', *Archaeol J*, 145 (1988), 222-54.

Harvey, J H 1954 English Medieval Architects. London.

Harvey, Y 1975 'Catalogue', in Platt, C & Coleman-Smith, R Excavations in Medieval Southampton 1953–1969: The Finds, 254-93. Leicester.

Henkes, H E 1994 Glas Zonder Glans. (= Rotterdam Papers, 9). Rotterdam.

Hewett, C 1980 English Historic Carpentry. London.

Hillam, J, Morgan, R A & Tyers, I 1987 'Sapwood estimates and the dating of short ring sequences', in Ward, R G W (ed) Applications of tree-ring studies: Current research in dendrochronology and related subjects, 165-85. Oxford. (= BAR Int Ser, 333).

Higgins, F C 1892 (repr 1970) Copper Coins of Europe till 1892. London.

Higgins, D A & Davey, P J 1988 A New Recording System for Excavated Clay Tobacco Pipes, Thesis, University of Liverpool.

Higham, R & Barker, P 1992 Timber Castles. London.

Hodgson, G W I 1979 Report on the animal remains excavated during 1975-6 from the medieval levels at the High Street, Perth, Scottish Development Department (Ancient Monuments) unpublished report.

Hodgson, G W I & Jones, A 1982 'The animal remains', in Wordsworth, J 'Excavation of the settlement at 13-15 Castle Street, Inverness, 1979', *Proc Soc Antiq Scot*, 122 (1982), 375-77.

Hodgson, G W I & Jones, P 1983 'Report on the animal remains from the medieval levels', *in* Blanchard, L 'An excavation at 45 Canal Street, Perth 1978–79', *Proc Soc Antiq Scot*, 113 (1983), 514-7.

Hume, IN 1961 'The Glass Wine Bottle in Colonial Virginia', J Glass Studies, 3 (1961), 91-117.

Hynd, N 1984 'Towards a Study of Gardening in Scotland from the 16th to the 18th Centuries', *in* Breeze, D J 1984, 269-84.

Innes, C 1859 The Book of the Thanes of Cawdor: a Series of Papers Selected from the Charter Room at Cawdor, 1236–1742. Spalding Club Publications, 30. Edinburgh.

James, T B 1990 The Palaces of Medieval England, c1050-1550. London.

Jessop, O 1997 Finds research group 700-1700, Datasheet 22: Medieval arrowheads.

Jones, B, Keillor, I & Mande, K 'The Moray Aerial Survey: Discovering the Prehistoric and proto-Historic Landscape', *in* Sellar 1993, 47-74.

Kenyon, G H 1967 The Glass Industry of the Weald. Leicester.

Kerr, J 1990 'Later Medieval Window Glass', in Biddle, M (ed) Object and Economy in Medieval Winchester: artefacts from Medieval Winchester, 386-447. Oxford. (=Winchester Stud, 7ii.)

Labrot, J 1989 Une Histoire économique et populaire du moyen Âge: les jetons et les mereaux. Paris.

Labrot, J 1996 'Un jeton banalisé de Tournai à la légende curieuse', *Le Livre des mereils*, 27 (=Bulletin du Centre National de Recherche sur les Jetons et les Mereaux du Moyen âge), 7-8.

Lawrence, S 1979 'York Pipes and their Makers', in Davey, P J (ed) *The Archaeology of the Clay Tobacco Pipe*, 1, 67-84. Oxford. (= BAR Brit Ser 63)

Lenoir, Y 1996 La Résidence épiscopale de Spynie (Écosse): étude archéologique et architecturale de l'état de la seconde moitié du XV^{ε} siècle. Thesis, University of Paris.

Lewis, J 1996 'Dunstaffnage Castle, Argyll & Bute: excavations in the north tower and east range, 1987-94', Proc Soc Antiq Scot, 126 (1996), 559-603.

Lillich, M P 1978 The Stained Glass of Saint-Pere de Chartres. Middletown, Connecticut.

LMMC 1940 London Museum Medieval Catalogue (= London Museum Catalogues, no 7), Ward-Perkins, J B (ed).

MacCarthy, M R & Brooks, C 1988 Medieval Pottery in Britain AD 900-1600. Leicester.

