RESEARCH DEPARTMENT REPORT SERIES no. 33-2010 ISSN 1749-8775

# ARCHAEOLOGY & ILLUSTRATORS
# A HISTORY OF THE ANCIENT MONUMENTS DRAWING OFFICE

## ARCHAEOLOGICAL GRAPHICS REPORT

Judith Dobie and Chris Evans

IMAGING, GRAPHICS
AND SURVEY

ENGLISH HERITAGE

Research Department Report Series 33-2010

# Archaeology and Illustrators

## A History of the Ancient Monuments Drawing Office

Judith Dobie and Chris Evans

NGR: N/A



ISSN 1749-8775

## SUMMARY

Over the course of its thirty year history, the Ancient Monuments Archaeological Drawing Office created work that had a wide and lasting influence on, and set standards for, Archaeological Illustration in this country. This report charts the development of illustrative methodology in the Drawing Office and describes how this development was influenced by the work of earlier illustrators. It examines how and why various illustrative techniques and styles emerged and uses anecdote and recollections to describe the milieu in which the Drawing Office illustrators worked

## CONTRIBUTORS

Judith Dobie and Chris Evans

## ACKNOWLEDGEMENTS

We would like to thank the following people for their contributions to this report: David Neal, Frank Gardiner, Daphne Ford, David Honour, Peter Dunn, Claire Thorne, Gilly Jones, Sue Heaser, Debby Fulford, Andrew Mclaren, Kate Morton, Ann Jenner, Jim Thorn and Tracey Croft. We would also like to thank Martin Biddle for providing the photograph of Pitt-Rivers.

## ARCHIVE LOCATION

N/A

## DATE OF RESEARCH

2008-9

## CONTACT DETAILS

Judith Dobie and Chris Evans
English Heritage
Fort Cumberland
Fort Cumberland Road
Portsmouth P04 9LD
chris.evans@english-heritage.org.uk
judith.dobie@english-heritage.org.uk

# CONTENTS

# INTRODUCTION

I was a member of the Inspectorate of Ancient Monuments Archaeological Drawing Office, part of The Ministry of Public Buildings and Works from 1970-1997 and this account is based on my experiences and recollections and the memories of some of the illustrators who worked in the office. It was an important period in the history of archaeology for during this time it changed from being a largely amateur activity with a few paid professionals into a fully professional occupation.

The Drawing Office was central to the development of archaeological illustration. It became the largest group of illustrators working in archaeology in Britain and in the quality of its work and the training it provided, had a wide influence. It seems a good time to write such an account to record how some of the most important and enduring publications from this pre-digital age were illustrated and to note the names of the often anonymous illustrators.

"It is evident how proper engravings are to preserve the memory of things, and how much better an idea they convey to the mind than written descriptions, which often not at all, oftener not sufficiently, explain them. *W. Stukeley, Itinerarium Curiosum, 2nd edition (1776), preface*

There was an archaeological drawing office in the The Department of Ancient Monuments And Historic Buildings from the early 1960s. The two illustrators drew finds from excavations financed by the Deparment during the war and post war years. but it was as a result of two reports published in 1960 and 1963 by the Royal Commission on the Historical Monuments of England that the drawing office expanded and became influential. The1960 report called *A Matter of Time [HMSO 1960]* was a survey of the archaeology of the river gravels in England and drew attention to the great number of sites being destroyed by gravel extraction. This was followed in 1963 by the publication of a list of 850 monuments - earthworks and buildings *[RHME 1963]* - selected from a far larger number which were considered to be at risk or already destroyed. These warnings that the archaeological resource was diminishing had a great influence on the profession and as a result, three directors of rescue excavations, Martin Biddle, Ian Stead and Brian Davidson were appointed within a structure headed by John Hamilton, newly arrived from Edinburgh. This new department focused on the rescue by excavation of archaeological sites threatened with destruction. As well as excavating, the department gave grants to other organisations and employed consultant archaeologists to dig on a fee and subsistence basis. The Archaeological drawing office expanded to provide illustrations for the publication of the results of these rescue excavations.

Geoff Wainwright, who suceeded Martin Biddle, referring to this time writes, " It can not be said, however, that our work programmes on behalf of the Government bore any relevance to the state of affairs revealed by the two reports…. We were left in the main,

to devise and pursue our own research strategies." *[Time Please. Antiquity 74 2000].* The drawing office which had been recruited to draw for the anticipated reports stuck more closely to the remit but it too worked on more than just the rescue excavations.

The idea of the specialised archaeological draughtsmen doesn't go back far, starting perhaps in 1880 when Lieutenant-General Augustus Pitt-Rivers, who is regarded as the first modern archaeologist, started excavations on his estates in Dorset and Wiltshire. He had as a dictum 'Describe your illustrations do not illustrate your descriptions', which explains his style of publication. His illustrations were not ancillary but the core of the report, the text providing a commentary on the drawings. His drawn sections of Bokerly Dyke and Wansdyke present the strata in a conventualised form. [*Excavations in Bokerly Dyke and Wansdyke, Lietenant- General Pitt-Rivers Dorset, Wilts, 1888]*. The drawings show us the soil as seen through the excavator's eyes and his interpretation of it. Although they were drawn by his draughtsman and not by himself, they still convey the general's terse, emphatic, decisive style. They are statements in a new visual language. In the same way, the finds illustration in the publication was far in advance of its time in accuracy, precision and scale; the pottery sherds for instance, were shown accompanied by their sections.

Before Pitt-Rivers there was no clearly defined discipline of archaeological draughtsmanship. Drawings of antiquities, sites or architecture conformed to the general conventions of draughtsmanship of the time. As for publication, Professor Stuart Piggott regards Canon W. Greenwell's report of 1877, 'British Barrows'*, [British Barrows, 1877 with George Rollieston. London*] as not untypical of the standards of archaeological publications of the time. It describes the excavation of 300 barrows but includes no plans or sections and illustrates only a fraction of the grave goods. *[Antiquity Depicted; Aspects of Archaeological Illustration; 1978 Thames and Hudson]*

However, there were outstandingly illustrated catalogues of finds, for example, John Evan's two books Ancient Stone Implements and Ancient Bronze Implements published in 1872 and 1881*, [The Ancient Stone Implements, Weapons and Ornaments of Great Britain. 1872. London. Longmans], and [Ancient Bronze Implements, Weapons and Ornaments of Great Britain and Ireland 1881. London. Longmans],* or the lovely coloured lithographs by Orlando Jewitt of the Witham and Battersea shields and the Wandsworth bosses published in 1863. *[Horae Ferales or Studies in the Archaeology of the Northern Nations. John Kemble 1863 London.]* As was common practise at that time Jewitt was not only an illustrator of archaeological finds. He drew for Joseph Hooker's flora, engraved wood blocks for George Bentham's Handbook of British Flora and worked with the Gothic revivalists Pugin, Parker and Bloxham as well as providing illustrations for The Archaeological Journal.

Archaeology was slow to develop its own graphic language. From the renaissance onwards advances in anatomy, surgery, botany, and geology, required a visual language to collate, categorise and present information and in response they developed their own specialised forms of illustration and codes of conventions. Botanical illustration in particular rapidly acquired a competency and accuracy in response to the needs of herbalists. Obviously, for example, it was important to be able to identify the poisonous hemlock from its close relation, parsley. Stone antiquities such as flint arrowheads or

*Figure 1: Lieutenant-General Augustus Pitt-Rivers, who is regarded as the first modern archaeologist, started excavations on his estates in Dorset and Wiltshire. Before then there was no clearly defined discipline of archaeological draughtsmanship. In addition to carrying out his own excavations he was the first Inspector of Ancient Monuments. The attached signature is believed to be taken from one of Pitt-Rivers' letters and the photograph is reproduced by kind permission of Martin Biddle.*

-stone axe heads, were not illustrated as a separate category of object but were included in catalogues with minerals, fossils, crystals and shells and were called "formed stones". Their use and age were not understood. Their recognition as manufactured objects and that of fossils as extinct organisms, came about at the same time. Gradually as the nature of the objects was appreciated and in response to the need for a corpus of material from which typological and taxonomic systems could be developed and presented, accuracy and faithful delineation increased. A driving force in the illustration of finds must have been the growing interest in numismatics. William Camden's Britannia of 1590 has four engravings of British coins and the number of coin illustrations increased in each subsequent edition.

By today's standards, the degree of accuracy required was not high. This was not because of an inability to draw accurately but because of a failure to understand the subject. For example, the German illustrator Matthaus Merian's seemingly accurate view of Notre Dame of 1635 is drawn through 17th century eyes and shows a lofty, symmetrical building with large, rounded, windows. The realisation that the buildings of the Middle Ages were concepts of subtlety showing an internal stylistic development from Romanesque to perpendicular grew slowly. John Aubrey was instrumental in devising an architectural taxonomy. The careful observation of detail in his sketches allied to examples dated from documentary sources provided a framework. 'The windows ye most remarqueably hence one may give a guess about what time the building was.' He could date the building from the shape of the window arch and the tracery.

Although knowledge came gradually architectural draughtsmanship was well advanced. Methods of drawing plans, sections, elevations and perspectives were all available and once styles of architecture were understood these could be applied to medieval buildings and to the fragments of Roman architecture which survived. Roman mosaics were in a classical idiom easily comprehended and were often well portrayed. For instance Michael Burgher's painting of the Stonesfield pavement of 1712 or George Vertues of the Littlecote mosaic of 1730.

It took time for field monuments to acquire the same graphic language. They are elusive, difficult to see and hard to understand. Even today, when the form of prehistoric monuments is better understood it needs a subtle, skilled illustrator to explain them graphically. In the 17th century surveying was a gentleman's pursuit, taught at the Inns of Court as a pleasant pastime. It took time to acquire professionalism. That came with William Roy who is regarded as the founder of the Ordnance Survey. He began his career as a surveyor in Scotland in 1747-55, employing, amongst others, the artist Paul Sandby in his mapping project. There was a tradition in England from the 17th century onwards, of combined topographical and antiquarian draughtsmanship. Roy's book, *'The Military Antiquities of the Romans in North Britain'*, a study of Roman field monuments was completed by 1773 and contained fine plans of forts and camps. With such publications antiquarianism moved towards archaeology. A method was evolving to express the shapes, volumes, textures and colours that are archaeology.

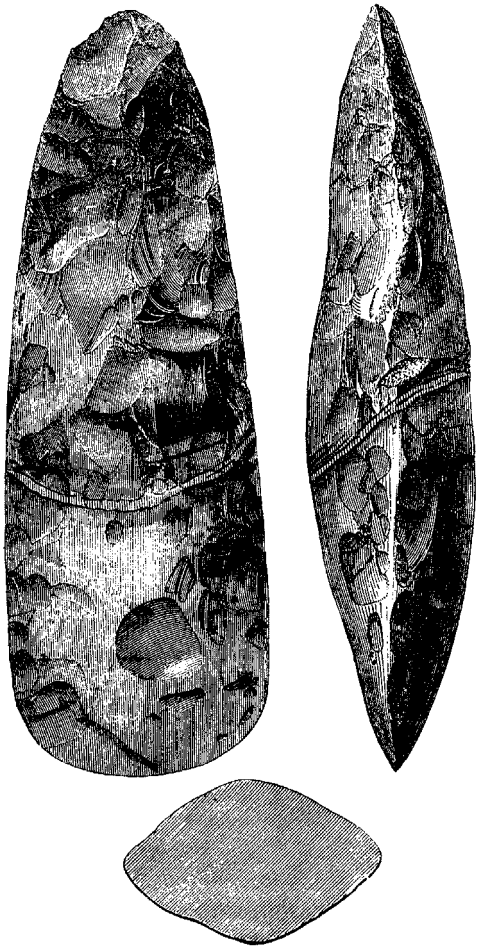


*Fig 2: A late nineteenth-century example of archaeological illustration, this fine woodcut of a flint axe was engraved by Mr Swain of Bouverie Street. It was published in* ***The ancient stone implements, weapons and ornaments of Great Britain****. Evans, J. Longman, Green and Co., London. 1897.*

## THE ARCHAEOLOGICAL DRAWING OFFICE

Although there had been this slow start to the specialisation of archaeological illustration by the 1960s when the archaeological drawing office of the Ministry of Works was founded there were well established methods and conventions for finds illustration, plan and section drawing and for recording buildings and field monuments. The largest number of archaeological Illustrators in Britain at this time was in the British Museum but they were not a coherent group. The different departments were separate kingdoms and an illustrator in Greco-Roman might never encounter or even know the name of an illustrator in Medieval and Later. There were no official meetings or exchange of ideas. Illustrators worked at The Museum of London but its drawing office was small and remained so until much later when the field team was formed. In addition there were one or two illustrators in the archaeological departments of universities and in provincial museums and in the offices of the Royal Commission working on maps and plans. Ian Scott was the very first illustrator employed by the Royal Commission on the Ancient and Historical Monuments of Scotland. He started work in 1959 in the Edinburgh office and by the end of the 1970s was in charge of a staff of seven. Trained as a sculptor, he specialised in the recording of carved stones and his drawings were well known and much admired. At the Institute of Archaeology, part of London University, Harry Stewart was the drawing tutor. The Director, Professor W. F. Grimes who was renowned for his fine draughtsmanship also worked with the students. Gilly Jones [March], who was employed in the drawing office from 1964-72 and who had studied at the Institute, remembers Professor Grimes building up the tones on his drawings with fine lines and cross hatching to show every variation in texture and form. A method she had to abandon when she joined Ancient Monuments and adopt the Drawing Office's more economical style.

In the Department of Ancient Monuments the archaeological drawing office was not the only group of draughtsman. There was an established drawing office of 15-20 architectural illustrators, the Ancient Monuments architects drawing office. They supported the architects of the department by making surveys of listed sites and by drawing plans for publication, mainly for guide books and they sometimes developed material for exhibitions. Although there was some cross over, the nature of the work of the two drawing offices was different and called for different graphic styles and expertise. There was an undertow of rivalry between the heads of the offices, which continued for many years. I remember only one illustrator crossed the floor and that was Daphne Hart [Ford]. She started in the architects' drawing office in the beginning of 1969 where she described the work as' pleasant but not particularly intellectually demanding'. She then joined the archaeological illustrators for a short time and late in 1969 when Alan Cook became head of the architects' drawing office returned to work with him on "The *History of the King's Works".* Daphne regarded Alan Cook's appointment as a turning point in the analysis and recording of historic buildings. Until then the worlds of architectural research and archaeological research were seen as largely unrelated disciplines but from that time the skills of archaeological recording "the noting and close recording of minute changes within the fabric of the building which when analysed can shed light on earlier building phases." were brought to the study of historic buildings.

*Figure 3: A plate brooch from the Guide to the Antiquities of Roman Britain, British Museum, 1958. This illustration shows the use of conventions such as diagonal lines and dots to represent the colours of the inlaid enamel.* Reproduced by permission of the Trustees of the British Museum.

Elizabeth Fry-Stone [Meikle] was the first illustrator appointed to the new archaeological drawing office and David Neal joined her in September 1961. As a teenager David had worked on Sheppard Frere's excavations at Verulanium. He lived locally and remembers how he hung over the barriers of the excavation day after day fascinated by the archaeology until he was noticed and asked if he'd like to take part. David, who went on to become an expert on Roman mosaics, recorded his first mosaic in 1958 on these excavations, drawing it on graph paper and presenting it as a surprise to Sheppard Frere. Both he and Elizabeth had studied at art school. Initially, he says that when drawing small finds with a dip pen his lines were thick and clumsy but he admired Elizabeth's fine skills and learnt from her. The find drawings of C.O. Waterhouse who illustrated catalogues for the British Museum in the 1930s, 40s and 50s were another influence, though David remembers thinking they were a little bland and trying to inject more contrast into his own drawings. At the Department of Ancient Monuments and Historic Buildings some of the Inspectors of Ancient Monuments drew pottery and plans and stratigraphic sections - notably Gerald Dunning - but no one else was trained artistically as they were.

Their appointments chimed with current attitudes to illustration in archaeology. At that time there were few guides on how to write and publish archaeological reports. Practical archaeology was not taught on every university course and students might pass their degrees without ever working on site. There were two publications that archaeologists followed, 'Field archaeology' by RJC Atkinson *[Field Archaeology RJC Atkinson, Methuen]* first published in 1940 and Mortimer Wheeler's book - *'Archaeology from the Earth', published in 1954. [Archaeology from the Earth. Mortimer Wheeler. 1954 Oxford University Press].* Atkinson's book was prosaic and practical but Mortimer Wheeler's book which was highly influential, was inspirational.

In his late teens Wheeler had considered a career as an artist and when his schooling ended had spent much time in art galleries and museums. When in 1907 he won a scholarship to study classics at University College, London he had a special arrangement to attend classes at the Slade School of Art. His artistic flair and experience can be seen in his site record drawings.

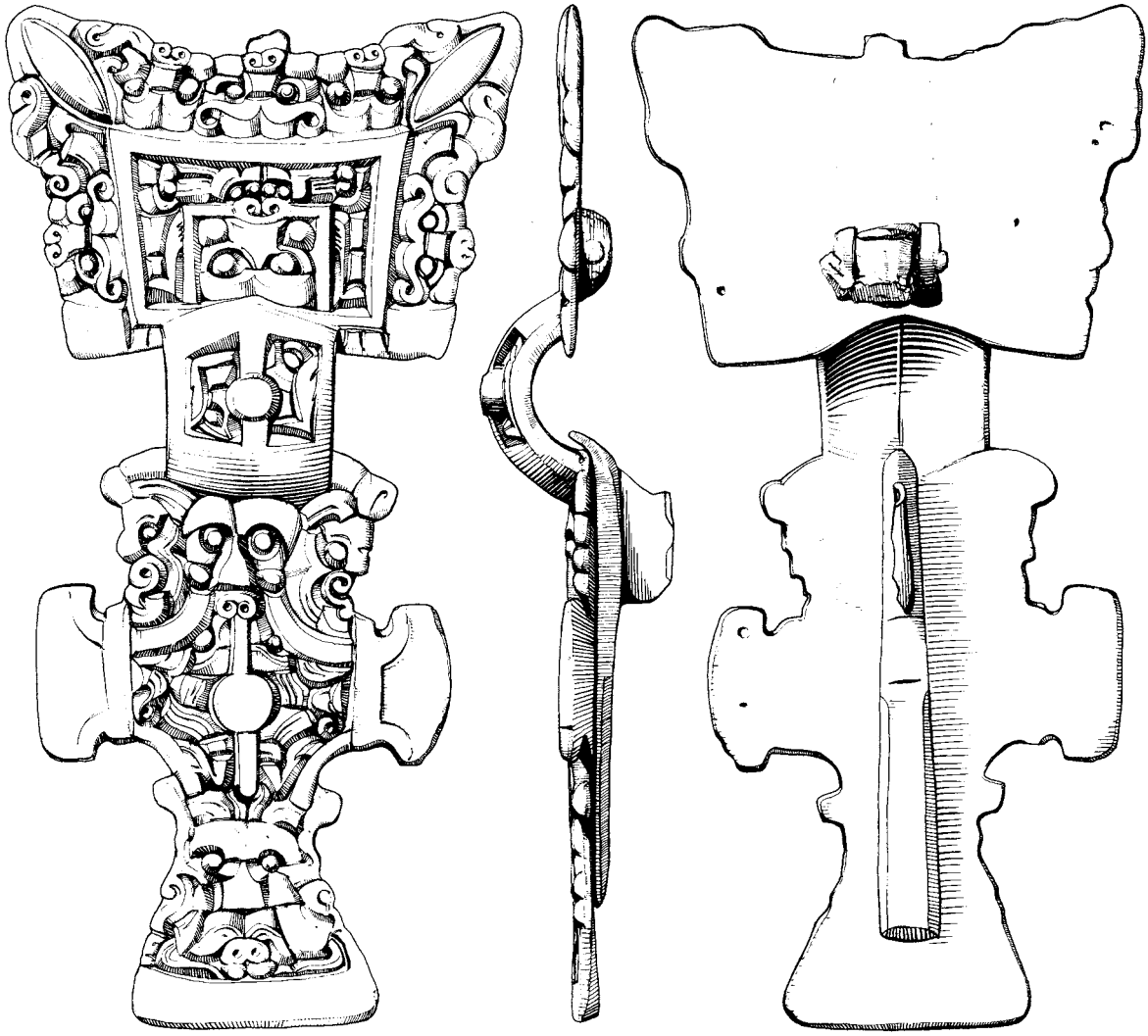


*Figure 4: A great square headed brooch, Broughton Lodge, Nottinghamshire. Scale 1:1 (Frank Gardiner)*

He saw the archaeologist's primary function as a recorder, primarily a pictorial recorder. He believed that Illustrations should lead the text and that the clarity of illustrations was as important as the clarity of literary style. While the artistic appeal of an archaeological drawing was not of primary importance, the importance of the aesthetic quality was not negligible. He saw the archaeological finds illustrator as an artist in the orthodox and creative sense and appreciated the importance of illustration in helping the archaeologist communicate his ideas. Atkinson also regarded the text of the report as a commentary upon the illustrations for - 'They are a far more vivid and economical medium of description than written text.'

It was in this climate that the first illustrators to the Inspectorate of Ancient Monuments were appointed. Arnold Taylor, who commissioned many of Alan Sorrell's reconstructions for the Department, was the Chief Inspector of Ancient Monuments and he interviewed both Elizabeth Fry-Stone and David Neal. The mood of the time was to look for Wheeler's 'artistic, creative draughtsmen'.

## THE CREATION OF A STYLE

Claire Thorne who worked in the office from 1984 to 1986 and came from the Museum of London drawing office where she had been the senior illustrator writes - The Ancient Monuments Drawing Office had a strong house style. A mapping pen was used to draw with which gave the illustration an illusive quality that was difficult to achieve and needed much practise. The best finds drawings were lively and accurate with tapered fine lines and bold shadows. Learning to draw in this way you were learning a craft. The drawing had to be accurate with adequate projection of views so you could recreate the object never having seen it. The style forced decisions about how to use shading to show detail, texture and the structure of objects. It was an abstract language of lines and dots to describe smooth, scratchy or worn rubbed surfaces and raised or sunken carved decoration and other detail. You needed to be decisive and clear about how to proceed because if you were not, having loaded the pen with ink, if you hesitated, it would dry on the tip and spoil your line. It was very satisfying when the pen went well and a struggle when it didn't respond and the lines were thick and wouldn't trail off gracefully. I liked the dramatic way shadows could become black shapes and you could make areas visually rise or fall.'