McCormick, F 1996 'Faunal remains', in Ewart, G & Triscott, J 'Archaeological Excavations at Castle Sween, Knapdale, Argyll & Bute, 1989–90', *Proc Soc Antiq Scot*, 126 (1996), 553-5.

Macdonald, R 1900 'Notes on the heraldry of Elgin and its neighbourhood', *Proc Soc Antiq Scot*, 34 (1899-1900), 344-429.

MacGibbon, D & Ross, T 1887–92 The Castellated and Domestic Architecture of Scotland, 5 vols. Edinburgh.

MacGibbon, D & Ross, T 1896–97 *The Ecclesiastical Architecture of Scotland*, 3 vols. Edinburgh. McIvor, I & Petersen, B 1984 'Lauderdale at Holyroodhouse, 1669–70', *in* Breeze, D J (ed) 1984, 249-68.

McKean, C 1987 The District of Moray: An Illustrated Architectural Guide. Edinburgh.

Mackintosh, H B & Richardson, J S (1980) Elgin Cathedral: The Cathedral Kirk of Moray. Edinburgh.

Maclean, A 1974 (ed) Elgin Cathedral and the Diocese of Moray, 1224-1974. Inverness.

Markus, M 1996–8 Elgin Cathedral: an illustrated inventory of the ex-situ carved and moulded stones, Phase 1 (1996) 9 vols; Phase 2 (1998), 10 vols. Unpublished report for Historic Scotland.

Marshall, R K 1987 'The Plenishings of Hamilton Palace in the Seventeenth Century', Review of Scottish Culture, 3 (1987), 13-22.

Martin, C J M 1987 'Pipes from the Dutch East Indiaman, Kennermerland, 1664', in Davey 1987a, 183-224.

Maxwell-Irving, A 1996 'The dating of the tower-houses at Comlongon and Elphinstone', *Proc Soc Antiq Scot*, 126 (1996), 871-9.

Milner, L 1976 'Bywell Castle', Archaeol J, 133 (1976), 205.

Mitchiner, M 1982 'A Nineteenth-Century Hoard of European Jettons and Coins', *Num Chron*, 142 (1982), 101-16.

Mitchiner, M 1988 Jetons, Medalets & Tokens: The Mediaeval Period and Nuremberg. London.

Morgan, N 1983 *The Medieval Painted Glass of Lincoln Cathedral* (Corpus Vitrearum Medii Aevi, Great Britain, Occasional Papers, 3). London.

Morley, B M 1976 'Hylton Castle', Archaeol J, 133 (1976), 118-34.

Murdoch, K R 1997 'Glass', in Proudfoot, E & Aliaga-Kelly, C 'Excavations at Niddry Castle, West Lothian', 1986–1990', Proc Soc Antiq Scot, 127 (1997), 811-18.

Murdoch, K R 1998 'Glass', *in* Ewart, G J & Baker, F 'Carrick Castle: symbol and source of Campbell power in south Argyll from the 14th to the 17th century', *Proc Soc Antiq Scot*, 128 (1998), 937-1016.

Murdoch, K R 2001 'Glass & Window-lead', in Mitchell, K L, Murdoch, K R & Ward, J R Fast Castle, Excavations 1971–86, 81-87. Edinburgh.

Murray, A. L. 1995 'Preserving the Bishop's Castle, Glasgow, 1688–1741', *Proc Soc Antiq Scot*, 125 (1995), 1143-61.

Murray, H K & Murray, J C 'Excavations at Rattray, Aberdeenshire. A Scottish deserted burgh', *Medieval Archaeol*, 37 (1993), 109-218.

Murray, J C (ed) 1982 Excavations in the Medieval Burgh of Aberdeen 1973–81. Edinburgh. (=Soc Antiq Scot Monogr Ser, 2).

NAS DD27/4363 Unscheduled Monument: Spynie Cathedral, scheduling 1967-1980.

NAS DD27/1214 Scheduled Monument: Spynie Castle, Morayshire. Scheduling and negotiations (unsuccessful) to obtain guardianship, 1924-1969.

NAS DD27/1215 Scheduled Monument: Spynie Castle, Morayshire. Presentation, 1947-1967.

NAS GR 2045/31.