David Neal's test, when he was head of the drawing office, as to whether he would employ an illustrator or not was the quality of their pen line. He expected illustrators to have an art school education and be able to draw accurately in a linear style. People did

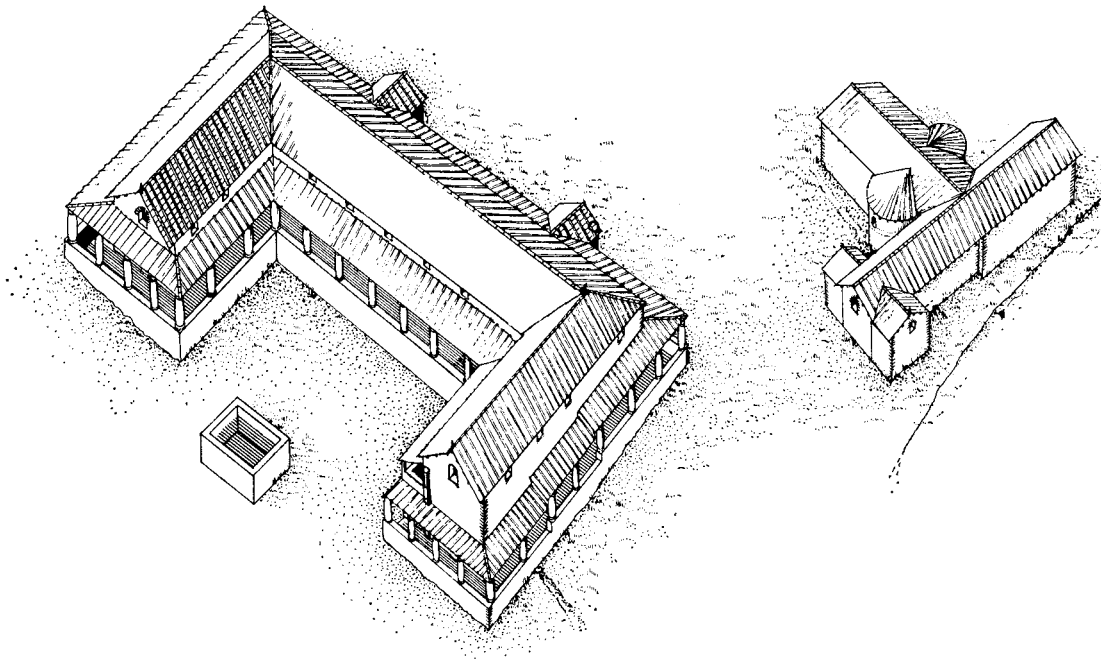


*Figure 5: An isometric reconstruction of the Roman Villa in Gadebridge Park by David Neal.*

come from other backgrounds some through archaeology but art school was the usual route. One was given a months trial and so good was David's eye for an illustrator that few people failed the test. At one time he taught archaeological illustration at an evening class at Bishop's Gate Institute near Liverpool Street Station and this is where Jim Thorn, who worked in the drawing office from 1967-1985? learnt to draw. Claire Thorne also attended. She remembers, at first, how hard she found it to draw with a mapping pen and that David took a certain satisfaction in his class's struggles.

## Drawing Pottery

Pottery drawing is often thought of as the easiest form of archaeological illustration and that it can be learnt by almost anyone. However, when drawn by a good illustrator with a sure firm line and a feeling for surface texture an expressive and sympathetic drawing can be made, far removed from the basic, diagrammatic illustrations often thought acceptable. After all, hand made pots often bear the prints of the potter and deserve more than a mechanistic diagram.

The systematic sectional illustration of pottery, where half the pot is shown in section was first used by Samuel Lysons in the 19th century and formulated by Sir John Evans in his report ' On Roman remains at Boxmoor' published in 1852. *[On Roman remains found at Boxmoor, Hertfordshire 1852 Archaeologia Vol XXXIV pp 394-398]* John Evans recorded the pot profiles by first making a plaster cast of the sherds and then slicing it open. Mortimer Wheeler telling this story in Archaeology from the Earth, said it reminded him of how the delights of roast pork were discovered - according to Charles Lamb in The Essays of Elia, - by the burning down of the swineherd's cottage.

We used the style rather reluctantly disliking its diagrammatic quality. Sometimes we put more work into the drawing than the archaeologist or specialist appreciated. I remember when drawing Saxon buckleurns from Mucking a site in Essex that Tom Jones the site co-director threatened to cut out the lines on my drawing that he thought were superfluous. Later, when drawing Roman pottery for English Heritage's Central Excavation Unit our drawings were returned for us to scrape out the lines we'd used to express the form. The specialist believed they made the wheel thrown pots look hand made.

We thought, of course, of the drawings we made as our drawings and the sites they came from as our sites. The archaeologists thought of the drawings as their drawings and the sites as their sites. Both sides might have been surprised by the others feelings. This is perhaps why in spite of recognition of the primacy of illustration in an archaeological report the artists name is often omitted from the publication or else included in a list of minor acknowledgements. David Neal, who was not easily bettered, tells of working with the medieval pottery expert John Hurst on a book of painted, imported Spanish pottery from Plymouth. It was a particularly difficult job as the soil conditions had destroyed the surface lustre of the pottery but by using a blue ultra-violet lamp David was able to recover the ghostly traces of paint and reconstruct the decoration. He considered the pottery report to be a joint endeavour and was hurt and offended when his name was omitted from the published book. He confronted John Hurst. " If you ever again do this

to me I will never again work with you."-…. After that they had a long productive working relationship spending time each year in Holland working on H. J. E. Van Beuningen's collection of medieval pottery and co-authoring the standard book, Pottery Produced and Traded in North-West Europe 1350-1650 and many other papers. We should all be so straightforward.

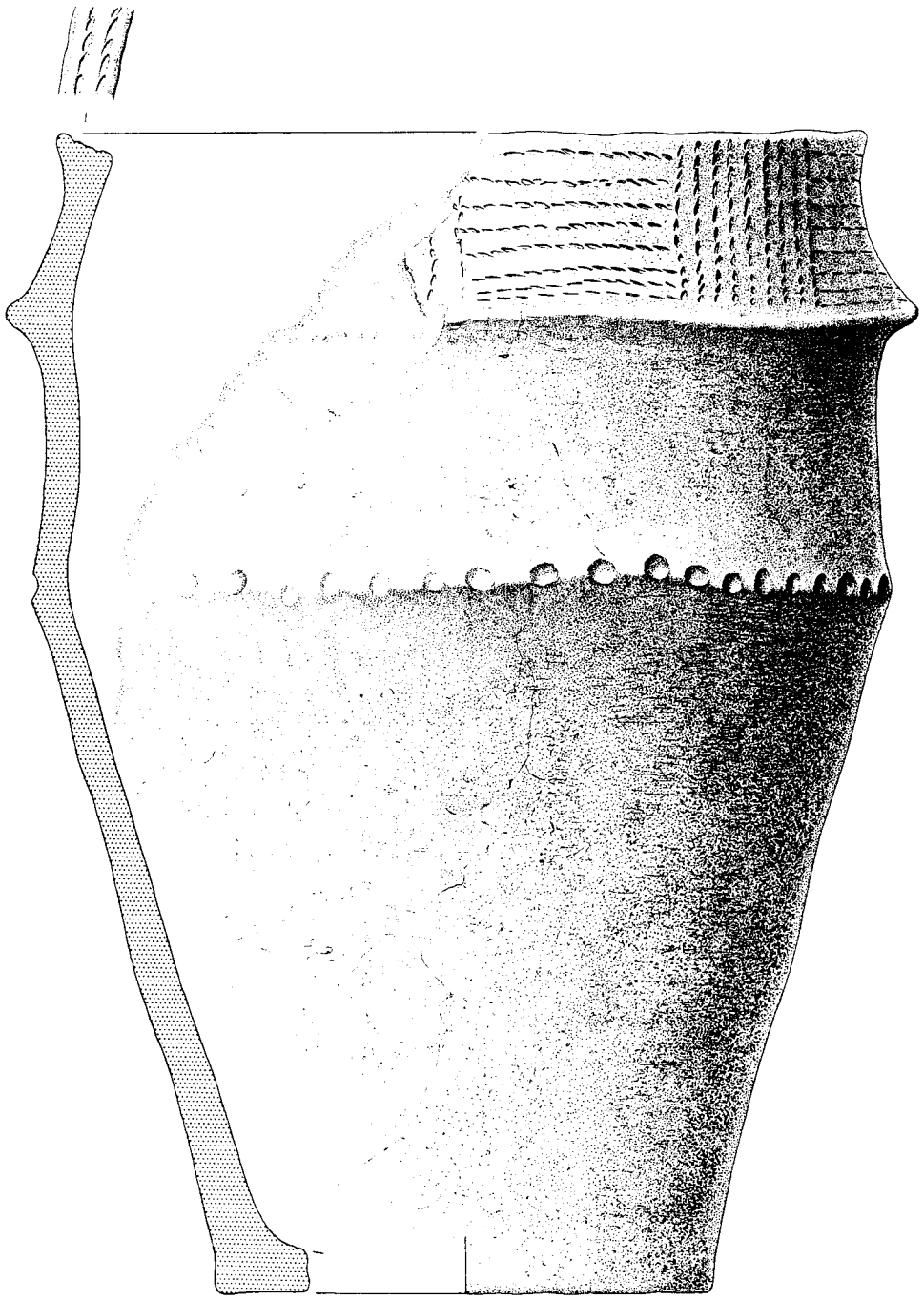
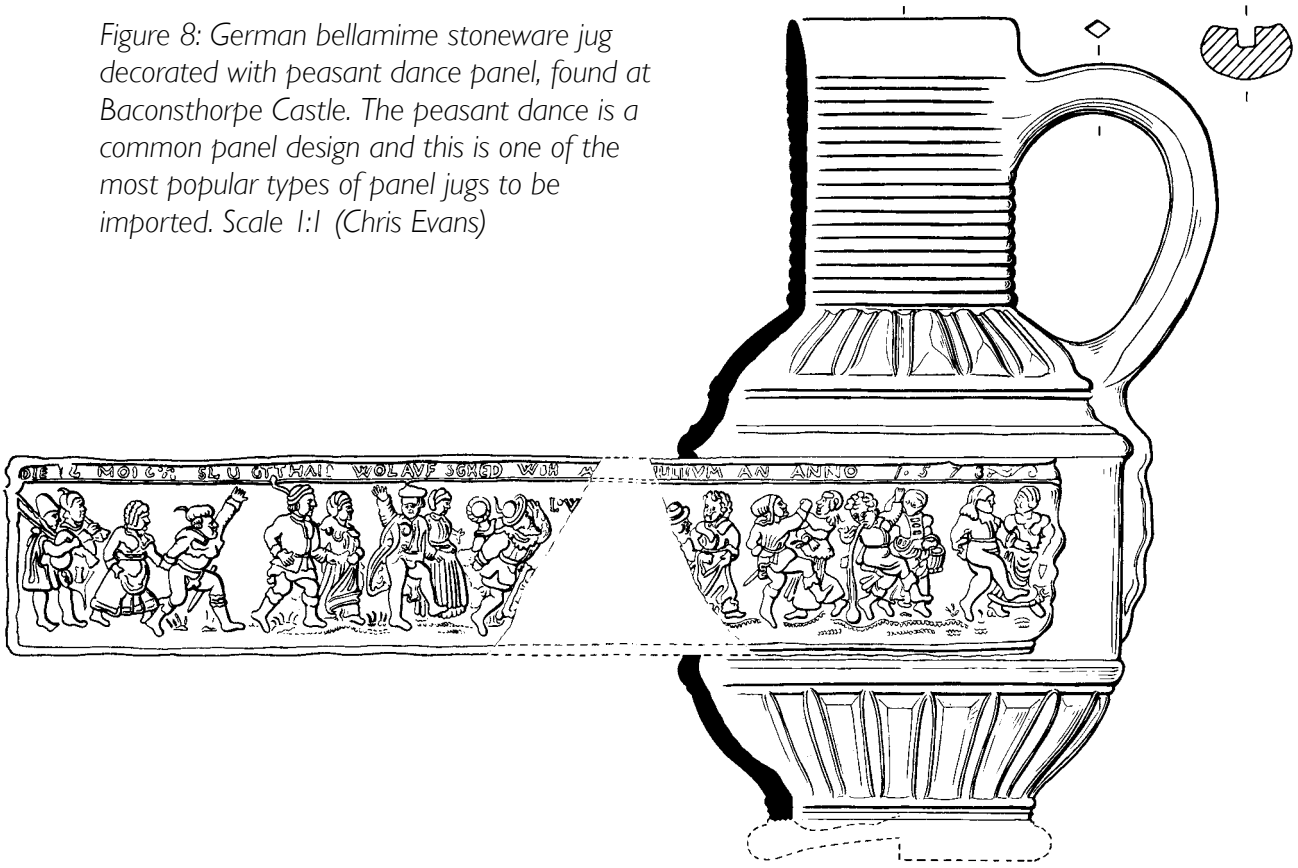


*Figure 6: Bronze Age urn from West Cotton, Northamptonshire. Scale 1:2 (Chris Evans.)*

*Figure 7: Reconstruction painting of a slip decorated dish with scraffito motifs, probably north Italian,17th century. Scale 1:2 (Christine Boddington)*

*Figure 8: German bellamime stoneware jug decorated with peasant dance panel, found at Baconsthorpe Castle. The peasant dance is a common panel design and this is one of the most popular types of panel jugs to be imported. Scale 1:1 (Chris Evans)*



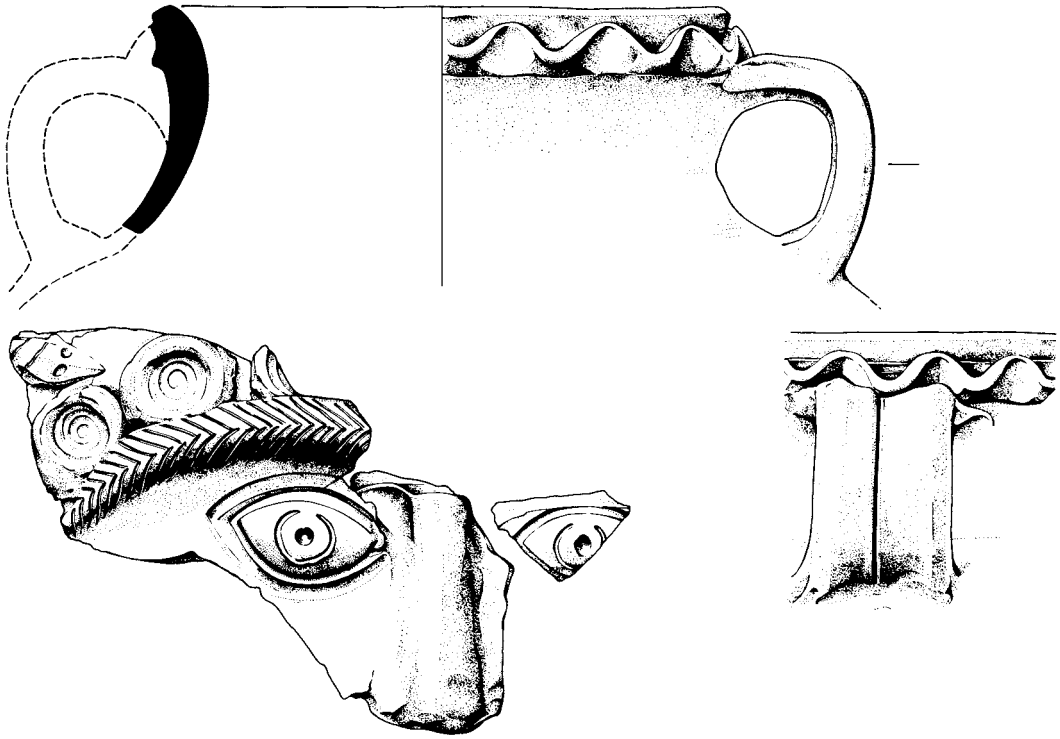


*Figure 9: A face pot from Old Penrith with a frilled rim and two strap handles. The features are applied and the eyes incised. A small snake's head with the beginnings of a hatched body can be seen just above the left eyebrow. Scale 1:2 (Margaret Tremayne)*

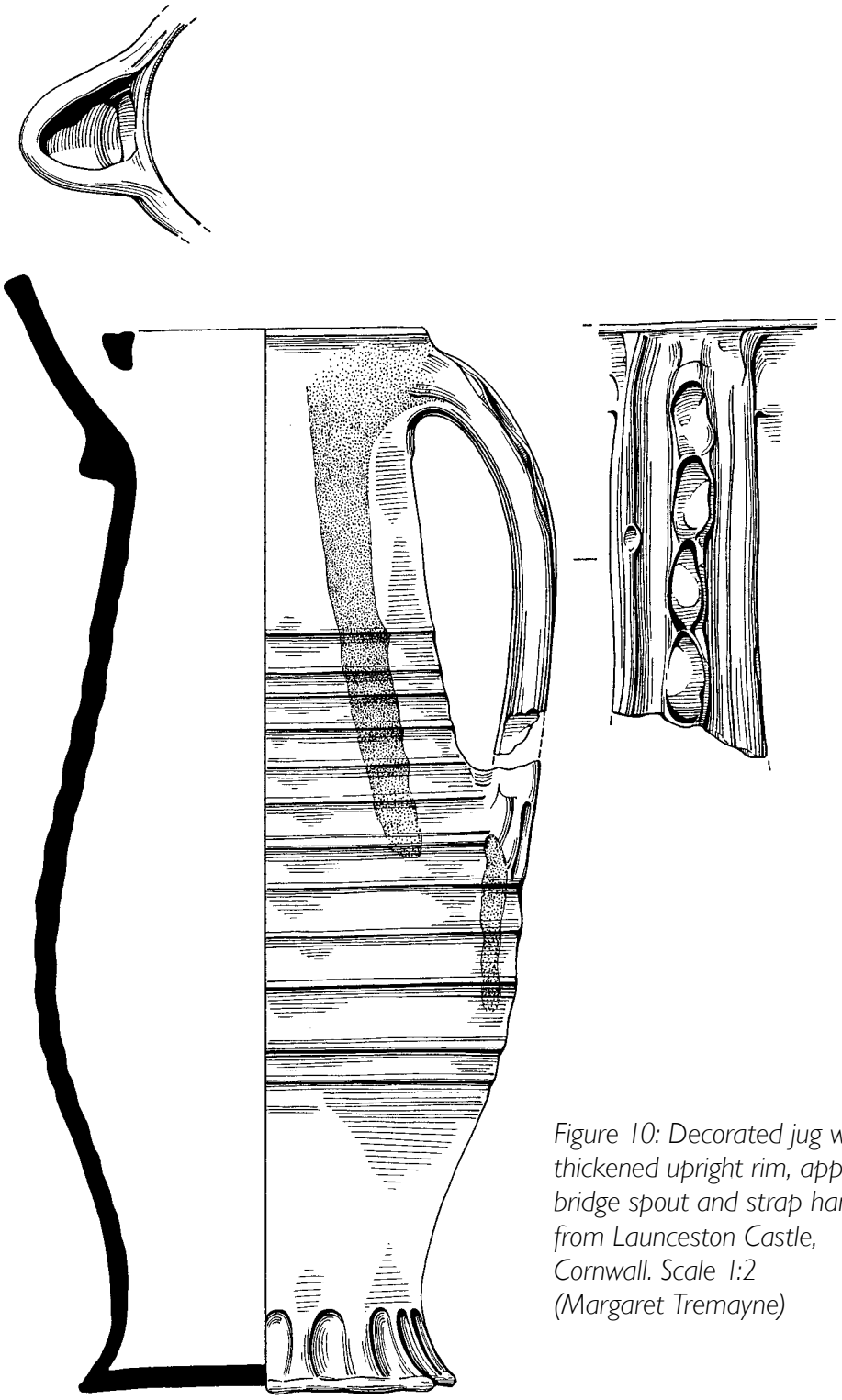


*Figure 10: Decorated jug with thickened upright rim, applied bridge spout and strap handle, from Launceston Castle, Cornwall. Scale 1:2 (Margaret Tremayne)*

*Fig 11: Three stoneware 'bellarmine' masks, Fulham Pottery, London. Scale 1:1 (Sandra Hooper)*

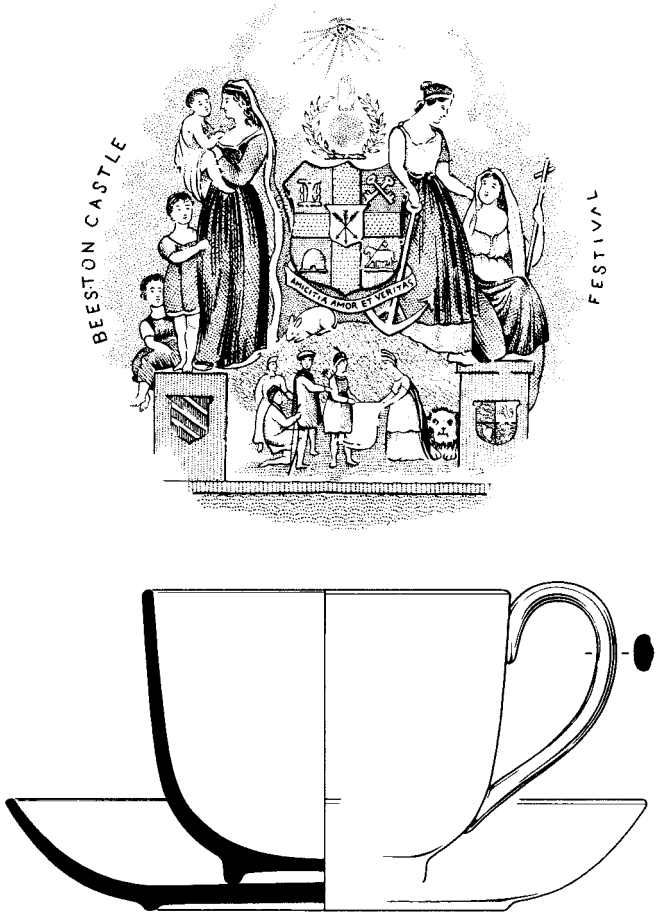



*Figure 12: Transfer printed whiteware from the Staffordshire potteries found at Beeston Castle. This cup and saucer has over-glaze printed 'Beeston Castle Festival'. Scale 1:2 (David Honour)*

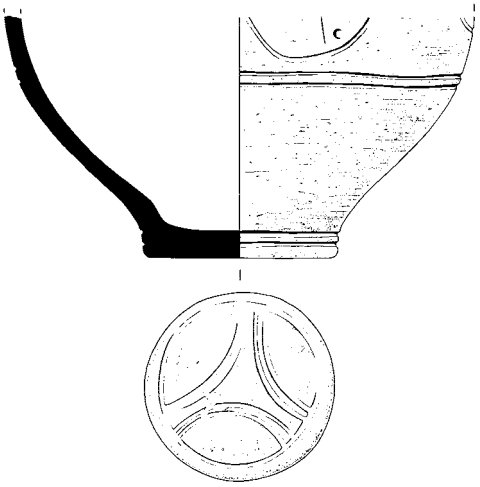


*Figure 13: Burnished globular Iron-Age bowl from Stanwick, Northants. Scale 1:3. (Chris Evans)*

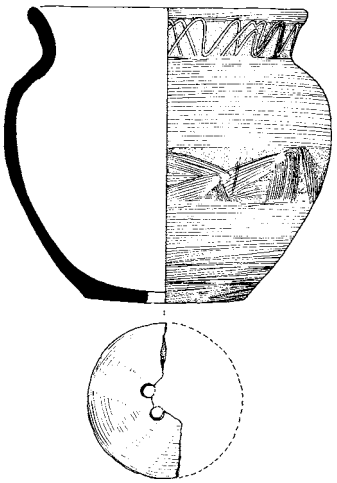


*Figure 14: Decorated Iron-Age pot from Gussage All Saints, Dorset. Scale 1:4 (Chris Boddington)*

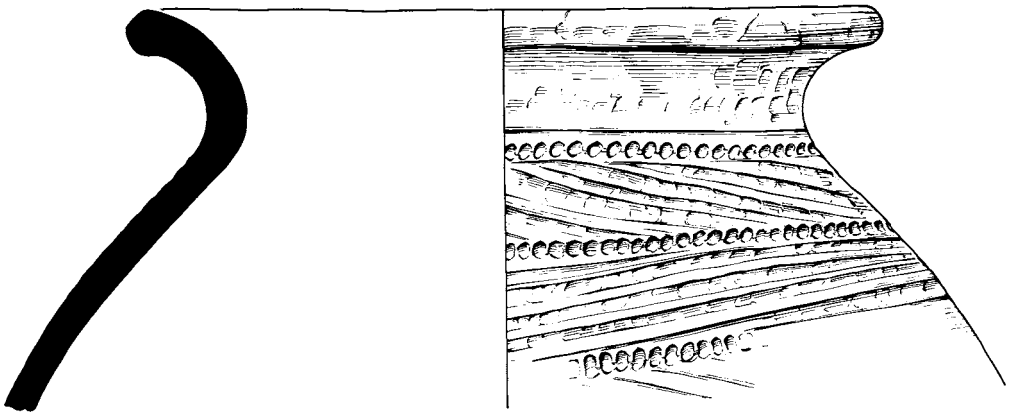


*Figure 15: Decorated prehistoric pot from Balkesbury Camp, Hampshire. Scale 1:2. (Christine Boddington)*

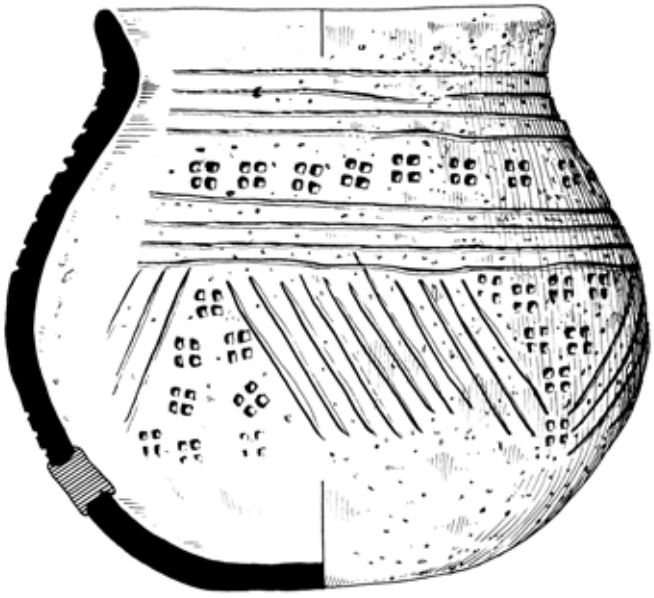


*Figure 16: Decorated Anglo-Saxon pot from Sewerby, Yorkshire. This globular pot with stamped designs and filled chevrons is from grave 38 and is probably sixth-century. Scale 1:2. (Frank Gardiner?)*

## Drawing Leather Finds

The question of how much work you should put into a drawing also arose with the drawing of leather objects. Our approach was to draw as we saw; looking for signs of wear and in the case of a shoe, for form that showed the shape of the foot that once wore it. The stitching and construction were of course vitally important but I for one liked to seek out the humanity of an object to connect with the individual who made or used them. At one time, there was a movement amongst leather experts for minimalist drawings, for shoes to be drawn like pattern pieces. Some of the drawing office illustrators attended a seminar promoting this idea and returned despondent but we never took it on board, for we relished drawing the organic, plastic qualities of the shoes too much to draw them diagrammatically. Wheeler had a dictum that illustrations should put the humanity into archaeology and that's what we thought too.

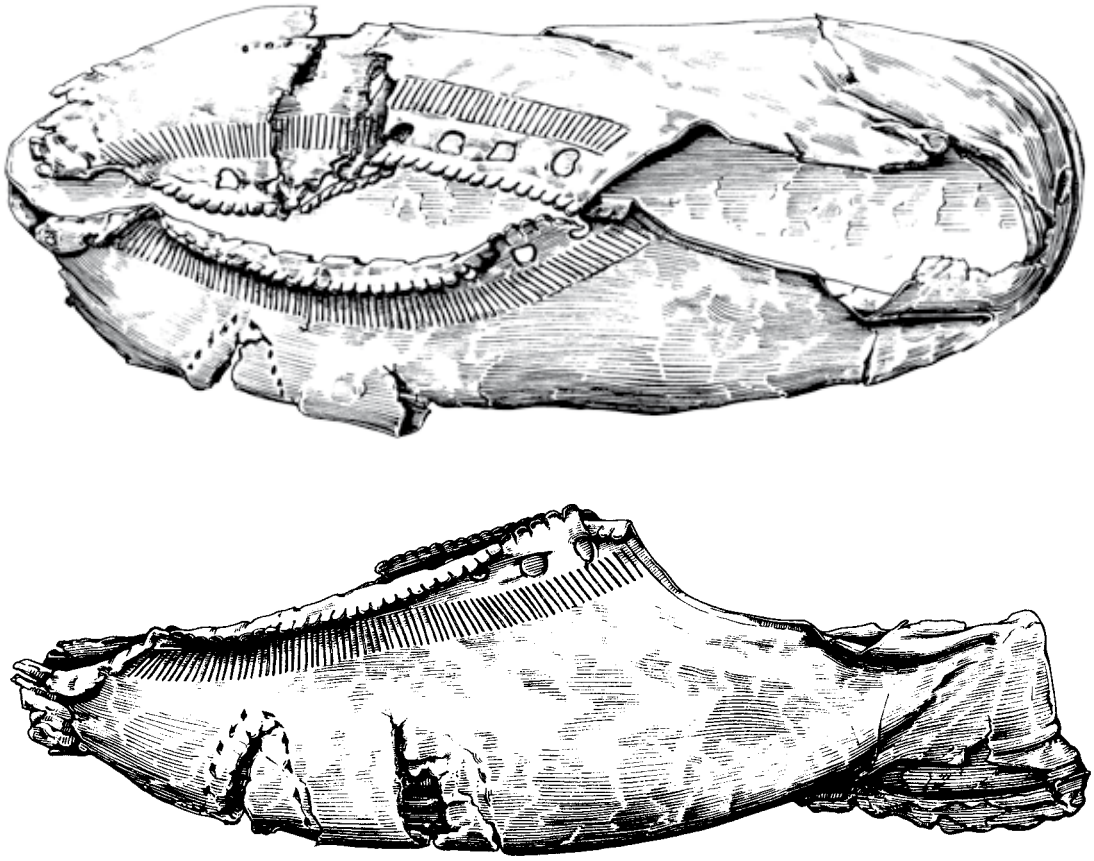


*Figure 17: Leather shoe from Old Penrith, Cumbria. The upper is in one piece joined down the centre of the instep and vamp and passing round the back of the heel without seam. Scale 1:2 (Margaret Tremayne)*

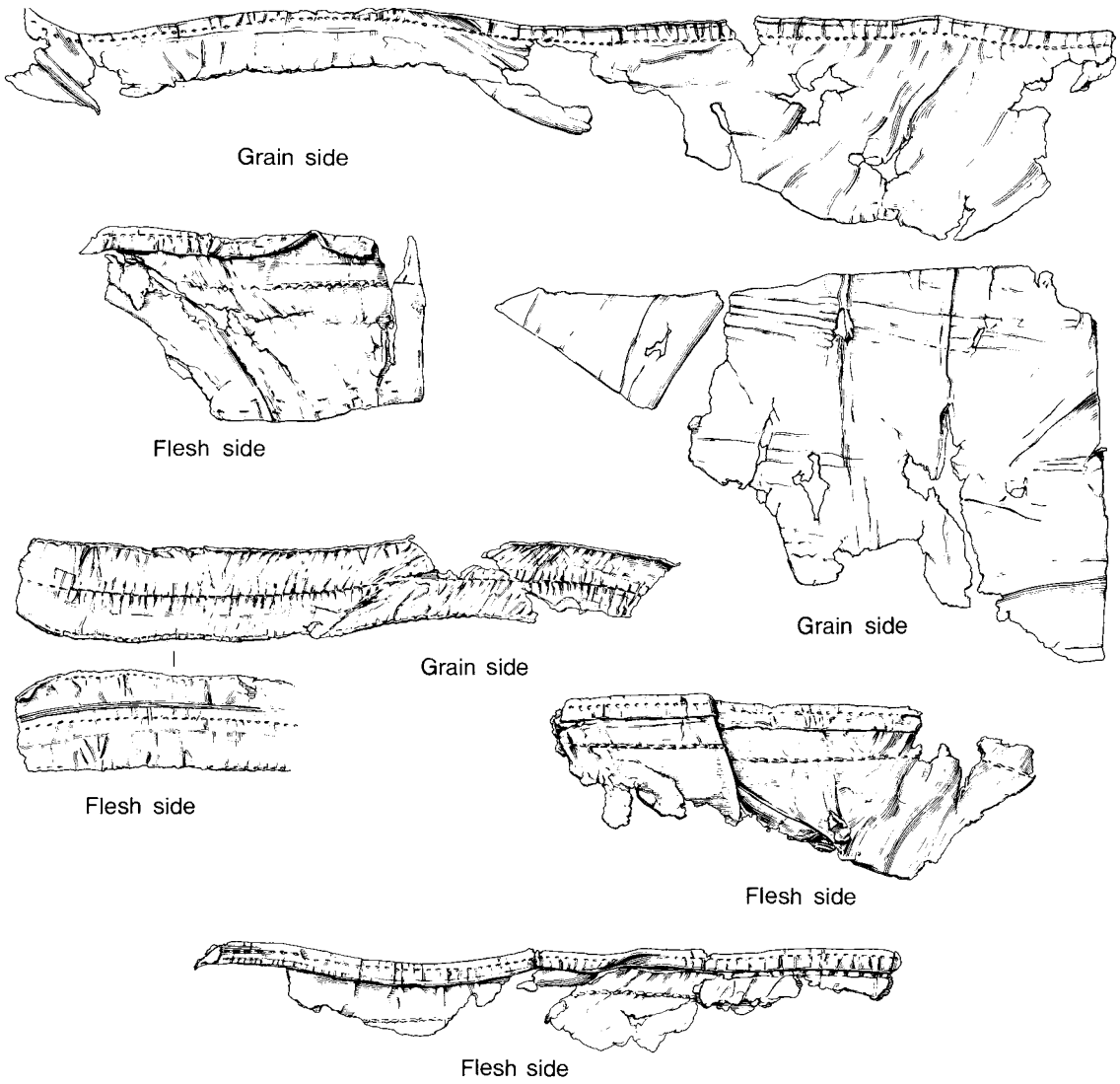



*Figure 18: Fragments of Roman tent leather from Old Penrith, Cumbria. The illustrations show the seams and stitch lines. Scale 1:3 (David Honour)*

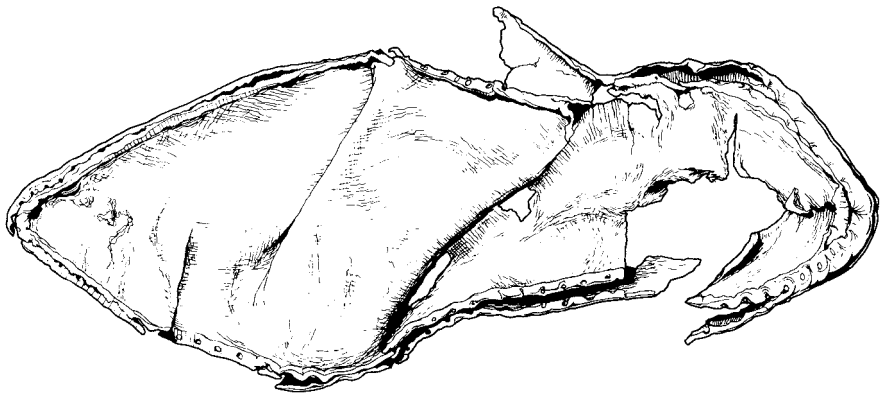


*Figure 19: Leather shoe from Fisher Street, Carlisle, Cumbria. Scale 1:2 ( illustrator unknown)*

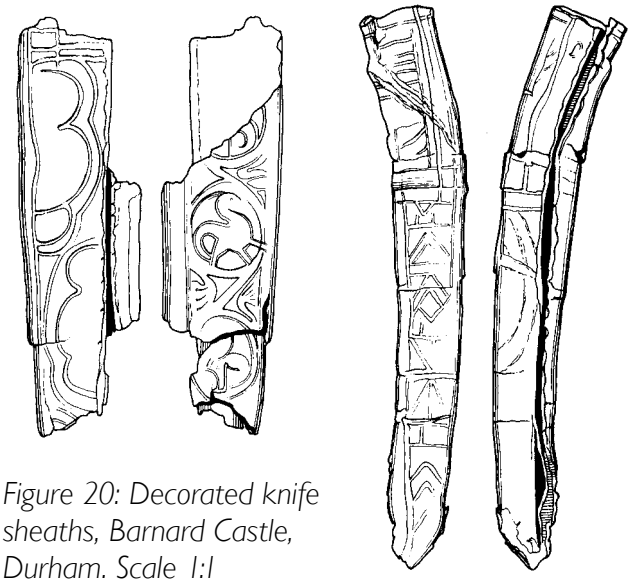


*Figure 20: Decorated knife sheaths, Barnard Castle, Durham. Scale 1:1 (Yvonne Brown)*

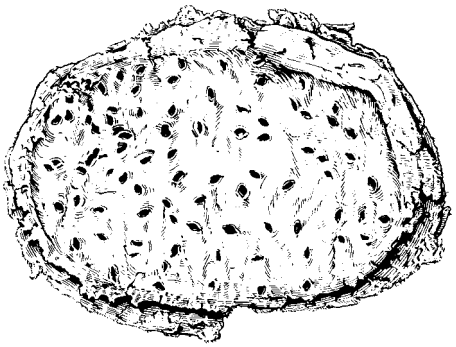


*Figure 21: Shoe heel fragment, Castle Acre Priory, Norfolk. Scale 1:1 (illustrator unknown)*

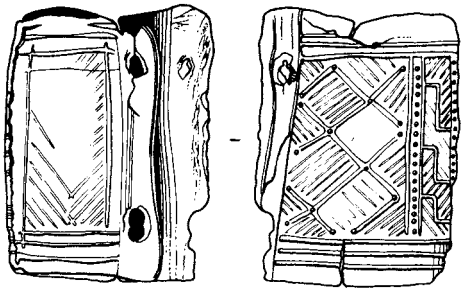


*Figure 22: Decorateed fragment, Barnard Castle, Durham. Scale 1:1 (Yvonne Brown)*



*Figure 23: Two views of a leather shoe found at Barnard Castle, Durham. Scale 1:1 (illustrator unknown)*

## Drawing Glass

Glass vessels were generally drawn in a broadly similar way to pottery with a section on the left. The best illustrators could somehow capture the fluid, brittle qualities of glass with the same pen line that they used for drawing pottery. My glass drawings were never so expressive but one of the first finds I drew when I joined the drawing office as a contract illustrator was the Anglo-Saxon claw beaker from Grave 843 at Mucking. This is a wonderful and unique object with two lines of hollow projections running around its girth and a pedestal giving it a hybrid Roman/Saxon appearance. The pale green glass is particularly clear and glossy and it shines out amongst the other claw beakers in its case at the British Museum. I longed to see it filled with drink, the liquid spilling down into the claws and transforming its shape but it was broken - rumour had it by the archaeologist stepping back as it lay newly excavated on the graveside but this may be apocryphal. Under David Neal's instruction I drew it with the blind pulled down so that the people in the building opposite couldn't see. This was to impress on me, that it was precious and valuable and to be careful.

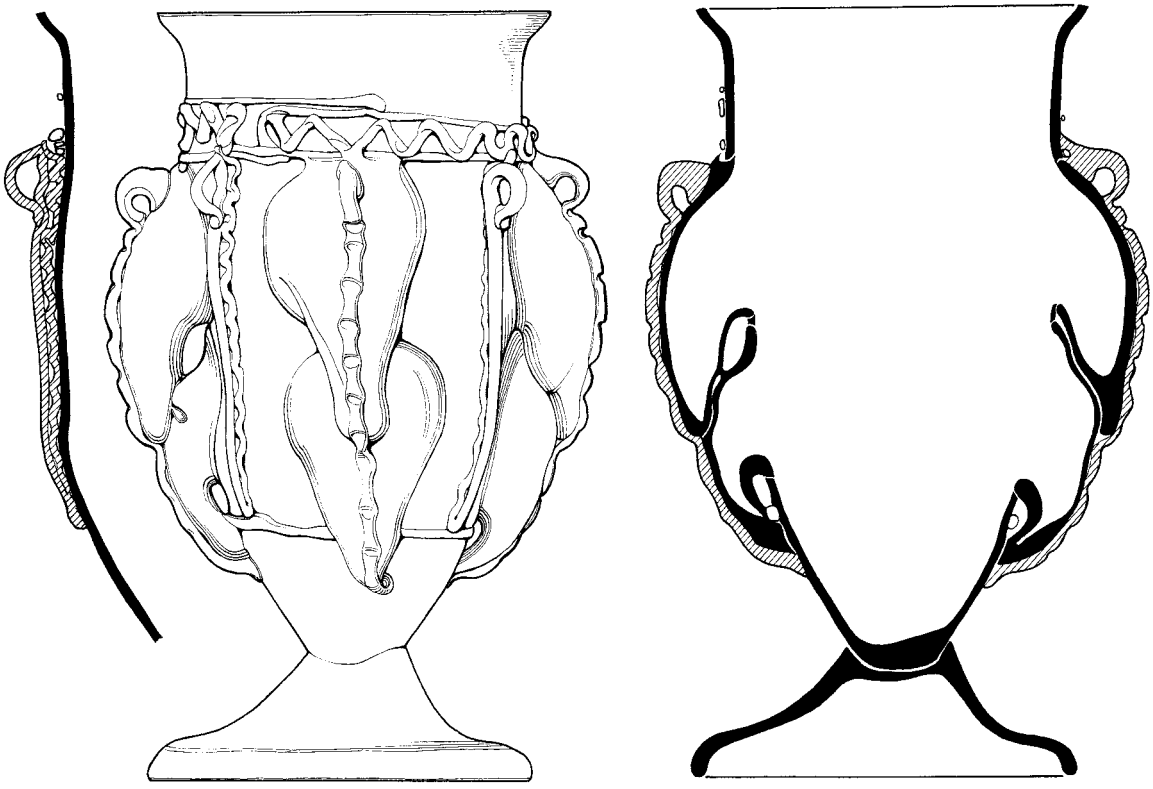


*Figure 24: Glass cone beaker, Mucking, Essex. Scale 1:1 (Judith Dobie)*

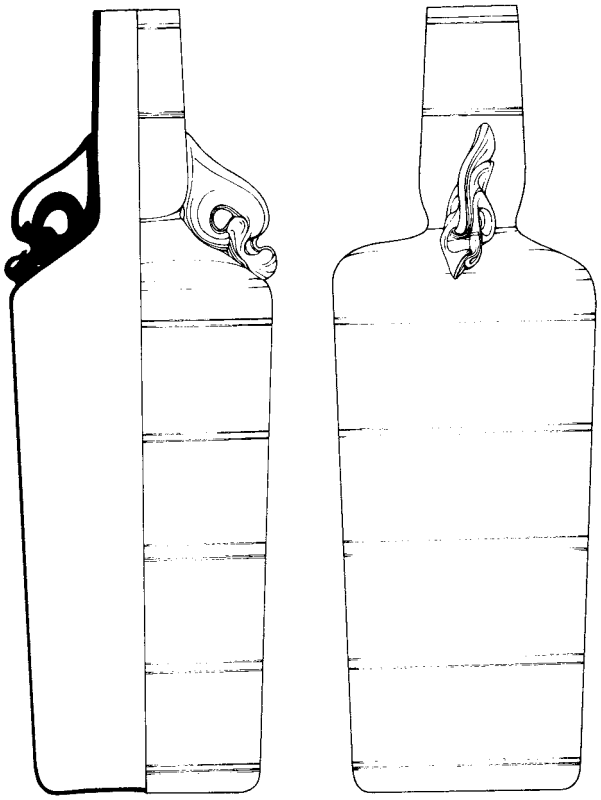


*Figure 25: Glass vessel, Lullingstone Roman Villa, Kent. Scale 1:2 (Margaret Tremayne)*

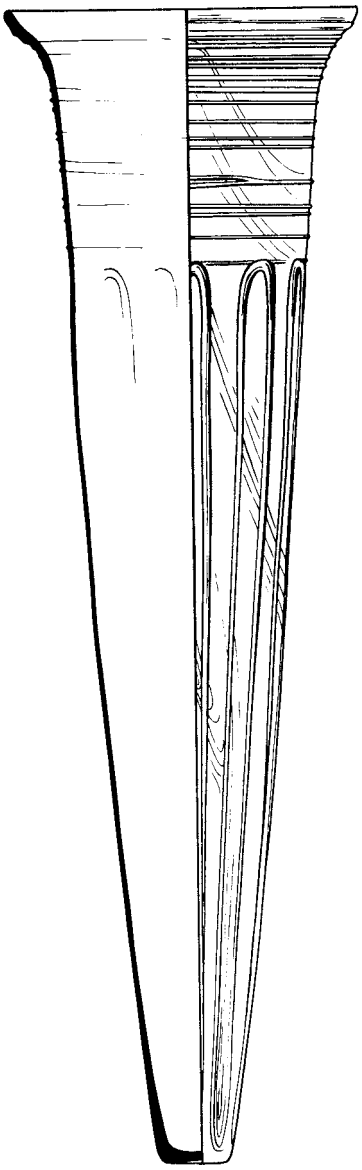


*Figure 26: Beaker, Dover: Buckland Anglo-Saxon cemetry, Kent.Scale 1:2 (illustrator unknown)*