Nattes, J 1799 *Inside View of Spynie Castle: the property of Lord Finlater* (pen and wash drawing), Nat Lib Scot MS 5203 folio 20.

Neill, R M 1963 'The animal remains', in Apted, M R 'Excavations at Kildrummy Castle, Aberdeenshire', Proc Soc Antiq Scot, 96 (1962-3), 223-4.

Newton, P A 1979 The County of Oxford (Corpus Vitrearum Medii Aevi, Great Britain, 1. London.

Nicholson, R 1974 Scotland: The Later Middle Ages, The Edinburgh History of Scotland, vol 2. Edinburgh.

Noddle, B forthcoming 'Mammalian bones from the Bishop's Castle, Scrabster, Caithness'.

NSA 1845 The New Statistical Account of Scotland (15 vols). Edinburgh.

Oakley, G E 1979 'The Copper Alloy Objects', in Williams, J H, St Peter's Street, Northampton excavations 1973–1976, 248-64. Northampton.

O'Connor, D E & Haselock, J 1977 'The stained and painted glass', in Aymer, G E & Cant, R (eds) A History of York Minster, 313-95. Oxford.

Omand, D 1976 The Moray Book. Edinburgh.

OSA 1794 The Statistical Account of Scotland, 10 (ed John Sinclair). Edinburgh.

Peacock, J D, Berridge, N G, Harris, A L, & May, F 1968 Geology of the Elgin District. Edinburgh.

Peers, C 1943 Middleham Castle, Yorkshire. London (repr 1968).

Pirie, E.J. E. 1986 *Post-Roman Coins from York Excavations 1971–81* (=The Archaeology of York, Fasc 18/1). London.

Platt, C 1982 The Castle in Medieval England and Wales. New York.

Pococke, R 1760 Tours in Scotland. Edinburgh.

Pringle, D 1987 Doune Castle. Edinburgh.

Pringle, D 1989 Linlithgow Palace: a Historical Guide to the Royal Palace and Peel. Edinburgh.

Pringle, D 1998 'Rothesay Castle and the Stewarts', J Brit Archaeol Assoc, 151 (1998), 149-69.

Pringle, D 1999 'The Houses of the Stewart Earls in Orkney and Shetland', New Orkney Antiq J, 1 (1999), 17-41.

Purmer, D & van der Wiel, HJ 1996 Handboek van het Nederlands Kopergeld. Vriezenveen: Movius.

Radford, C A R 1953 The Bishop's Palace, St David's, Pembrokeshire, 2nd ed. London.

Radford, C A R 1960 Llawhaden Castle, Pembrokeshire. London.

RCAHMS 1924 The Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland *Inventory of Monuments and Constructions in the County of East Lothian*. Edinburgh.

RCAHMS 1929 The Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland *Inventory of Monuments and Constructions in the Counties of Midlothian and West Lothian*. Edinburgh.

RCAHMS 1933 The Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland *Inventory of Monuments and Constructions in the Counties of Fife, Kinross and Clackmannan*. Edinburgh.

RCAHMS 1963 The Royal Commission on the Ancient and Historical Monuments and Constructions of Scotland *Stirlingshire: An Inventory of the Ancient Monuments*. Edinburgh.

RCAHMS 1971 The Royal Commission on the Ancient and Historical Monuments of Scotland *Argyll: an Inventory of the Ancient Monuments*, 1: Kintyre. Edinburgh.

RCAHMS 1975 The Royal Commission on the Ancient and Historical Monuments of Scotland *Argyll: an Inventory of the Ancient Monuments*, 2: Lorn. Edinburgh.

RCAHMS 1992 The Royal Commission on the Ancient and Historical Monuments of Scotland Argyll: an Inventory of the Ancient Monuments, 6: Mid Argyll & Cowal, Medieval & Later Monuments. Edinburgh.

RCAHMW 1991 Royal Commission on the Ancient and Historical Monuments of Wales *Glamorgan*, 3, 1a: The Early Castles from the Norman Conquest to 1217. London.

Register of the Regality Court of Spynie, 1592-1601 in Miscellany of the Spalding Club, 2. Aberdeen 1842, 117-46.

Rhind, W 1839 Sketches of the Past and Present State of Moray. Edinburgh.