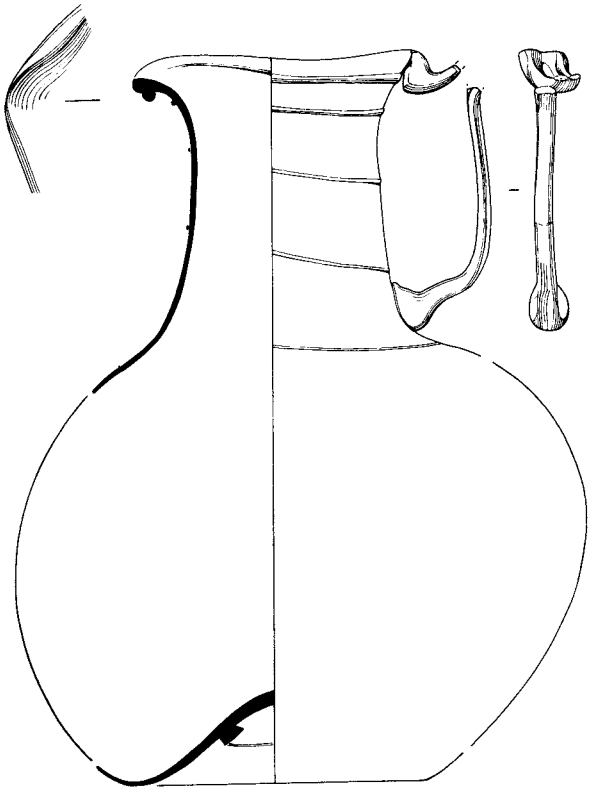


*Figure 27: Glass jug, Battle Abbey, East Sussex. Scale 1:2 (Judith Dobie)*

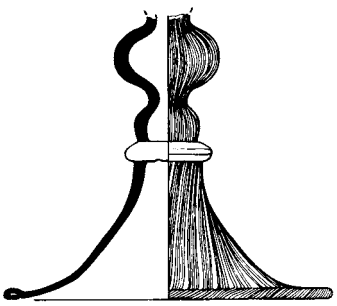


*Fig 28: Vessel base from Acton Court, Somerset. Scale 1:2 (Margaret Tremayne?)*

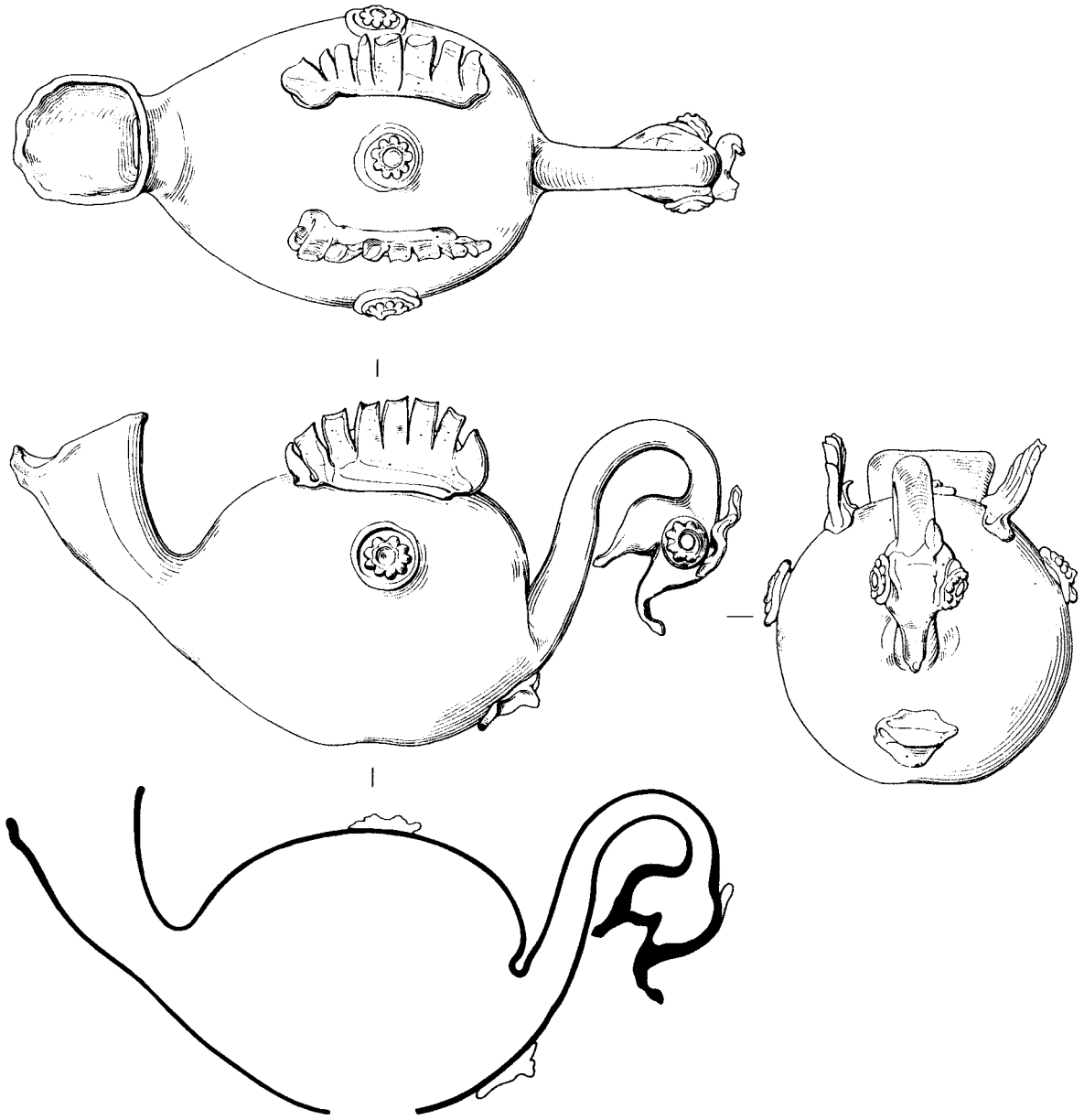


*Fig 29: The most important find among the Baconsthorpe Castle glasses, and one apparently unique in British Archaeology was a venetian theriomorphic pouring vessel, probably first half seventeenth century. The vessel takes the form of a fantastic bird, it's head and neck acting as a handle, and it's pouring spout forming a tail. Scale 1:2 (Chris Evans)*

## Drawing Copper Alloy Objects

In his book "The preparation of archaeological reports" *[Preparation of Archaeological Reports Leslie Grimsell, Philip Rahtz, David Price-Williams. J. Baker 1974]* Philip Rahtz writes "Theoretically, the finds will be preserved for all time in the museum in which they are deposited. But they do sometimes get lost, or more commonly deteriorate through lack of conservation. ….So the finds should be described and drawn fully in such detail that nothing else could be learned [except by new scientific techniques] by examining the finds themselves." I know this for myself. When checking illustrations of delicate embossed, foil, saucer brooches from graves at Mucking drawn 30 years previously, against the objects, the expert and I found that all that remained in the boxes was a puff of green bronze dust.

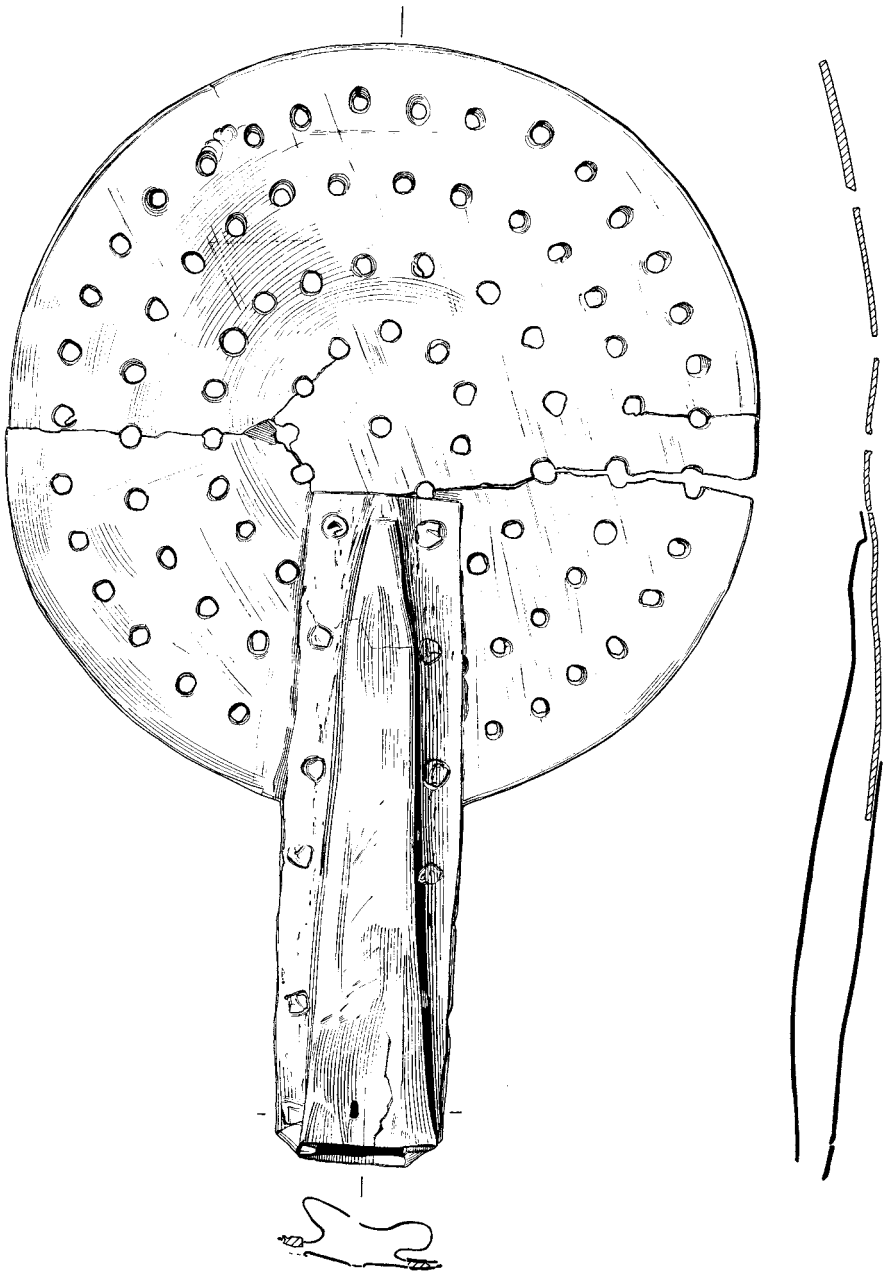


*Figure 30: Copper Alloy skimmer. Probably 15th or 16th century, found at Castle Rising Castle, Norfolk. Scale 1:2 (illustrator unknown)*

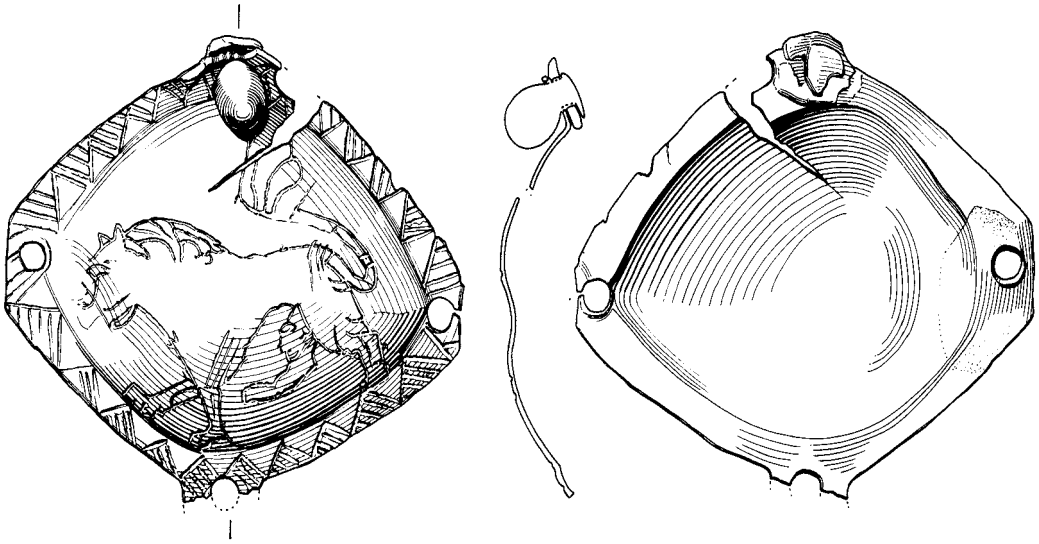


*Figure 31: Decorated fitting from Prudhoe Castle, Northumberland. The piece is edged with chevrons surrounding a central incised lion. Scale 1:1 (Judith Dobie)*

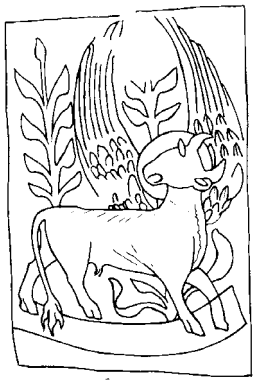
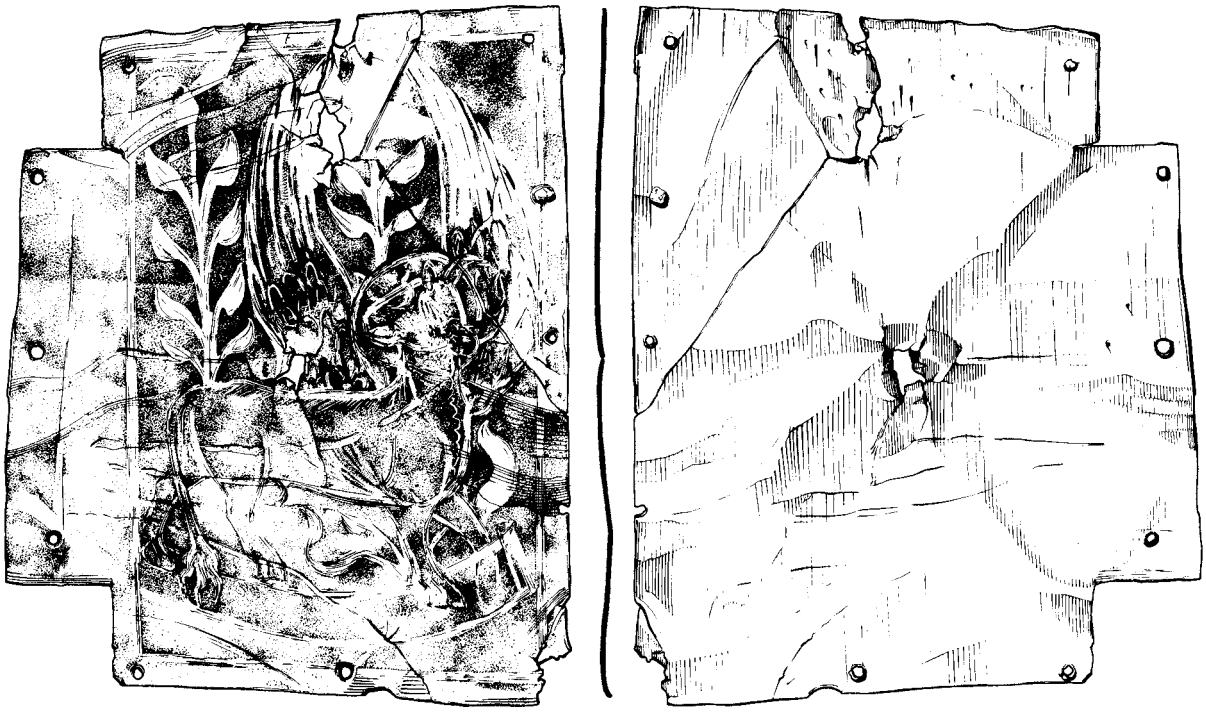


*Figure 32: Sheet from right arm of a cross portent with decoration in vernis brun, Battle Abbey. The winged bull of St Luke stands on a banner from which grow trees or scrolls with asymmetrical leaves. The shape of the leaves suggest a date around 1300. The sheet would have been attached to a wooden cross. Scale 1:2 (Judith Dobie)*



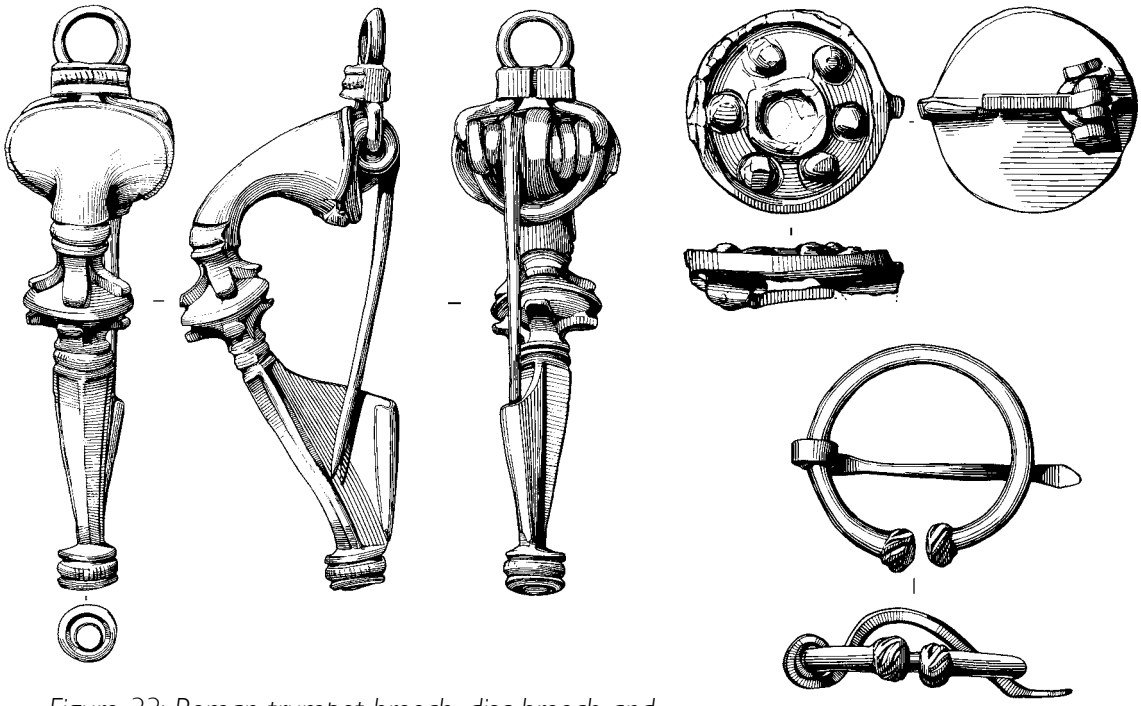


*Figure 33: Roman trumpet brooch, disc brooch and penannular brooch, Catterick, Yorkshire. Scale 1:1 (Judith Dobie)*

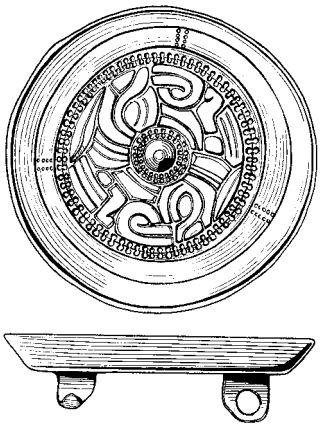


*Figure 34: Decorated Saxon disc brooch, Barrow Clump, Hampshire. Scale 1:1 (Chris Evans)*

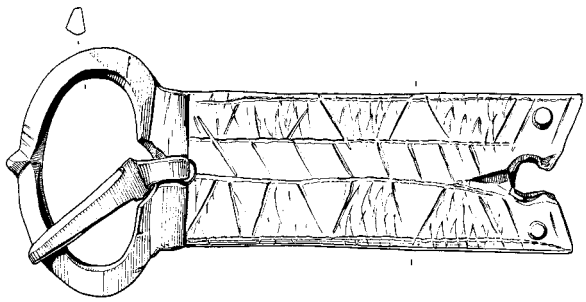


*Figure 35: Decorated buckle, Winchester, Hampshire. Scale 1:1 (Judith Dobie)*

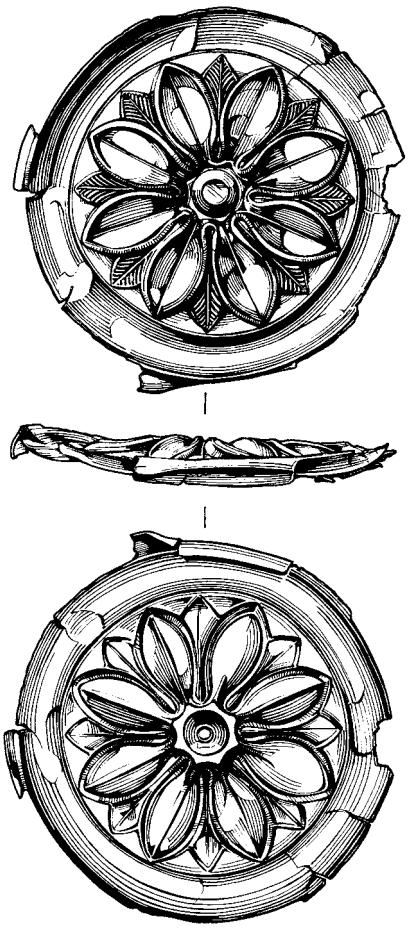


*Figure 36: Decorated bronze, Castle Acre Priory, Norfolk, 1:1 (Margaret Tremayne)*

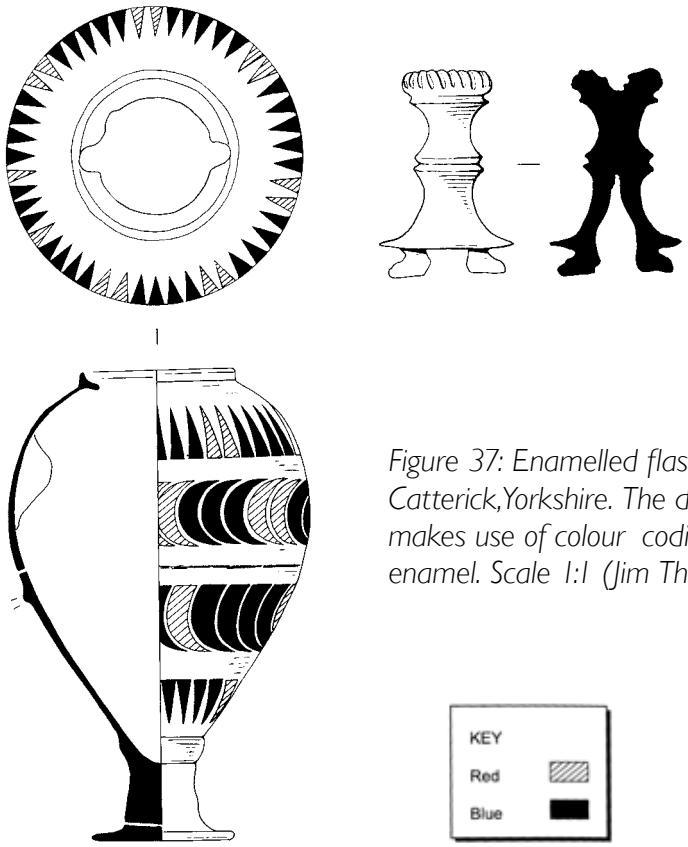



*Figure 37: Enamelled flask, Catterick,Yorkshire. The drawing makes use of colour coding for the enamel. Scale 1:1 (Jim Thorn)*