RM 1837 Registrum Episcopatus Moraviensis, e pluribus codicibus consarcinatum circa A D 1400, Bannatyne Club. Aberdeen.

RMS 1882–1914 Registrum Magni Sigilli Regum Scotorum: The Register of the Great Seal of Scotland, 1306–1668, 12 vols, Paul, Sir J B & Thomson, J M (eds). Edinburgh.

Rogers, D J de S 1990 Toy Coins. Wolverhampton.

Rouyer, J & Hucher, E 1979 Histoire du jeton au moyen âge. Paris.

Rowland, T H 1987 Medieval Castles, Towers, Peles and Bastles of Northumberland. Morpeth.

RPC 1877- The Register of the Privy Council of Scotland, ed Burton, J H. Edinburgh.

RRS Regesta Regum Scotorum, 8 vols (1960-), Barrow G W S (ed). Edinburgh.

RSS 1908–82 Registrum Secreti Sigilli Regum Scotorum: The Register of the Privy Seal of Scotland, 1488–1584, Livingstone, M et al (eds). Edinburgh.

Salch, C-L 1979 Dictionnaire des Châteaux et des Fortifications du Moyen Âge en France. Strasbourg.

Salch, C-L 1987 Les Plus Beaux Chateâux Forts en France. Strasbourg.

Samson, R 1982 'Finds from Urquhart Castle in the National Museums of Scotland, Edinburgh', *Proc Soc Antig Scot*, 112 (1982), 465-76.

Seaby, P & Purves, P F 1984 Coins of Scotland, Ireland and the Islands. London.

Seaton, M 1985 Laich o' Moray: Past & Present. Elgin.

Sellar, W D H (ed) 1993 Moray: Province and People. (=Northern Studies, 7). Edinburgh.

Shaw, L 1775 The History of the Province of Moray. Edinburgh.

Shaw, L 1882 The History of the Province of Moray. New edition, enlarged by Gordon, J F S, 3 vols. Glasgow.

Shepherd, I A G 1993 'The Picts in Moray' in Sellar 1993, 75-90.

Simpson, A T & Stevenson, S 1982 Historic Elgin: the Archaeological Implications of Development. Scottish Burgh Survey. Glasgow.

Simpson, W D 1927 The Palace of the Bishops of Moray at Spynie. Elgin.

Simpson, W D 1961 The Castle at Bergen and the Bishop's Palace at Kirkwall: a Study in Early Norse Architecture. Aberdeen University Studies, 142. Edinburgh.

Simpson, W D 1965 *The Bishop's Palace and the Earl's Palace, Kirkwall, Orkney.* 5th ed with revisions by Pringle, D. Edinburgh.

Simpson, W D 1982 Doune Castle. Derby.

Smiesing, P K & Brinkerink, J P 1988 Onder de Rook van Utrecht. Twee eeuwen tabakspijpenmakerij in Lauwerecht (1600–1800). Utrecht.

Spalding, J 1828–9 *The History of the Troubles and Memorable Transactions in Scotland and England.* Aberdeen: Bannatyne and Maitland Clubs.

Spalding, J 1850–1 *Memorials of the Troubles in Scotland and England 1624–1645*. Aberdeen: Spalding Club. Stell, G 1983 Royal Commission on the Ancient and Historical Monuments of Scotland, *Monuments Index:*

Notes on Spynie Palace.

Stell, G & Baillie, M G L 1993 'The Great Hall and Roof of Darnaway Castle, Moray', in Sellar 1993 162-86.

Stewart, J 1852 Miscellany of the Maitland Club. Aberdeen.

Stewart, I H 1967 The Scottish Coinage (revised edition). London.

Stone, J.C. 1989 The Pont Manuscript Maps of Scotland: Sixteenth century origins of a Blaeu atlas. Tring.

Swann, J M 1973 'Shoe Fashions to 1600', Trans Museums Assistants, 12 (1973), 14-24.

Symon 1959 Scottish farming past and present. Edinburgh.

Tabraham C J 1994 Bothwell Castle. Edinburgh.

Tabraham, C J 1997 Scotland's Castles. London.

Talbot, E 1974 'Early Scottish Castles of Earth and Timber – Recent Field-Work and Excavation', Scot Archaeol Forum, 6 (1974), 48-57.

Thomas, C 1982 'The Leather', in McGavin, N 1982 'Excavations in Kirkwall 1978', Proc Soc Antiq Scot, 112 (1982), 392-436.

Thompson, M W 1998 Medieval Bishops' Houses in England and Wales. Aldershot.

Tupan, H 1985 'Een fluitje van een pijpesteel', Pijpelogische Kring Nederland, 8e (1988), 1.

Turnbull, J 2001 The Scottish Glass Industry 1610–1750. Edinburgh. (=Soc Antiq Monogr Ser 18).

Turner, R 1991 Lamphey Bishop's Palace. Llawhaden Castle. Cardiff.

Turner, R 2000 'St Davids Bishop's Palace, Pembrokeshire', Antig J, 80 (2000), 87-194.

Tymstra, F & Meulen, J van de (eds) 1988 de kleipijp als bodemvondst, Pijplogische kring nederland jubileumuitgave. Leiden.

Verhaege, F 1983 'Low Countries pottery imported into Scotland: note on a minor trade. The second Gerald Dunning Memorial Lecture', *Medieval Ceramics*, 7 (1983), 95-9.

Vince, A (ed) 1991 'Blue-grey ware', in Aspects of Saxo-Norman London II: Finds and Environmental Evidence (= Special Paper LAMAS), 12.

Walton, P 1981 'The Textiles', in Harbottle, B & Ellison, M (eds) 'An excavation in the Castle Ditch, Newcastle upon Tyne 1974–1976', Archaeologia Aeliana, 5, 9 (1981), 197.

Watson, W J 1993 The History of the Celtic Place-Names of Scotland, 1993 edition. Edinburgh.

Warrack, J 1920 Domestic Life in Scotland, 1488-1688. London.

Watt, D E R 1969 Fasti Ecclesiae Scoticanae Medii Aevi ad annum 1638, Scottish Record Society, new ser, 1. Edinburgh.

Winston, C 1865 Memoirs Illustrative of the Art of Glass-Painting. London.

Winston, C 1867 An Inquiry into the Difference of Style observable in Ancient Glass Paintings, especially in England, with Hints on Glass Painting. Oxford.

Wood, E S 1982 'A 16th Century Glasshouse at Knightons, Alfold, Surrey', Surrey Archaeol Collections, 73 (1982), 1-47.

Wood, M 1983 The English Medieval House. London.

Wyntoun, A 1872–9 Orygynale Cronykil of Scotland, Laing, D (ed), Scottish Text Society. Edinburgh.

Yeoman, R S 1967 A Catalog of Modern World Coins 1850-1964. Racine, Wisconsin.

Young, R 1871 The Parish of Spynie. Elgin.

Ypey, J 1976 'Mondharpen' ('Jew's Harps'), Antiek, 11(1976), 3.

Zeune, J 1992 The Last Scottish Castles. (= Internationale Archaeologie, 12). Buch am Erlbach.