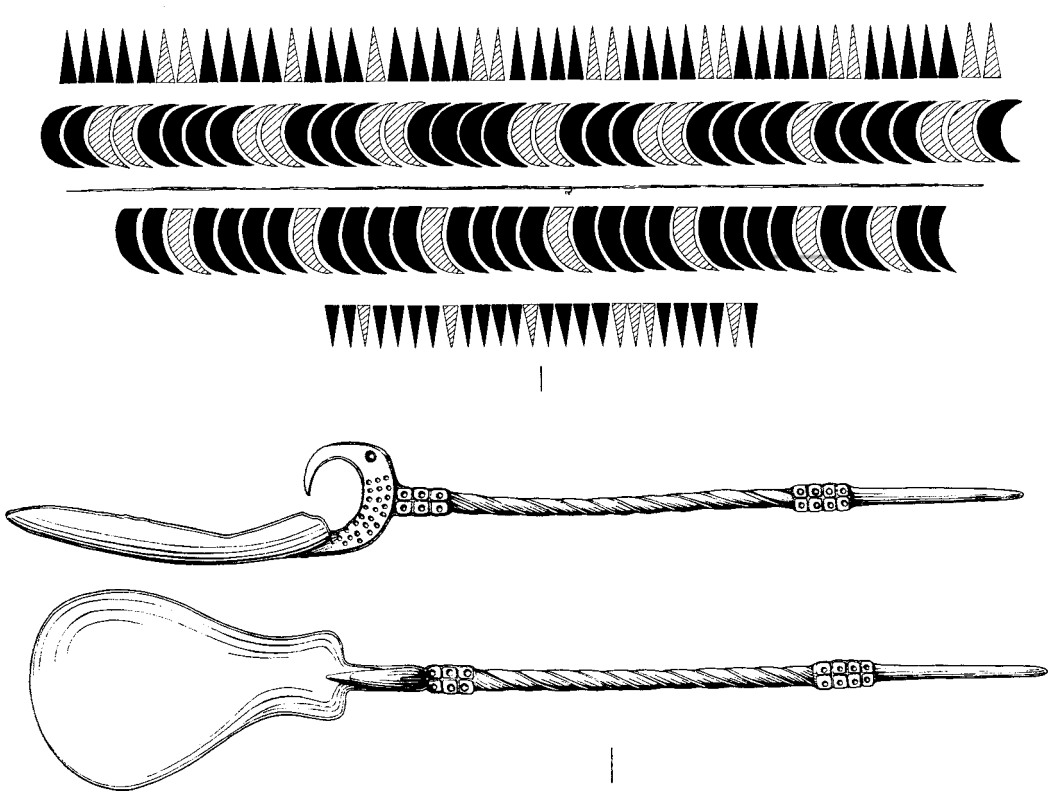


*Figure 38: Spoon Decorated with bird's head, Lullingstone Roman Villa, Kent. Scale 1:1 (Margaret Tremayne?)*

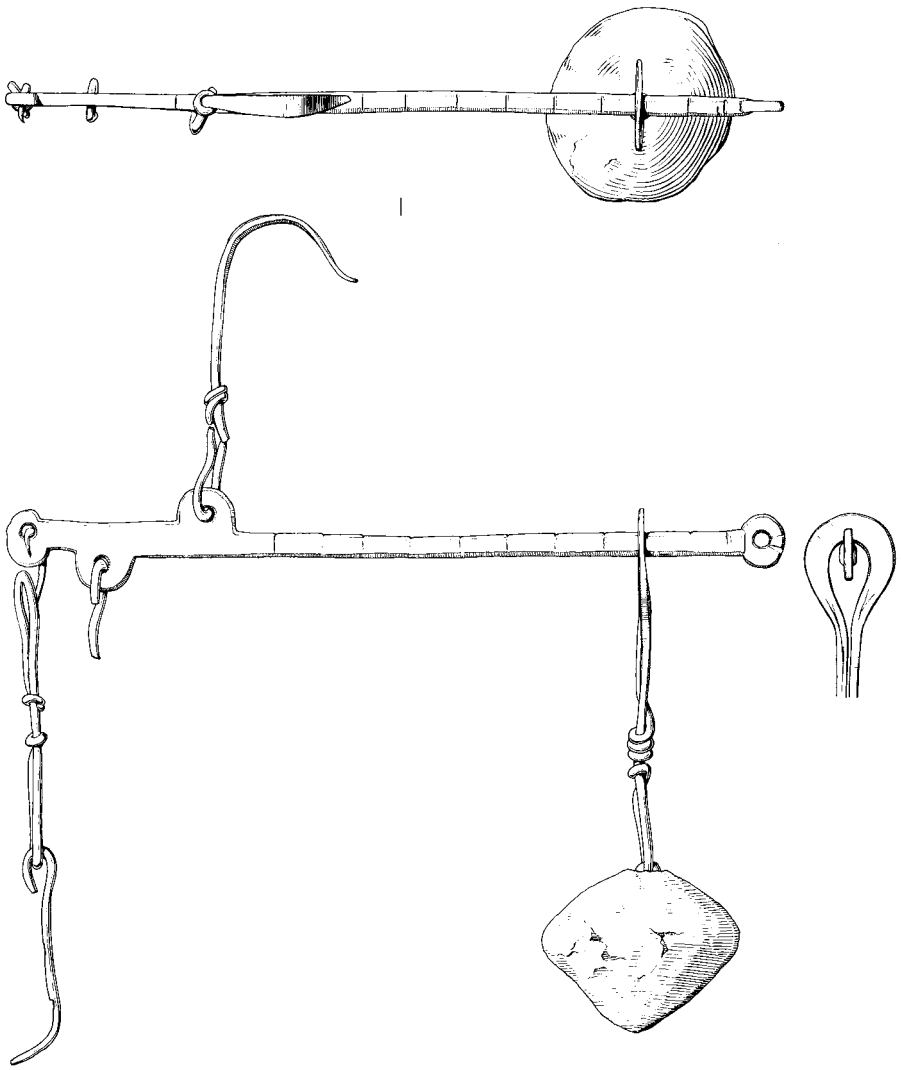


*Figure 39: Bronze steelyard with lead weight, Gestingthorpe, Essex. Scale 1:1 (illustrator unknown)*

*Figure 40: Hub-cap fitting decorated with lion's head, Lullingstone Roman Villa, Kent. Scale 1:1 (Margaret Tremayne)*

Frank Gardiner when head of the drawing office used to stress to us that it should be possible to recreate the objects from our drawings and we probably drew more views than time - short illustrators would today. Generally, copper alloy finds which were usually small and often intricate, were drawn at twice their size for reproduction at their actual size. We enlarged the object on a Grant Projector an enlarging camera which stood in the corner of the room surrounded by curtains which were drawn to make the image, which was projected onto a glass screen, clearer. You stood on a step and there were handles to turn to adjust the magnification and focus. Gilly Jones felt as though she was piloting a ship as she turned the wheels one way and another. There were down lights and side lights on arms that you could move to throw different shadows. The side lights were powerful and inside the curtains the temperature rose. Using it for any length of time became an endurance test. Once, when enlarging some precious, decorated La Tene horse bits from Gussage, Margaret Tremayne was horrified to see a stream of molten black wax pouring from their hollow centres. Unknown to her the fragile horse bits had been strengthened by filling with wax. Hugh Thompson General Secretary to the Society of Antiquaries went on fire when he used the Projector. The drawn curtains touched the hot side lights and ignited. Hugh unknowingly carried on tracing while flames flickered and we rushed to pull him clear.

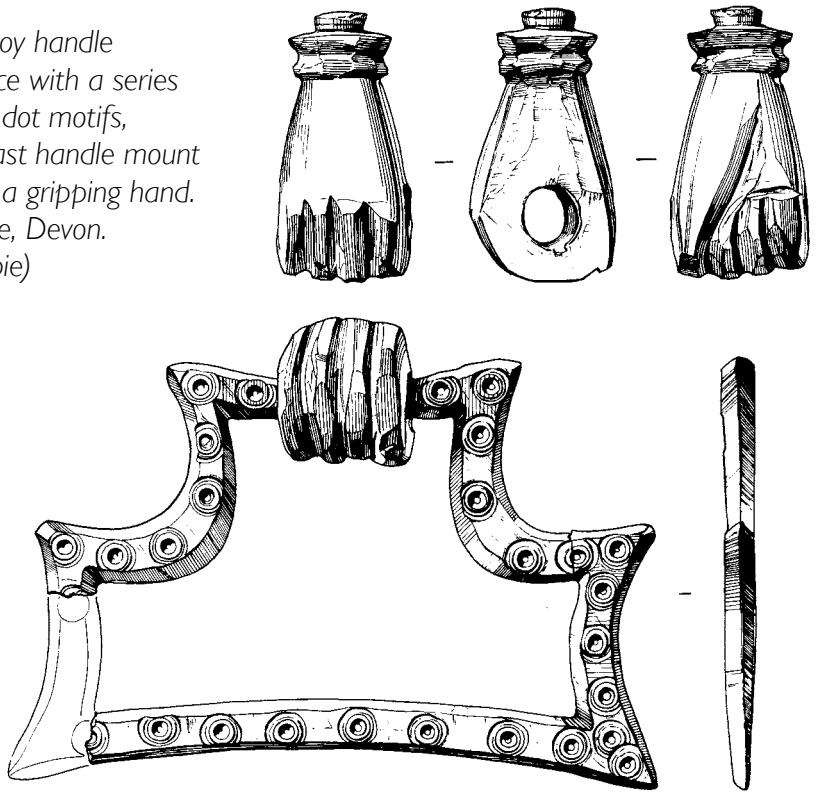


*Figure 41: Copper alloy handle decorated on one face with a series of punched ring and dot motifs, articulating with a cast handle mount stud in the shape of a gripping hand. Berry Pomeroy Castle, Devon. Scale 1:1 (Judith Dobie)*

## Drawing Iron Objects

The drawing office was one of the first to use x-rays when drawing iron objects. We were lucky that the Ancient Monuments laboratories were in the same building and we worked closely with the conservationists. The finds came to us from the laboratories with the conservationist's notes and x-rays. Each find in its own box, cocooned in foam rubber. It was exciting opening the boxes, you didn't know if you'd find a rusty nail or a fabulous jewel. Drawing from an x-ray was problematical. It pulled you between the naturalistic and the schematic. The x-ray gave you a silhouette but from the corroded object you had to abstract form. It was a balancing act to make an interesting drawing. Drawing a conglomerate of objects was especially difficult. Sometimes we used stereo x-rays to decipher chatelaines or the contents of bags. Straining to see through the viewer for hours you felt in a different world of floating objects. All the looking and looking to extract the shape of a buckle or a pattern of inlay sometimes didn't seem justified by the simple drawing eventually produced.

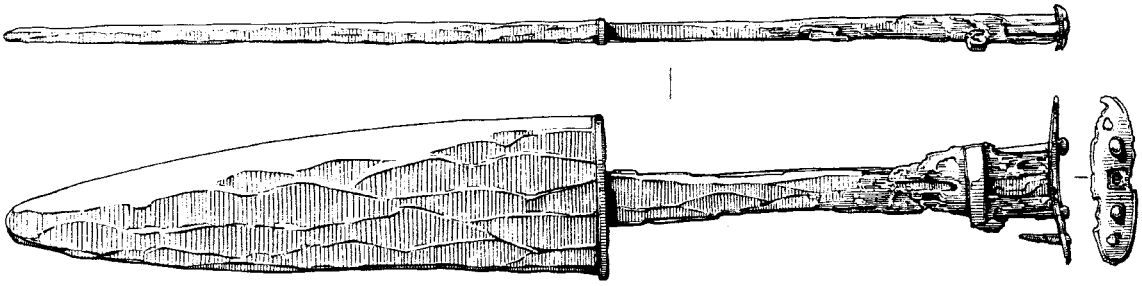


*Figure 42: Dagger, Sewingshields, Northumberland scale 1:2 (Margaret Tremayne)*

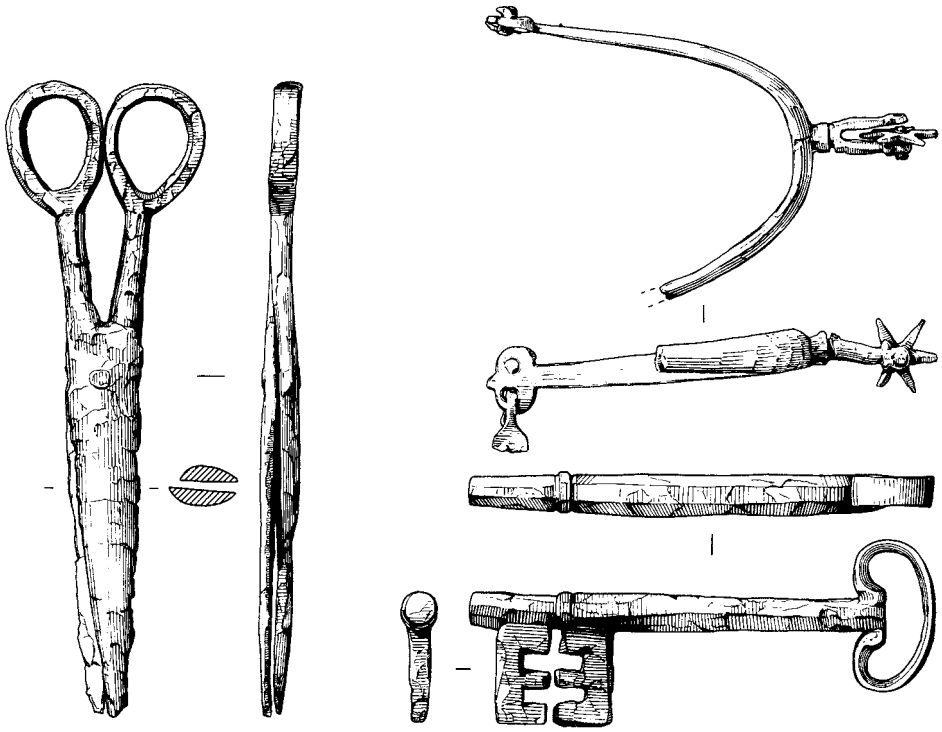


*Figure 43: Oval handled scissors, rowel spur and kidney bow key, Battle Abbey, East Sussex. Scale 1:2 (Judith Dobie)*

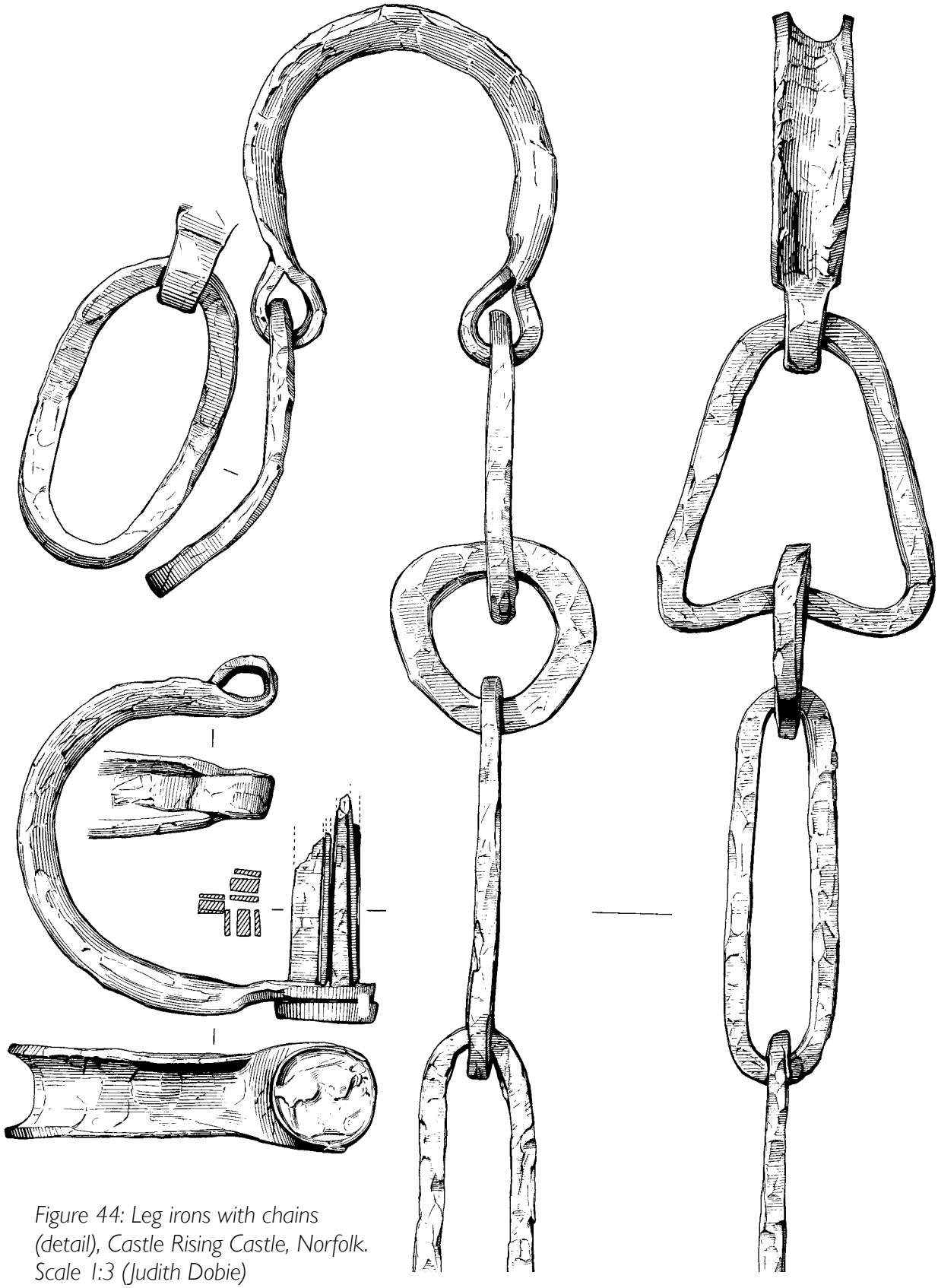


*Figure 44: Leg irons with chains (detail), Castle Rising Castle, Norfolk. Scale 1:3 (Judith Dobie)*

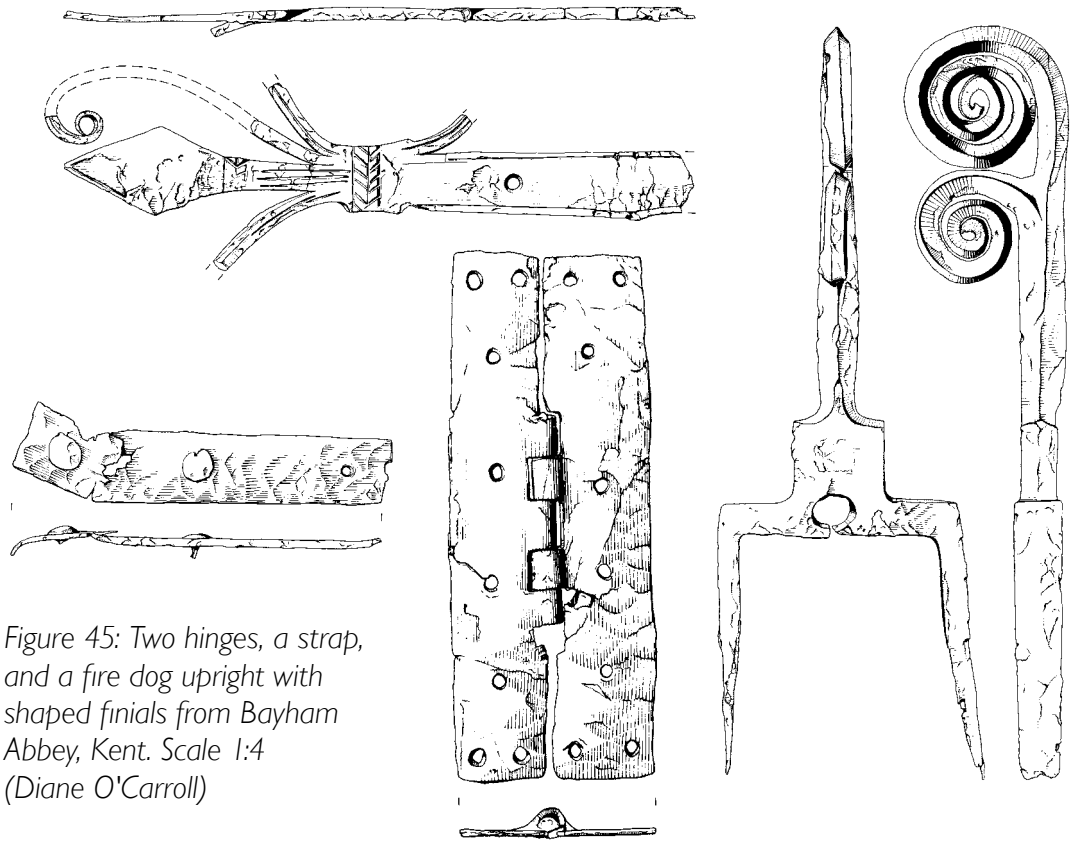


*Figure 45: Two hinges, a strap, and a fire dog upright with shaped finials from Bayham Abbey, Kent. Scale 1:4 (Diane O'Carroll)*

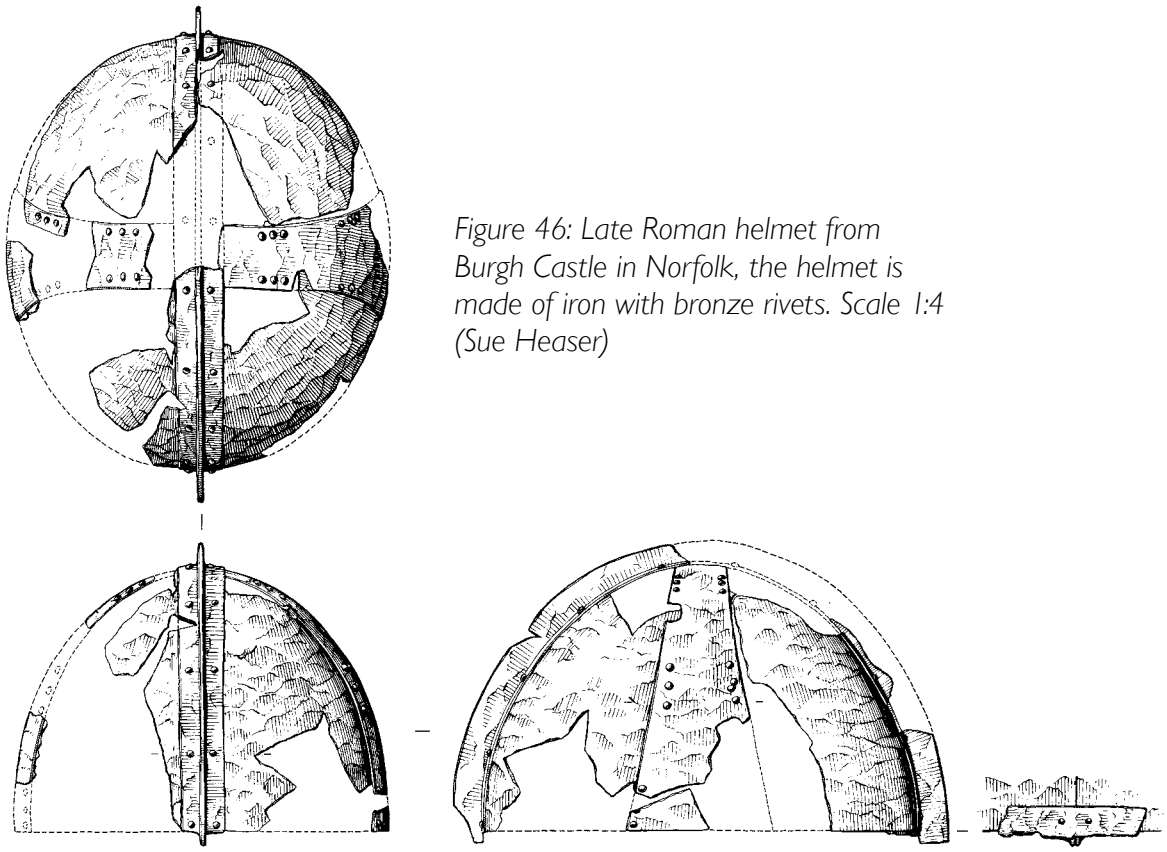


*Figure 46: Late Roman helmet from Burgh Castle in Norfolk, the helmet is made of iron with bronze rivets. Scale 1:4 (Sue Heaser)*

Specialists could have contrary ideas as to the drawing of iron finds. One expert wanted only an outline of each object. As with the diagrammatic drawing of leather we had no enthusiasm for this. He showed us pages of outline drawings so basic we couldn't believe they would interest anyone. Another professor wanted each flake of rust drawn. If soil or a stone had adhered to the object they were to be drawn too. She wanted to see an exact drawing of the object as it was found. If this is what you want then perhaps a photograph would better suit your needs.

A drawing is really an interpretation; you are actually drawing out the meaning. Any illustrator who becomes familiar with a range of objects knows how to select and accentuate. For many years I drew Saxon brooches from the cemeteries at Mucking and got to know well what was truly significant and what was merely accidental. However you must stay alert in case you miss or ignore the unexpected. In Archaeology from the Earth, Mortimer Wheeler writes a warning about the finds illustrator who is 'inclined to impose his own personality upon the motifs of another age and the objective accuracy of his rendering is sometimes questionable. He needs watching. I once drew a group of bronze socketed axes from Beeston Castle. I was mortified later to find they had been redrawn by an illustrator from the British Museum. Asking why, I learnt it was because I hadn't understood the significance of the little marks that showed how they had been cast. The British Museum illustrator knew this material well and her drawings literally drew out the information. I had observed but not understood.

Frank Gardiner who became head of the drawing office in 1976 when David Neal turned to full time archaeology, said he found these struggles over methods of drawing finds difficult. He was sure himself how best to illustrate the finds but it was very hard to successfully oppose an esteemed expert and professor.

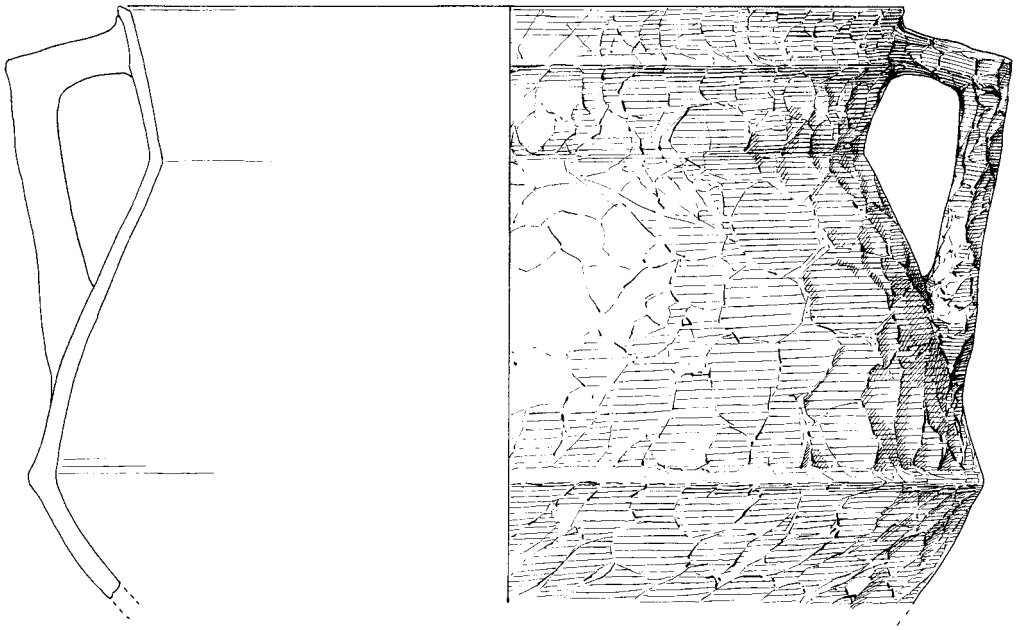


*Figure 47: Double handled vessel, Winchester, Hampshire. Scale 1:2 (Judith Dobie)*

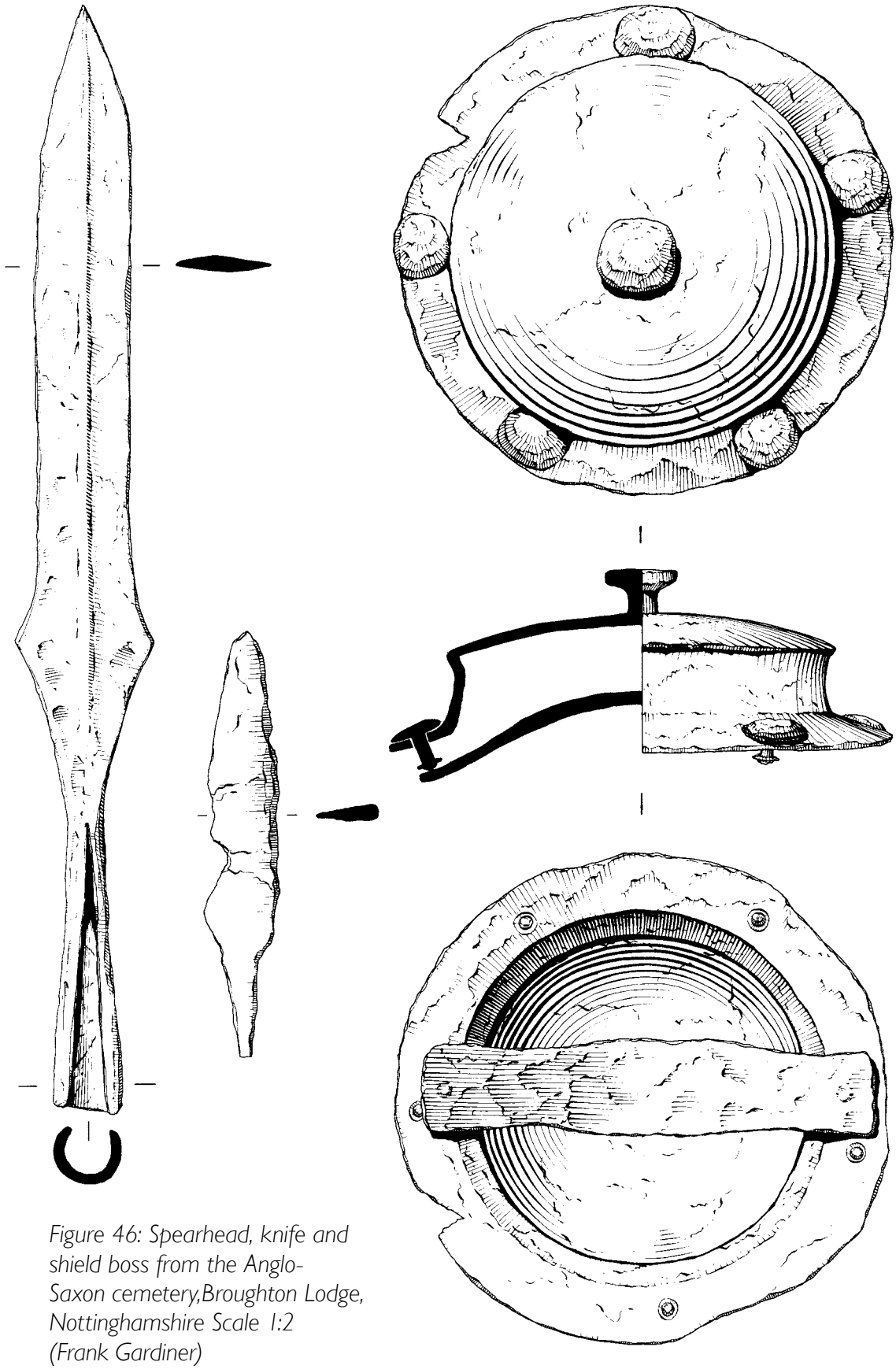


*Figure 46: Spearhead, knife and shield boss from the Anglo-Saxon cemetery,Broughton Lodge, Nottinghamshire Scale 1:2 (Frank Gardiner)*

Frank had a huge influence on the office style of drawing. He had come from a different world of printers and publishers. One of his skills was calligraphy and of all the illustrators who worked in the drawing office he was the only one who didn't find the dip pen style of drawing hard to master. It came easily and naturally to him. He arrived in the department with no experience of archaeological illustration but as a child there were antiquarian books in his home and the Victorian steel engravings in such books as 'Stone Implements, weapons, ornaments of Great Britain by John Evans and 'A smaller social history of Ancient Ireland' by P. W. Joyce 1906, had a great influence on him. He copied these drawings for his portfolio. They were his inspiration; he modelled his style on them and believes they have never been bettered. Elizabeth and David had generally run a long fine line down an object to express the form but Frank used a shorter more muscular line across a find searching out the different planes. Such was his enthusiasm for this style of drawing in his early days, that David Neal who was then head of the growing drawing office, says 'I had to keep a close watch on him and rein him in or he would go too far.' He meant that Frank would over-elaborate the drawing and when reduced for publication it would look too dark and heavy. Frank ruefully admits that David had a keen sense for what would look right in print. In his previous job his drawings were used without reduction and it took time to adapt.

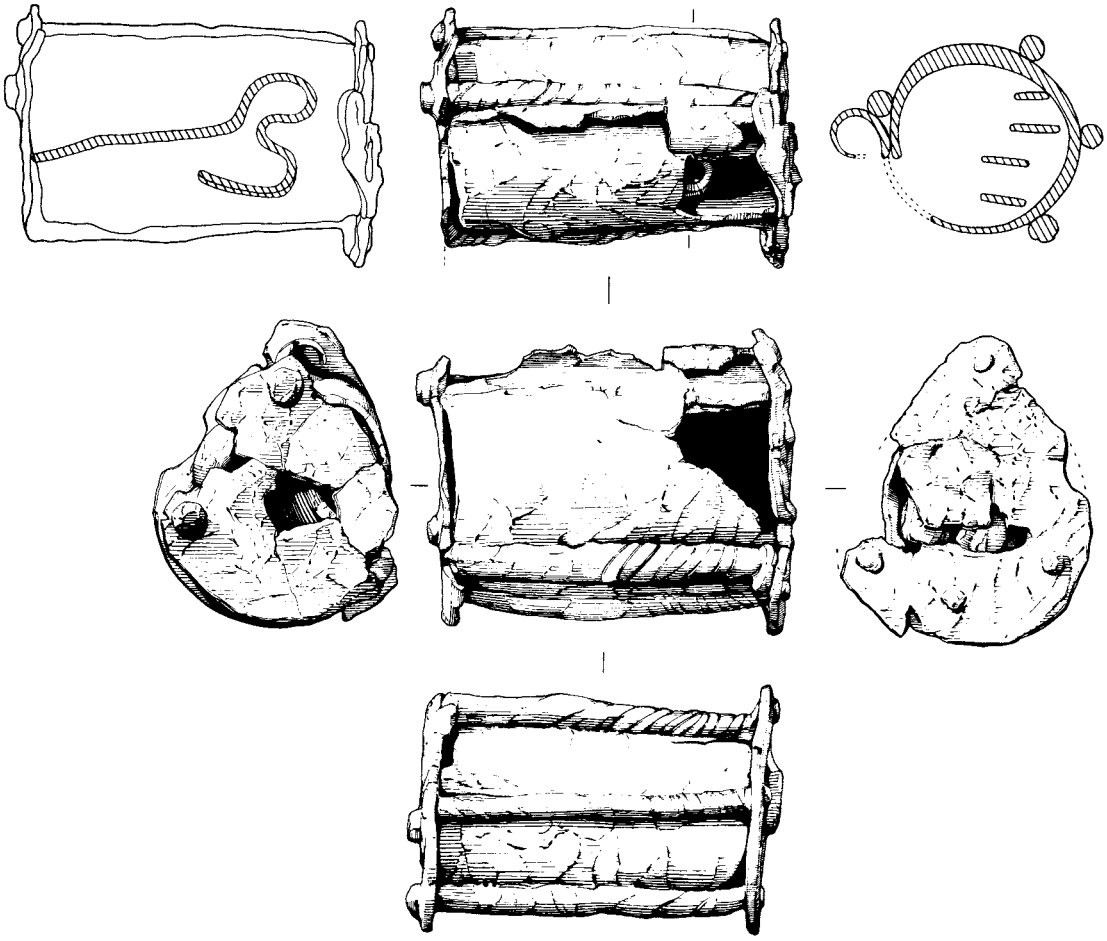


*Figure 49: Iron lock, Bidford-on-Avon, Warwickshire. Scale 1:2 (Judith Dobie)*

## Drawing Carved Stone

Stipple was used for stone objects and for stucco, pipe clay and flint cortexts, anything granular. Usually an outline was drawn with a mechanical pen and the same pen used to stipple with. Stipple was easy to control compared to the mapping pen but you still needed skill to build up the tones evenly to explain the shape and make a successful drawing. There is a tension about drawing finds with a dip pen Will you be able to control the line and then place the next line in just the right place, or will you spoil the drawing? There is no such anxiety about stipple and after lunch I would sometimes find my eyes closing in the monotony of dotting.

When David Honour who worked in the drawing office from 1977 drew the stucco from Nonesuch Palace at its actual size to be reduced to a quarter for publication he graded carefully the size of the dots he used. On the original drawings they looked like marbles but reduced perfectly to produce a smooth tone.

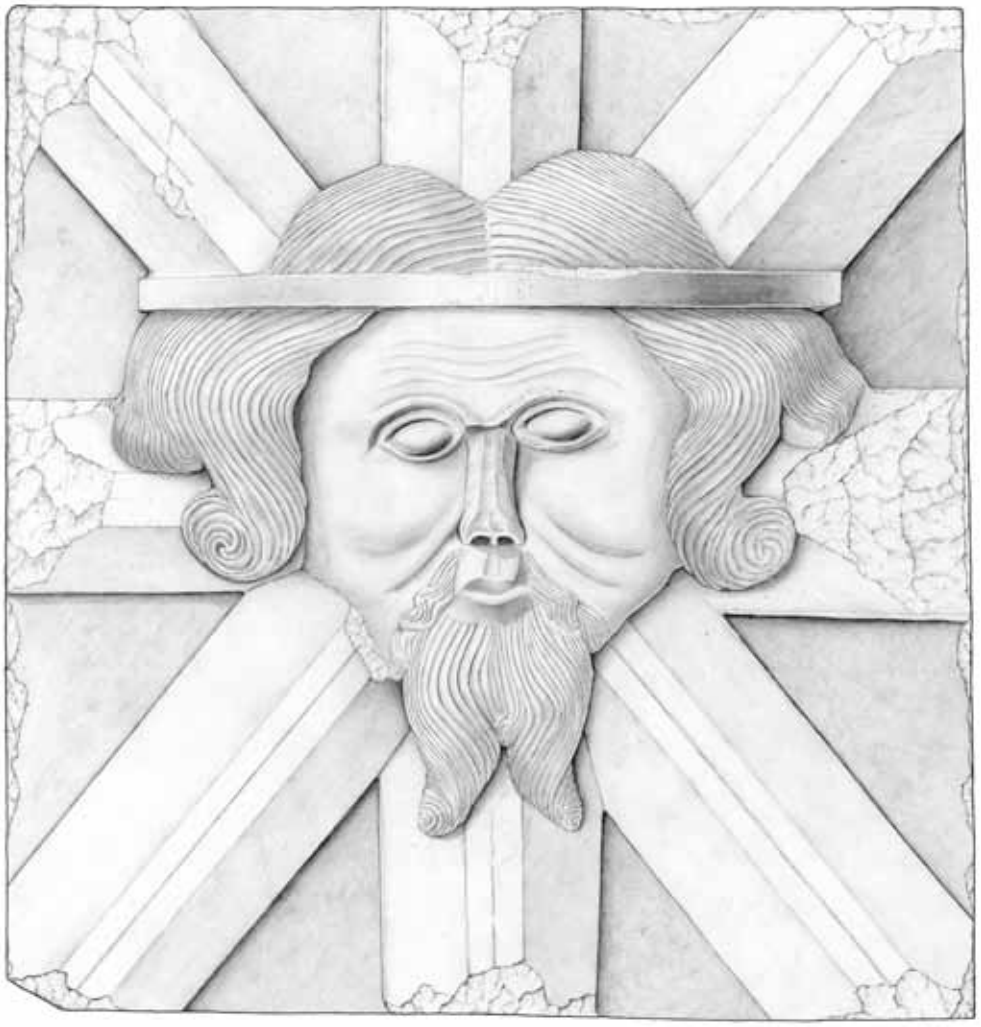


*Figure 50: Carved stone vault boss with bearded head from Gloucester Blackfriars. The usual method when drawing stone would be to stipple with a mechanical pen. For this drawing pencils were used, the tonal build up created by the use of different lead sizes. Scale 1:4 (Chris Evans)*


*Figure 51: Altar from Vindolanda Fort, Northumberland. This drawing by Frank Gardiner, following study of the altar in different lightconditions, corrects and adds detail to previous illustrations.*

*Figure 52: Carved cleric's head, Thorneholme Priory, Yorkshire. Scale 1:1 ( Judith Dobie)*

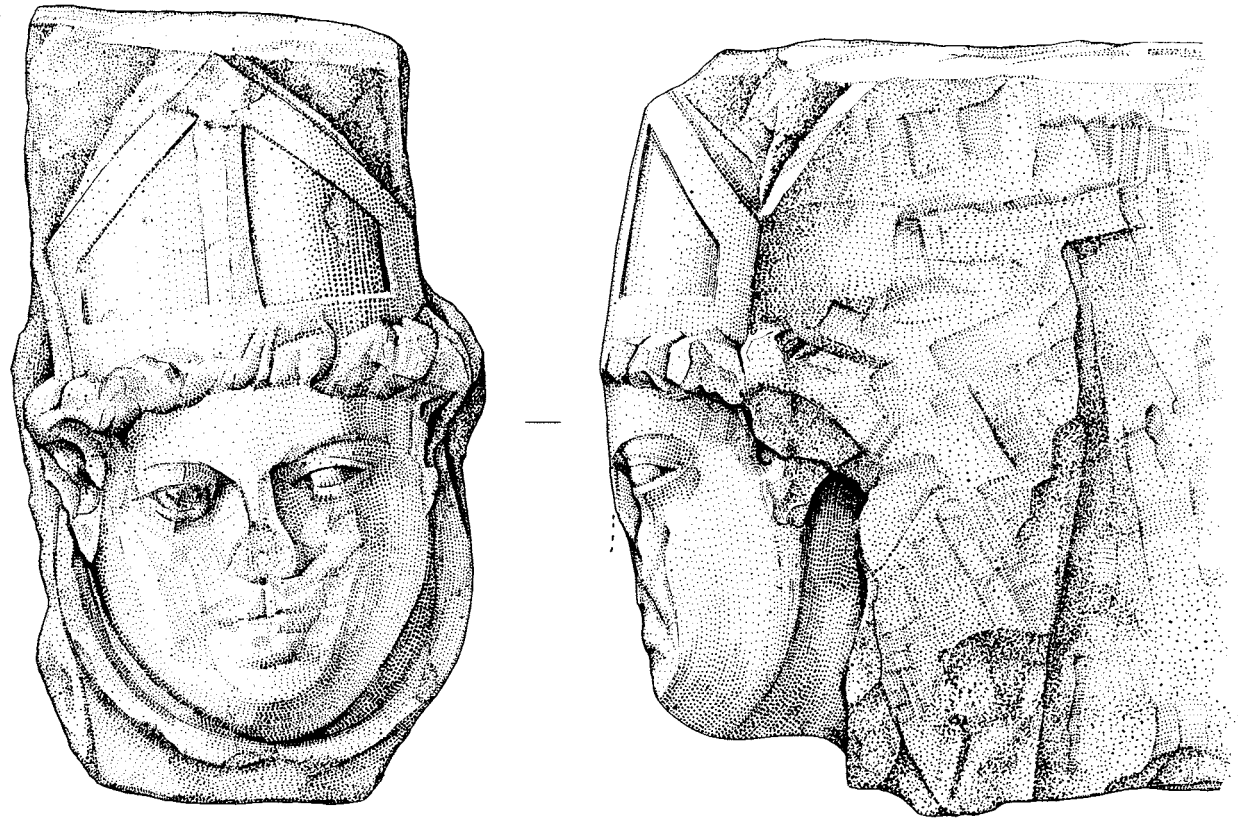


*Figure53: Carved cleric's head, Thorneholme Priory, Yorkshire. Scale 1:2 (Judith Dobie)*

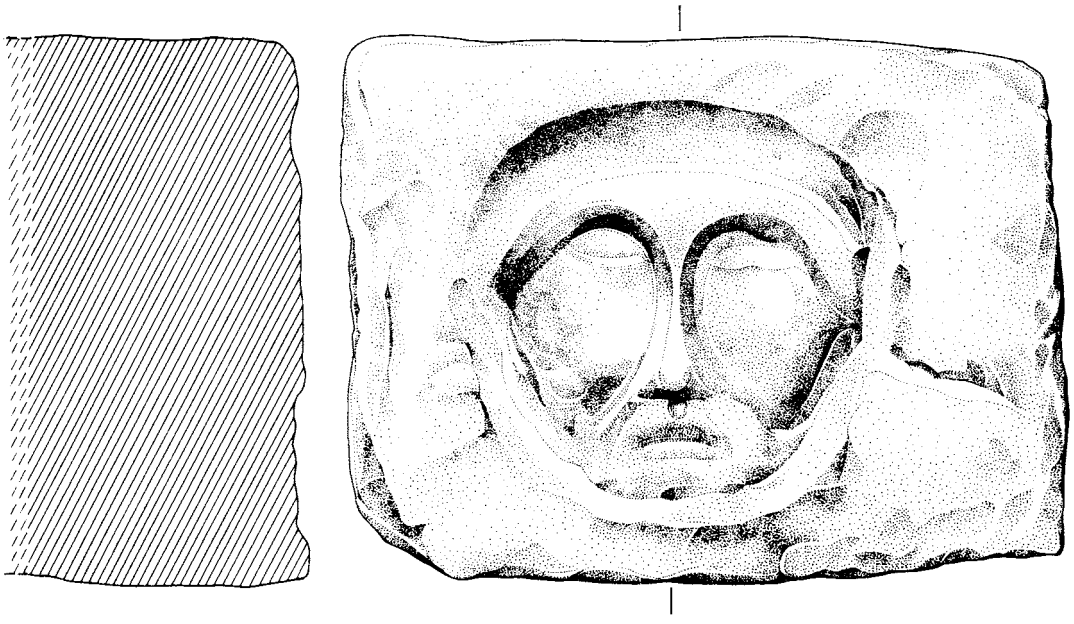


*Figure 54: A stone carving of a Celtic head found within the Hadrian's Wall milecastle at Sewingshields, Northumberland. Scale 1:2 (Margaret Tremayne)*