Index

Aberdeen 3, 4	brewing 3, 12
Act of Annexation (1587) 6, 7	Bronze Age artefacts 17, 166
Alexander of Chisholm 2	Bruce, Robert 170
animal bones 28, 49, 61, 71, 95, 160-2	building materials 159
armorial panels 3, 5, 51, 87-8, 174	contains materials
artillery 184	Camphill, Glasgow, ringwork 167
aranety 10)	Carrick Castle 58
Balgonie Castle, Fife 174	Chalmers, William 2
barony of Spynie 6, 11-12, 173, 177-8	Ciderhall, Sutherland 132
bird bones 163	Clackmannan Tower, Clackmannan 52
Birnie, Moray 1, 168-9	clay pipes 93, 140-4
Bishopric of Moray 1-2, 168	coins 51, 93, 101, 102-13, 192-4
Bishops of Moray 11	Comlongon Castle, Dumfriesshire 174, 175
Adam Bothwell 5, 11	copper-alloy artefacts:
Alexander Bur 2, 11, 88	buckles 113-14, 115
Alexander Douglas 4, 11	lace tags 114-16
Alexander Rose 9, 11	miscellaneous 114, 115
Andrew of Moray 1-2, 11	pins 115-18
Brice of Douglas 1, 11, 26	vessels 117-19
Colin Falconer 9, 11	Covenanters 8, 9
Columba of Dunbar 3, 11	Crichton Collegiate Church, Midlothian 173
David of Moray 11, 29, 170	Grenton Gonegiate Graren, Midiothian 175
David Stewart 3, 11, 13, 51, 174	Darnaway Castle, Moray 3, 77, 165, 176
George Douglas 6, 11, 178	dendrochronology 79, 164-5, 174
Gregory of Moray 1, 11	Deveth church, Moray 1
James Aitken 9, 11	Dirleton Castle, East Lothian 171, 174, 176
John Guthrie 8, 11, 181-3	Dornoch Cathedral, Sutherland 132
John of Pilmuir 2, 11	Doune Castle, Perthshire 41, 58, 176
John of Winchester 3, 11, 88, 173	Duffus Castle, Moray 1, 2, 168
Murdo Mackenzie 9, 11	Dunbar, Thomas, sheriff of Inverness 2
Patrick Hepburn 4-5, 6, 11, 51, 80, 93, 173,	Dunstaffnage Castle, Argyll 171
174, 178	Dunkarnage Gaste, ringjir 171
Richard of Lincoln 1, 11	Earls:
Robert Shaw 4, 11	Alexander, Earl of Mar 3
Simon of Moray 1, 11	Alexander Stewart, Earl of Buchan (the Wolf of
William 11, 168	Badenoch) 2
William Hay 11, 99	Angus, Earl of Moray 168
William of Spynie 2, 11, 88	Earl of Angus 4
William Tulloch 3, 11, 51, 52-3, 173, 174	James Stewart, Earl of Moray 4, 5, 9, 11
Bishop's Waltham, Hampshire 173, 174	James Hepburn, Earl of Bothwell 4-5
Blaeu's Atlas viii, 12, 178	George Gordon, Earl of Huntly 3, 4-5
bone artefacts 124	Elgin, Moray 1-2, 3, 6, 8, 11, 168
Borthwick Castle, Midlothian 174	burgh market 2
Bothwell Castle, Lanarkshire 174, 176	Cathedral 3, 10, 28, 29, 133-4, 169
Brevis Descriptio 2	Maison Dieu 2
en er in erskan ak ena er	

204

Elphinstone Castle, Midlothian 174, 175	Little Inverlochy, Moray 3-4
Ernehill, harbour and fishery, Moray 5	Loch Laggan, Glen Spean, Inverness-shire 169
	Lochleven Castle, Kinross 4
Falkland Palace, Fife 179	Lossie, River 15
Findrassie, Moray 1	
fish bones 26, 49, 61, 71, 95, 162-3	Mary, Queen of Scots 4, 5
fishing 11, 12, 169	marine shells 16, 17, 18, 19, 21, 50, 61, 163-4, 166
flint artefacts 17, 124	medals 102, 113, 193, 194
Forres, Moray 1, 6	Middleham Castle, Yorkshire 89
Freskyn, Hugh de 1, 168	Monro, Robert, Major-General 8, 93, 97, 178, 181-2
Glasgow, Bishop's Castle and Cathedral 169, 173, 175-6	Montrose, Marquis of 9, 93, 178, 179 mottes 167, 168
glass:	
vessel 71, 137-40	Nattes, John 64, 66, 68, 178
window 100, 132-7	New Spynie Church, Moray 2
window, painted, grisaille 28, 29, 132-7, 169	Niddrie Castle, Midlothian 58
guns, hand-held 36	
grisaille see under glass	Pont, Timothy 7, 12, 178
Grose, Francis 10, 172, 179	Popes:
51000, 1101010 19, 172) 172	Honorius III 1
Huntly Castle, Aberdeenshire 4, 8	Innocent III 1, 26, 168
	pottery:
Inverness 1, 3, 4, 9	medieval 19, 23, 26, 49, 68, 71, 93, 95, 168
Castle 4, 88, 173	post-medieval 99, 100, 128, 130
Inverlochy Castle, Inverness-shire 171	prehistoric 17, 21, 125-32
iron:	prematorie 17, 21, 123 32
artefacts 28, 120-22	railway, Elgin to Lossiemouth 14, 99
working 50, 94, 160, 171, 179	Randolf, Thomas 4
Working 30, 74, 100, 171, 177	Rattray, Aberdeenshire 177
jetons 51-2, 102-13	ringworks 167, 168
John the Lardener 3	Rokesbye, Christopher 5
Tz.	Roseisle, Moray 15
Kings:	Rothesay Castle, Bute 167, 171
Alexander II 1	1.11
Charles I 8, 9	saddle and trough flagstones 80
David I 1, 168	St Andrews, castle and cathedral, Fife 169, 170,
David II 2	171, 174
Edward I 2, 29, 170	St David's, Pembrokeshire, Bishop's Palace 174
James I 2	St Duthac's shrine, Tain, Ross-shire 4
James II 2, 3	salmon, Spey 3
James IV 4	salt 3, 174
James V 4	sandstone quarries 13-15
James VI 5, 6, 8	Sauchie Castle, Clackmannan 175
Robert II 2	seals and bulla 124
Robert III 2	Scone, Perthshire 2
William I 1	Shaw, Lachlan 10, 38, 87, 90, 177
Kinloss, Moray 1	shell middens 16, 166
Kinneddar, Moray 1, 5, 7, 11, 168, 170	silver pin 61
Kirkwall, Bishop's Palace, Orkney 171	Skipness Castle, Argyll 167, 169
	Spynie Loch 1, 10, 11-12, 13, 15, 16, 70, 86, 99,
Langley Castle, Northumberland 90	164, 166, 167, 168, 180
lead artefacts 118-19	Spynie Palace:
leather 93, 101, 144-6	architectural stone carving 30, 34, 35, 36, 40-1,
lime 95, 160	49, 52, 56, 57, 58, 59, 62, 63, 70, 72, 76, 77,
Lincoln Cathedral 1	78, 86, 88-9, 91, 150-8
Linlithgow Palace, Midlothian 88, 173, 176	arrowslits 36, 63, 173