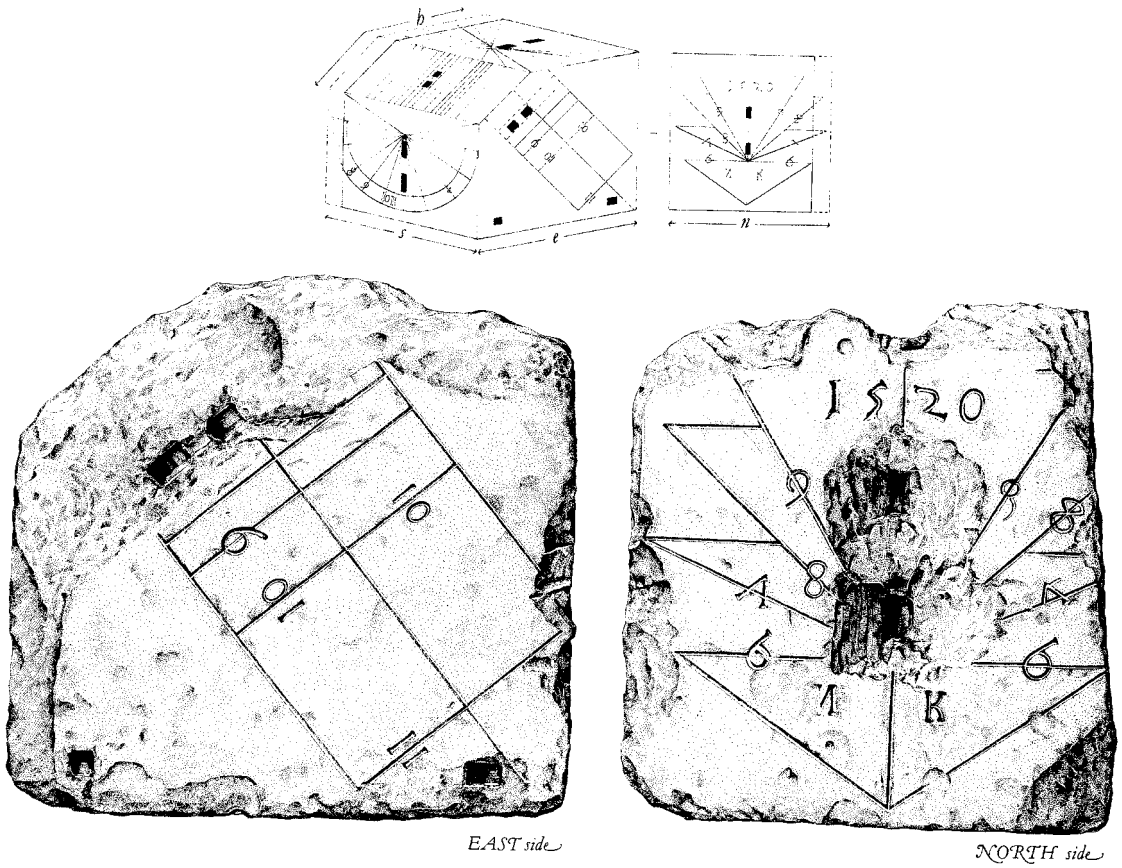



*Figure 55: Sun dial, Acton Court, Somerset. Scale 1:4 (Margaret Tremayne). The accompanying reconstruction shows the decoration on the other faces.*

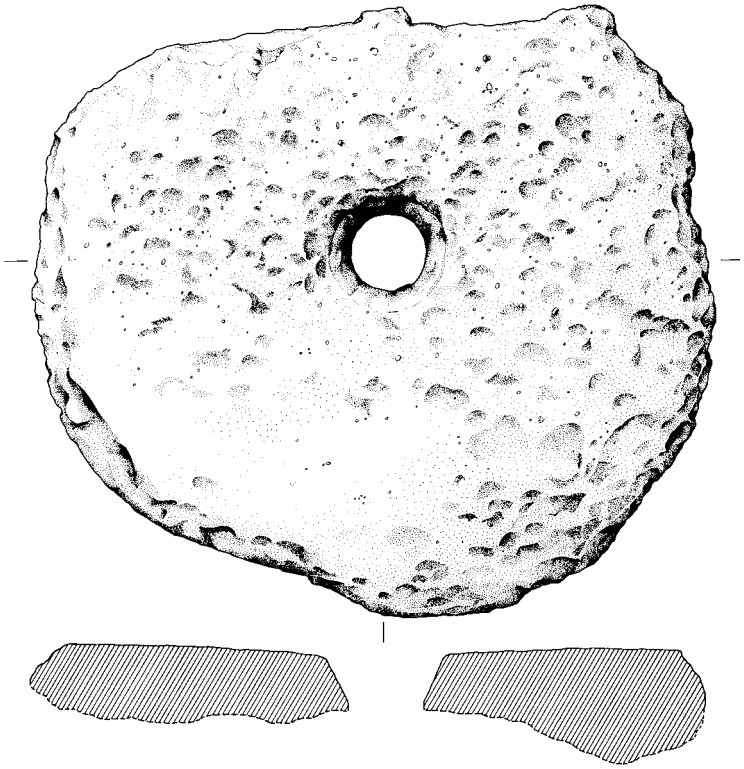


*Figure 56: Quernstone, Sewingshields, Northumberland, 1:4? (Margaret Tremayne?)*

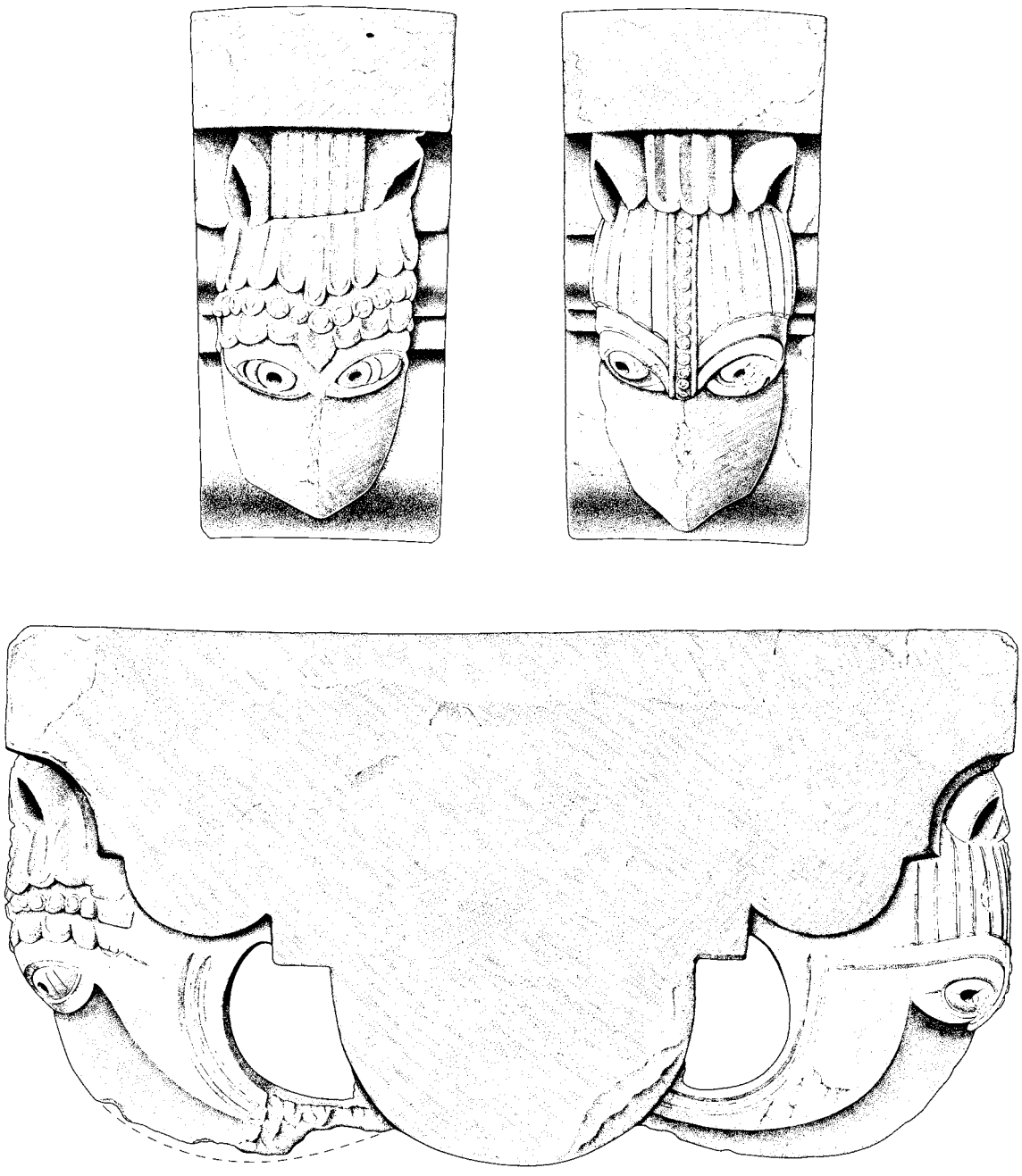


*Figure 57: Rib voussoir with beakheads, Sherborne Castle, Dorset, Scale 1:3 (Chris Evans)*

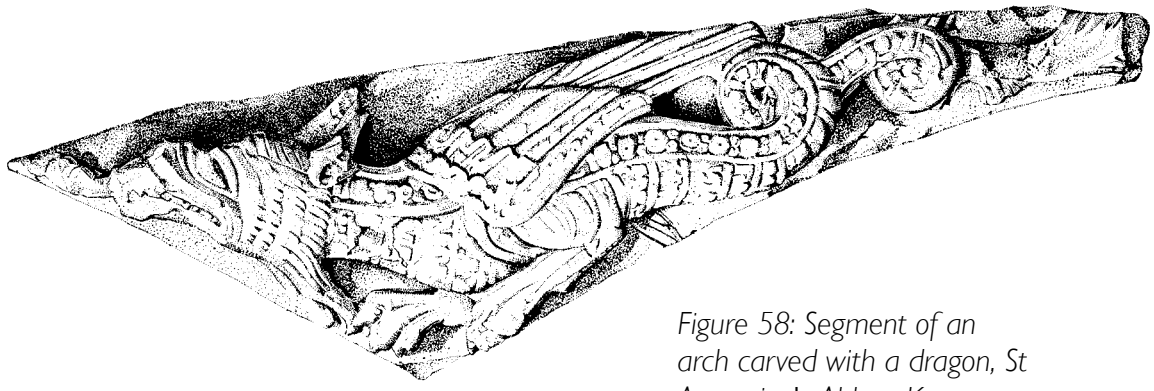


*Figure 58: Segment of an arch carved with a dragon, St Augustine's Abbey, Kent. Scale 1:4 (Judith Dobie)*

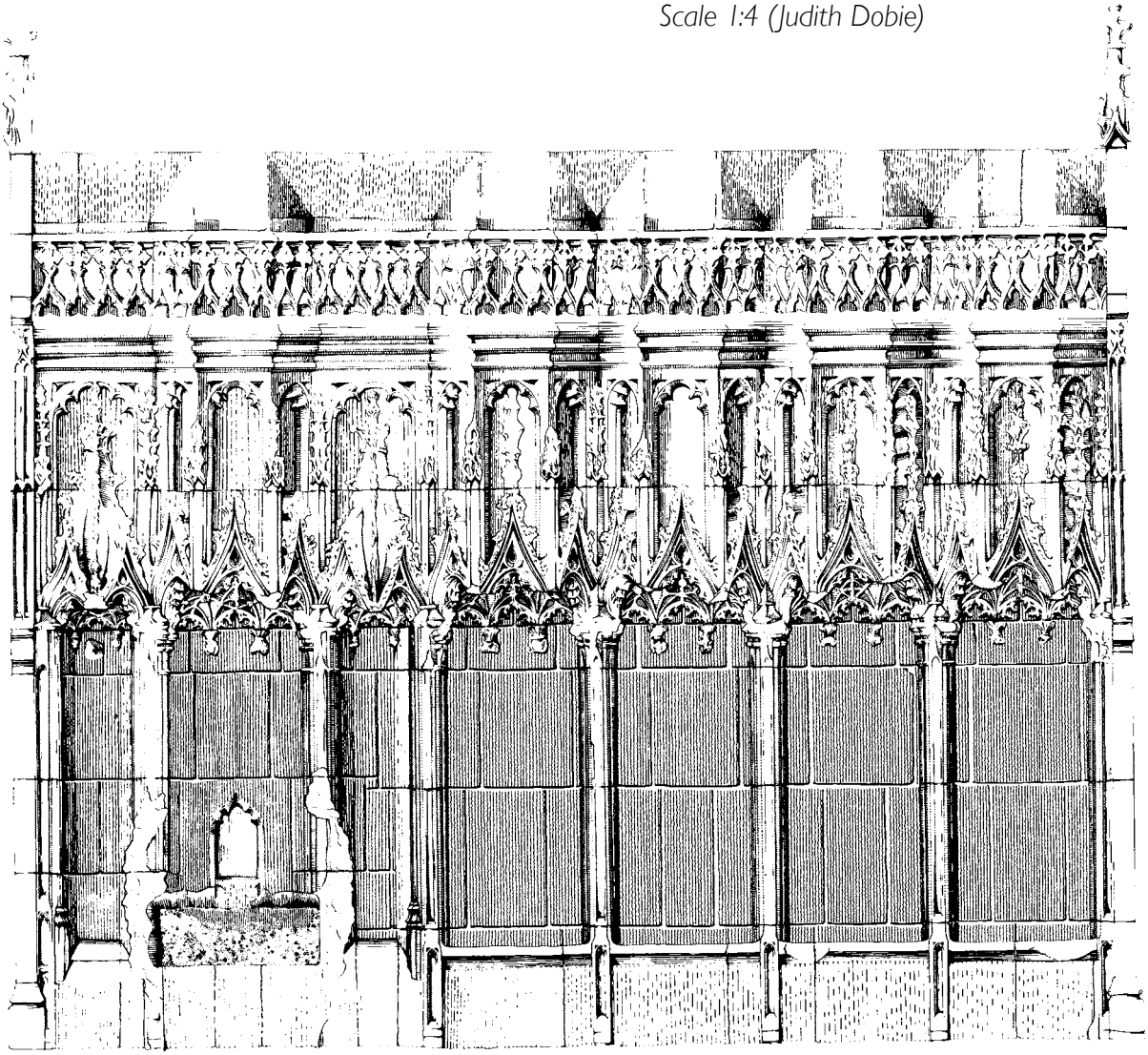


*Figure 59: The elaborate sedilia and piscina in the south wall of the presbytery, Furness Abbey, Cumbria. The Furness sedilia is one of the most impressive in the country and recording it must have seemed a daunting task. Scale 1:20 (Claire Thorne)*

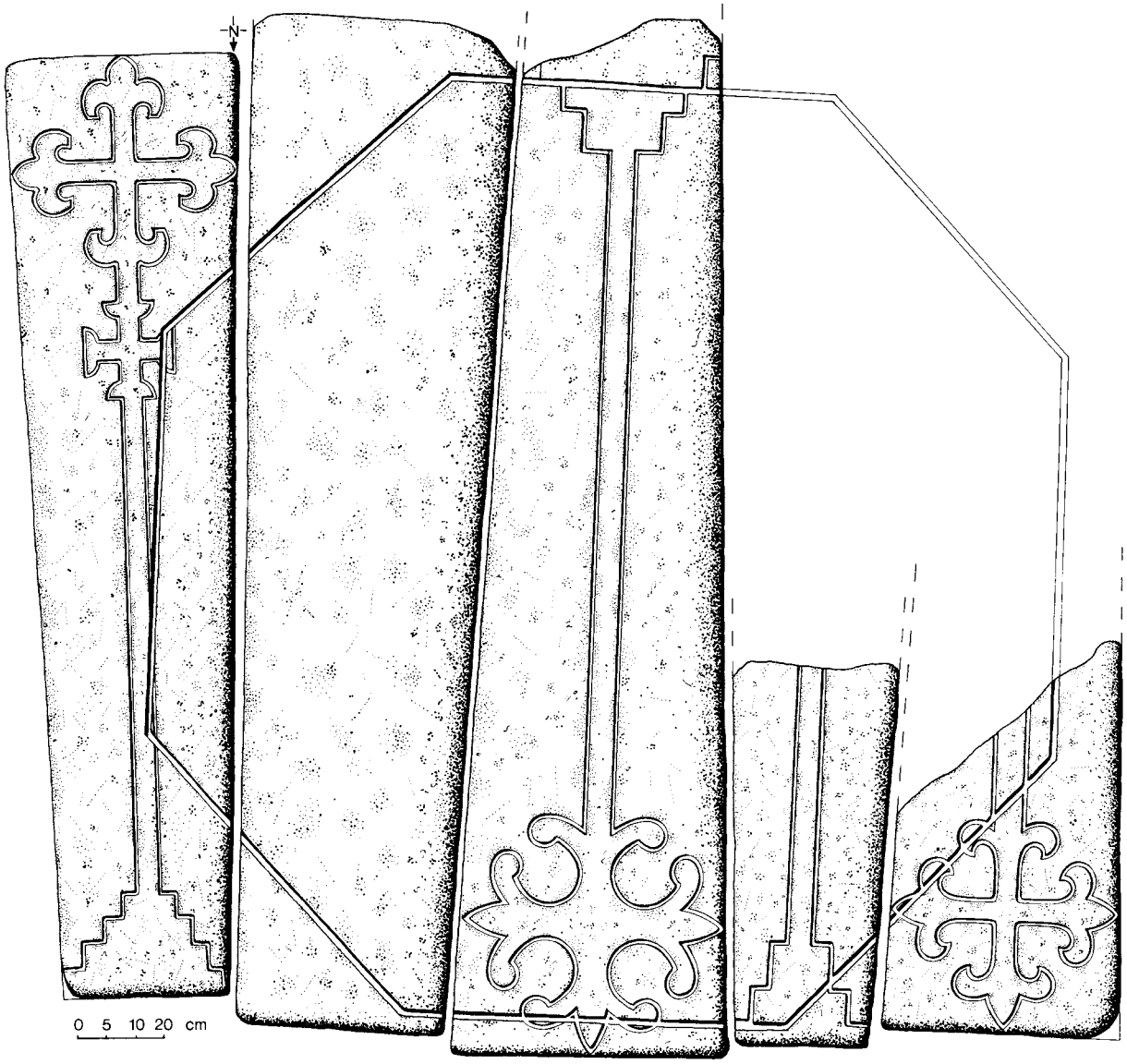



*Figure 60: Graveslabs, Thornton Abbey, North Lincolnshire. Scale 1:12 (Chris Evans)*

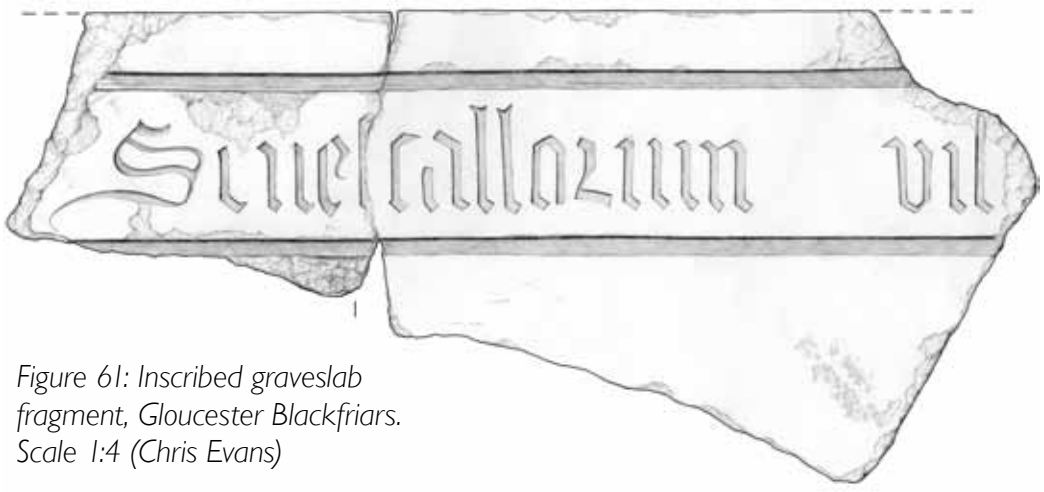


*Figure 61: Inscribed graveslab fragment, Gloucester Blackfriars. Scale 1:4 (Chris Evans)*

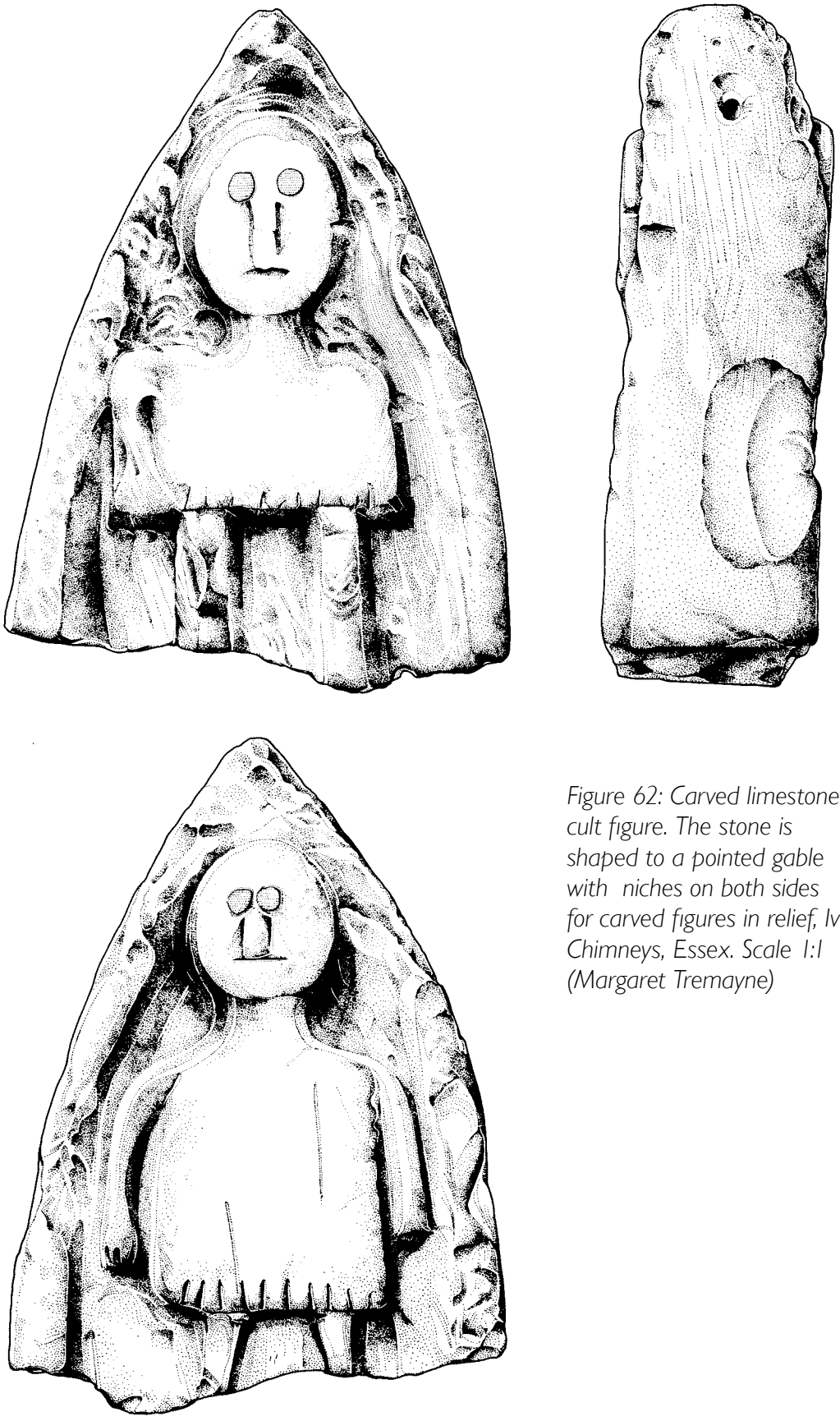


*Figure 62: Carved limestone cult figure. The stone is shaped to a pointed gable with niches on both sides for carved figures in relief, Ivy Chimneys, Essex. Scale 1:1 (Margaret Tremayne)*