Bishop's residence 1-9 'Bishop's well' 100 Castle Cottage 10, 14, 16-19, 101, 180 chapel 29, 33-5, 37, 62, 169, 170, 171, 173 David's tower 3, 7, 8, 10, 13, 23, 27, 28, 30, 37, 38, 41, 48, 51-61, 68, 80, 174-7 dovecot 180 endowment for church fabric 1-2 Gaelic name 13 gardens 5, 6, 9, 10, 179 gun-loops and shot-holes 36, 48, 49, 52-3, 63, 84, 90, 91, 98, 173, 178 history 1-12 hoard from watergate passage 101, 102, 119-20, 192-4 Holy Trinity Church 13, 14, 23, 50-1, 168 inventory (1607) 7, 44, 53, 59, 174, 176-7, 178, 179, 181, 184-7 inventory (1624) 8, 181-2, 187 inventory (1640) 8, 182-3, 187-9 inventories (1642) 9, 183-4, 189-91 kilns 41-2, 43, 45-6, 64, 68, 81, 84, 94-5, 99, 100, 171, 179 Lindsay, Archibald, chamberlain 5 oratory 58 phasing 16 plaster 35 portcullis 10, 87 prehistoric activities 17-19, 21, 23 rabbit warrens 5, 179

road 11, 91-2, 93 round tower, putative 38-40, 41, 52, 171 Rynd, John, gardener 5 scheduled 10 Stewart, James, constable 3 Sutherland, Alexander, castle chaplain 3 taken into guardianship 10-11, 180 tennis court 179 timber castle 2, 23-6, 29, 167-9 timberwork 10, 28, 36, 62, 68, 76, 77, 79, 86, 164-5, 174 wall paintings 10 wells 73-6, 93 window glass see under glass yetts 8, 35, 53, 56, 57, 171, 174 Spynie toun, Moray 5, 7-8, 11-12, 178 Stirling Castle, Stirlingshire 77, 165, 173 stone artefacts: architectural fragments 150-8 cannonballs 61, 124 discs 123-4 hammer 124 lamp 123-4

temporalities of the see of Moray 2, 3, 4, 6, 7 textiles 9, 61, 95, 146-9, 182, 183, 184 Threave Castle, Kirkcudbrightshire 174 trade token 102, 113

Urquhart Castle, Inverness-shire 1, 88