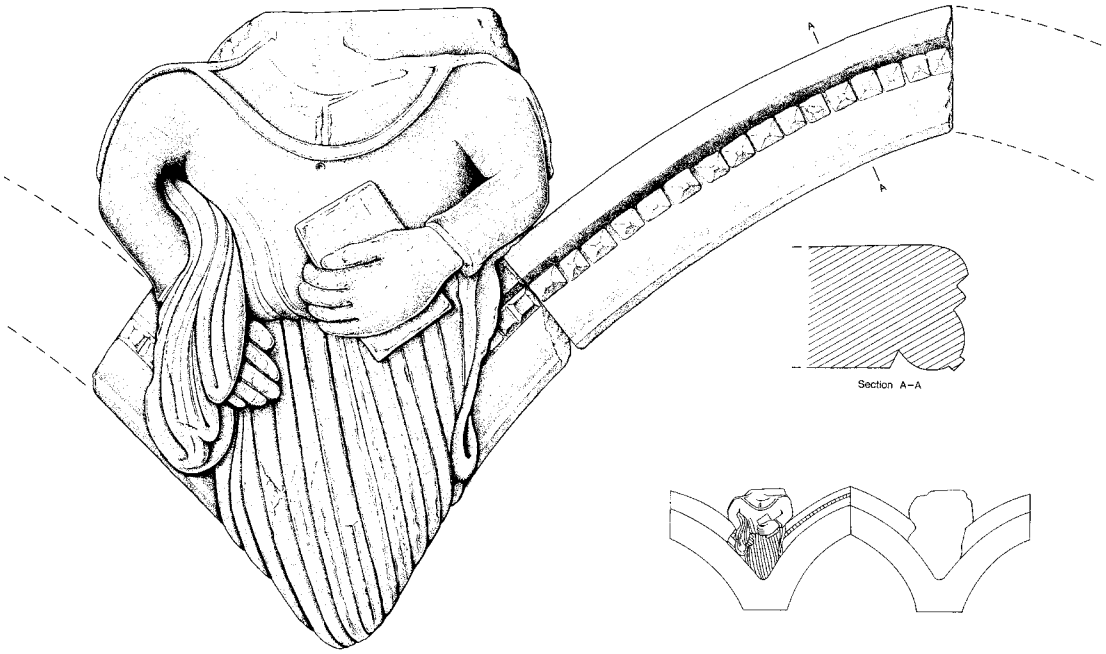



*Figure 63: Spandrel carved with cleric, Lanercost Priory, Cumbria. Scale 1:5 (Chris Evans)*

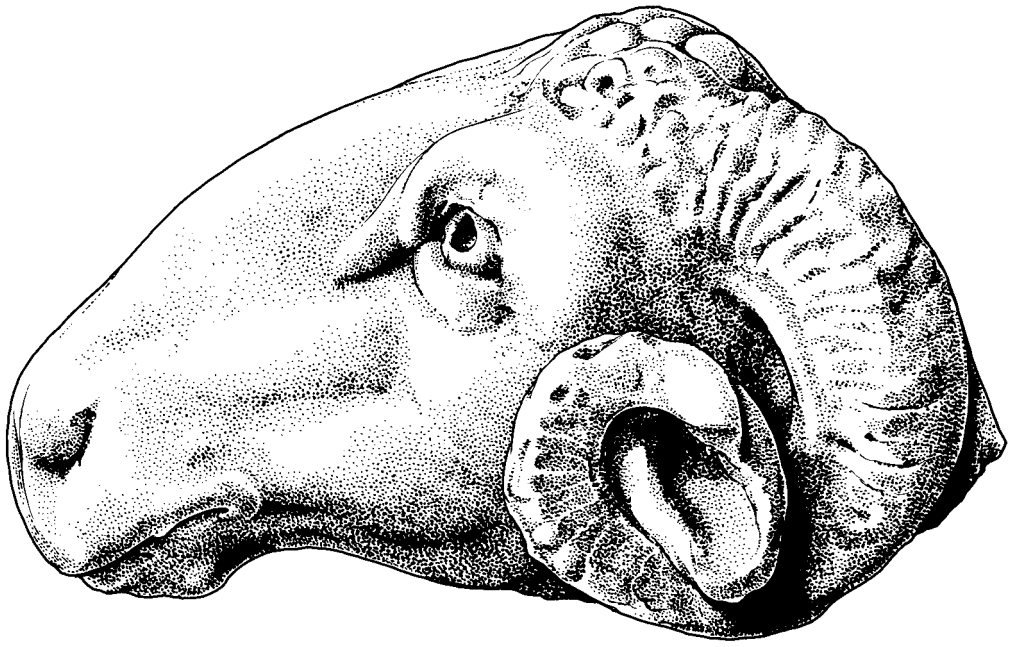


*Figure 64: Plasterwork ram's head, Nonsuch Palace, Surrey, Scale 1:2 (David Honour)*

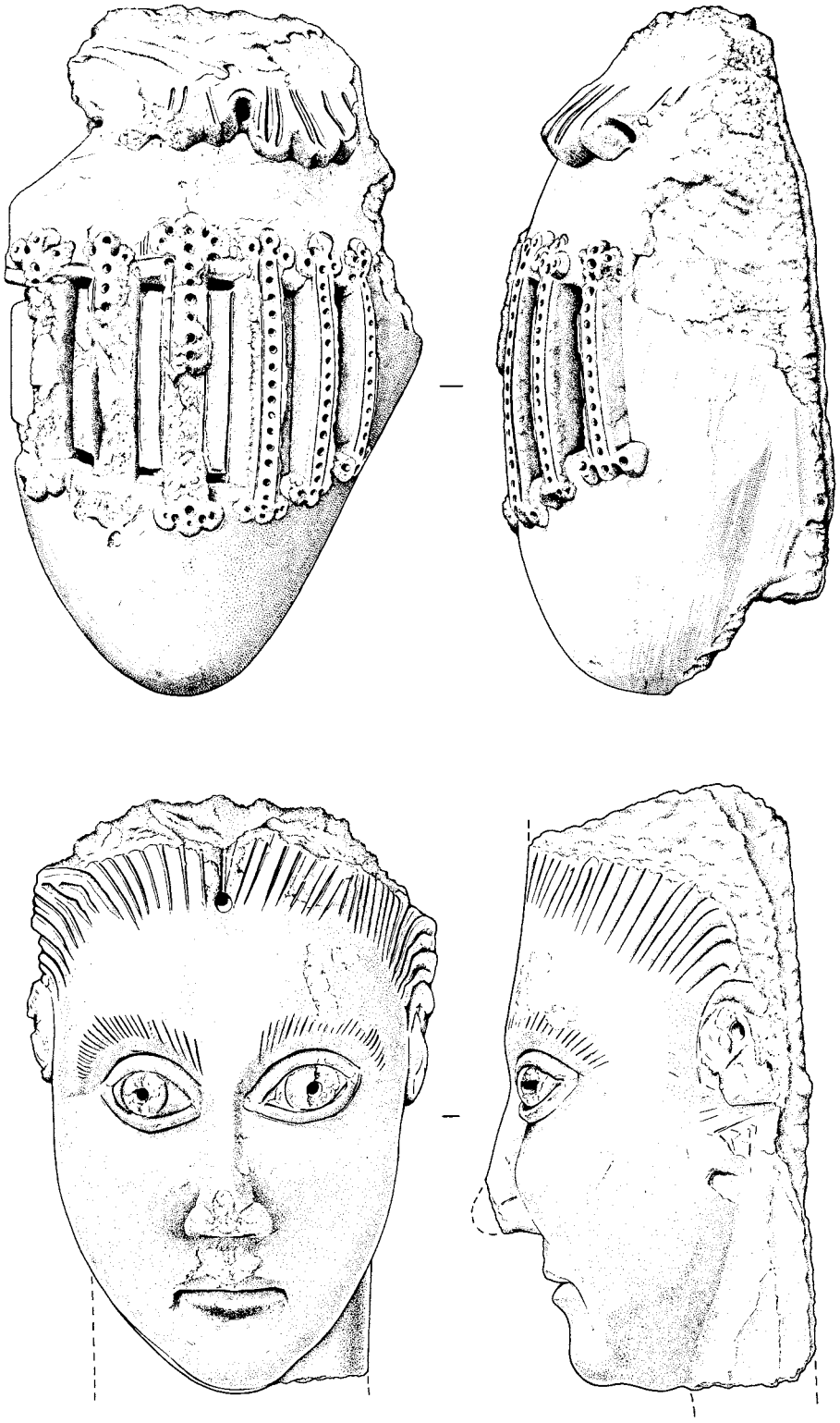


*Figure65: Plasterwork helm and woman's head, Berry Pomeroy Castle, Devon. Scale 1:2 (Chris Evans)*

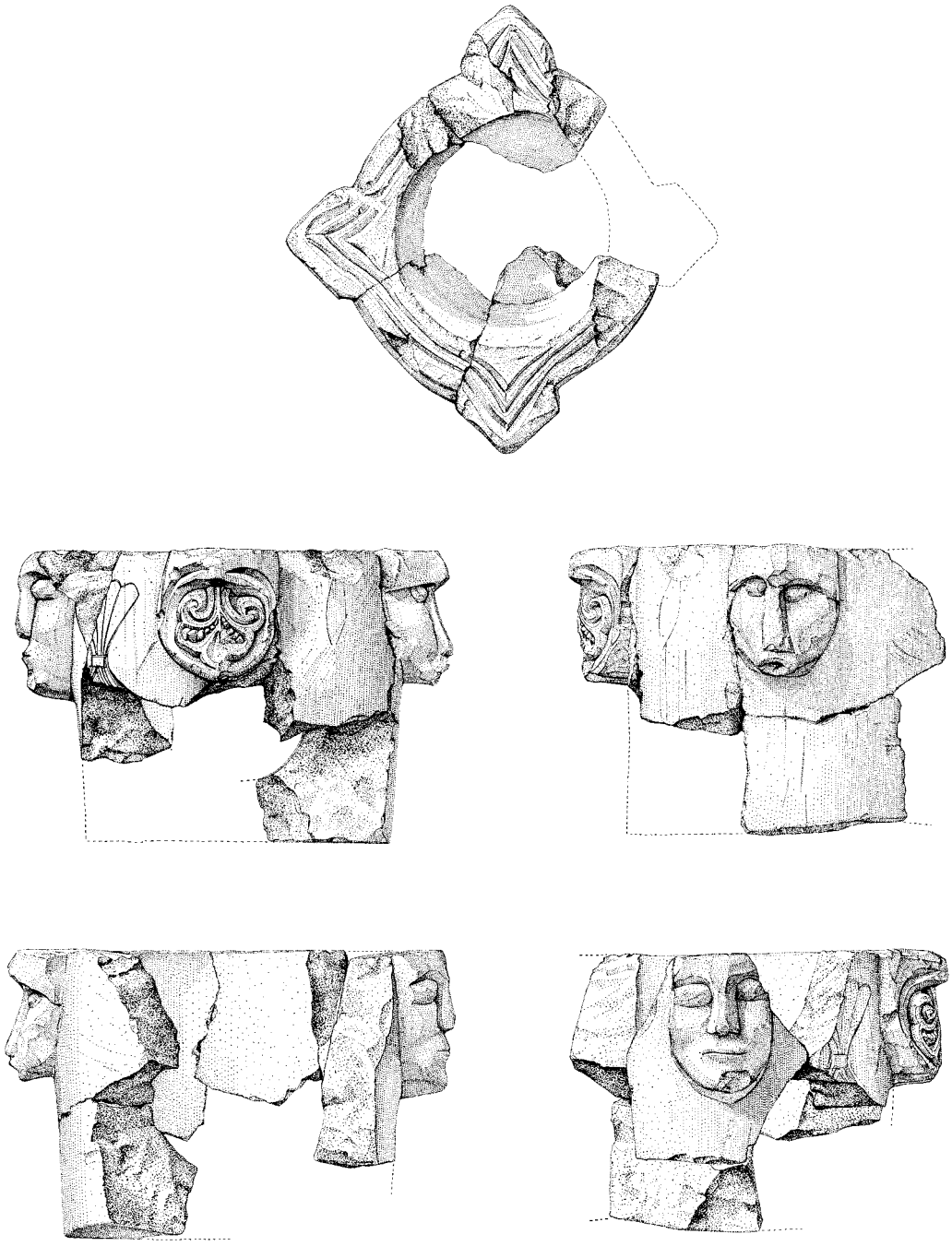


*Figure 66: Stone mortar from Castle Rising, Norfolk. The decoration of the mortar is balanced with two projecting faces at diagonal corners and the one remaining palmette was presumably balanced by a corresponding decoration at the diagonally opposite corner. The most likely date for the carving of the mortar is the third quarter of the 12th century, ie 1175-1200. Scale 1:4 (Judith Dobie)*

## Drawing Flints

When I joined the drawing office one of my first tasks was drawing flint cores from Roger Mercer's excavations at Grimes Graves. Illustrating flints is a task for an aesthete. Unrelentingly hard, shiny and smooth with percussion rings to read which explain their manufacture, you needed the smoothest and most regular of pen lines to make a satisfactory illustration. Initially I found it difficult to see the percussion ripples and then there was the problem of combining this information with tone to make the cores look solid and three dimensional. I drew flints for a year. It reminded me of my first year at art school when each morning we drew plaster casts of classical statues, monotonous but good for accuracy and technique Not everyone found them so challenging. Sue Heaser remembers Grimes Graves flints with pleasure. She had studied flints and knapping at university so they were of special interest to her. There were so many flints to draw that they had to be divided amongst all the illustrators. I scrutinized mine so closely that they were etched on my memory and when years later working at the British Museum I saw the cores laid out on tables for study, I could still pick out my flints from all the hundreds lying there.

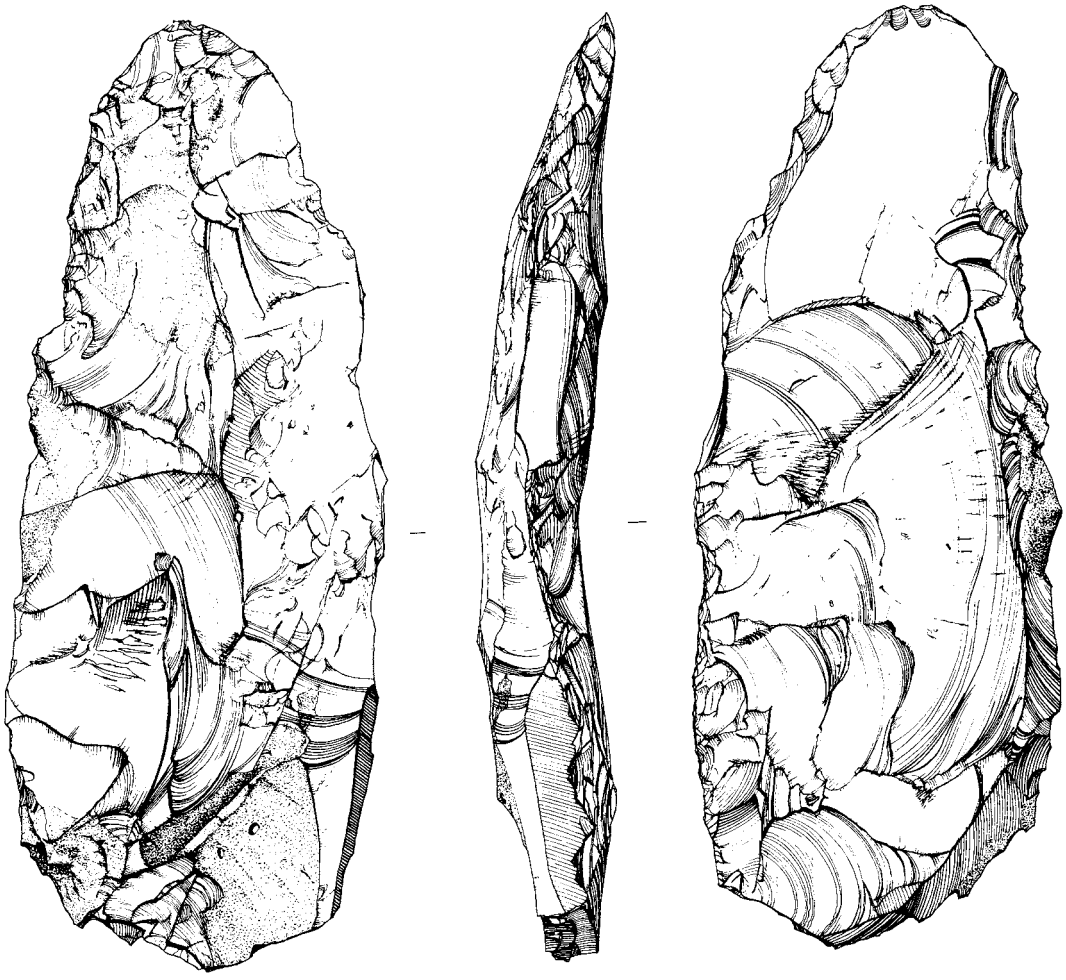


*Figure 67: Burin roughout, Grimes Graves, Norfolk. Scale 2:3 (illustrator unknown)*

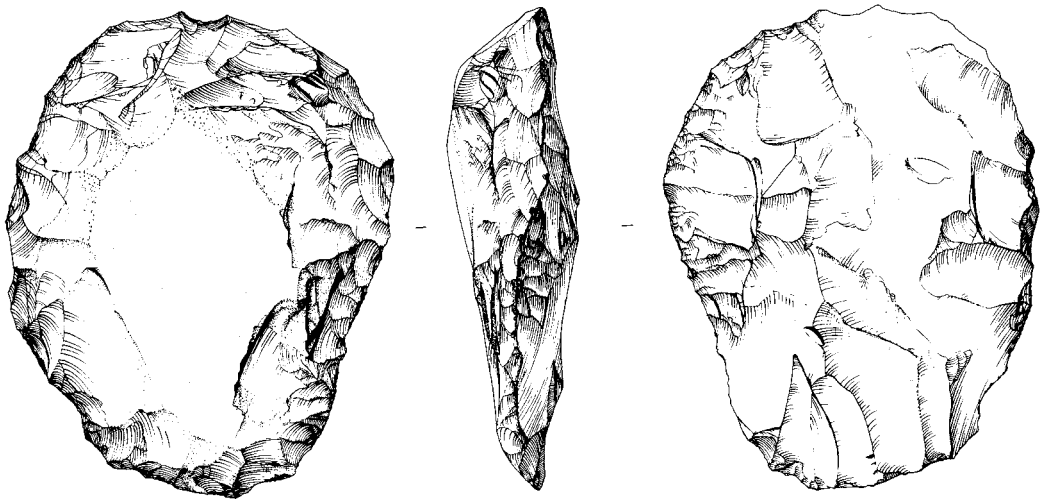


*Figure 68: Flint core, Grimes Graves, Norfolk. Scale 1:3 (illustrator)*

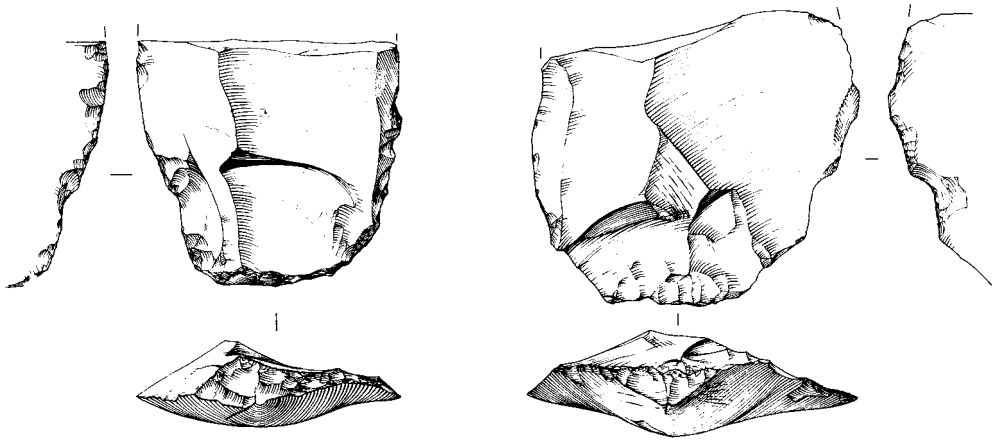


*Figure 69: Retouched flints, Grimes Graves, Norfolk. Scale 2:3 (illustrator unknown)*

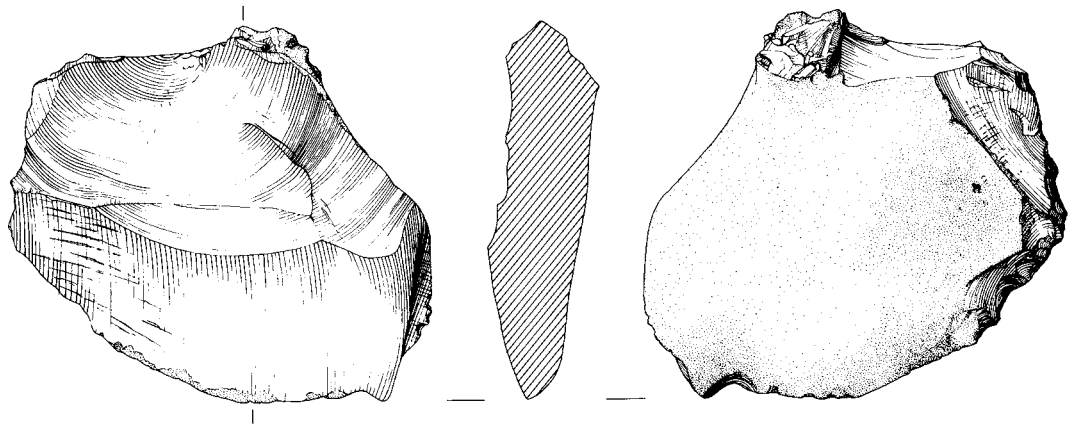


*Figure 70: Flint core, Grimes Graves, Norfolk. Scale 2:3 (illustrator unknown)*

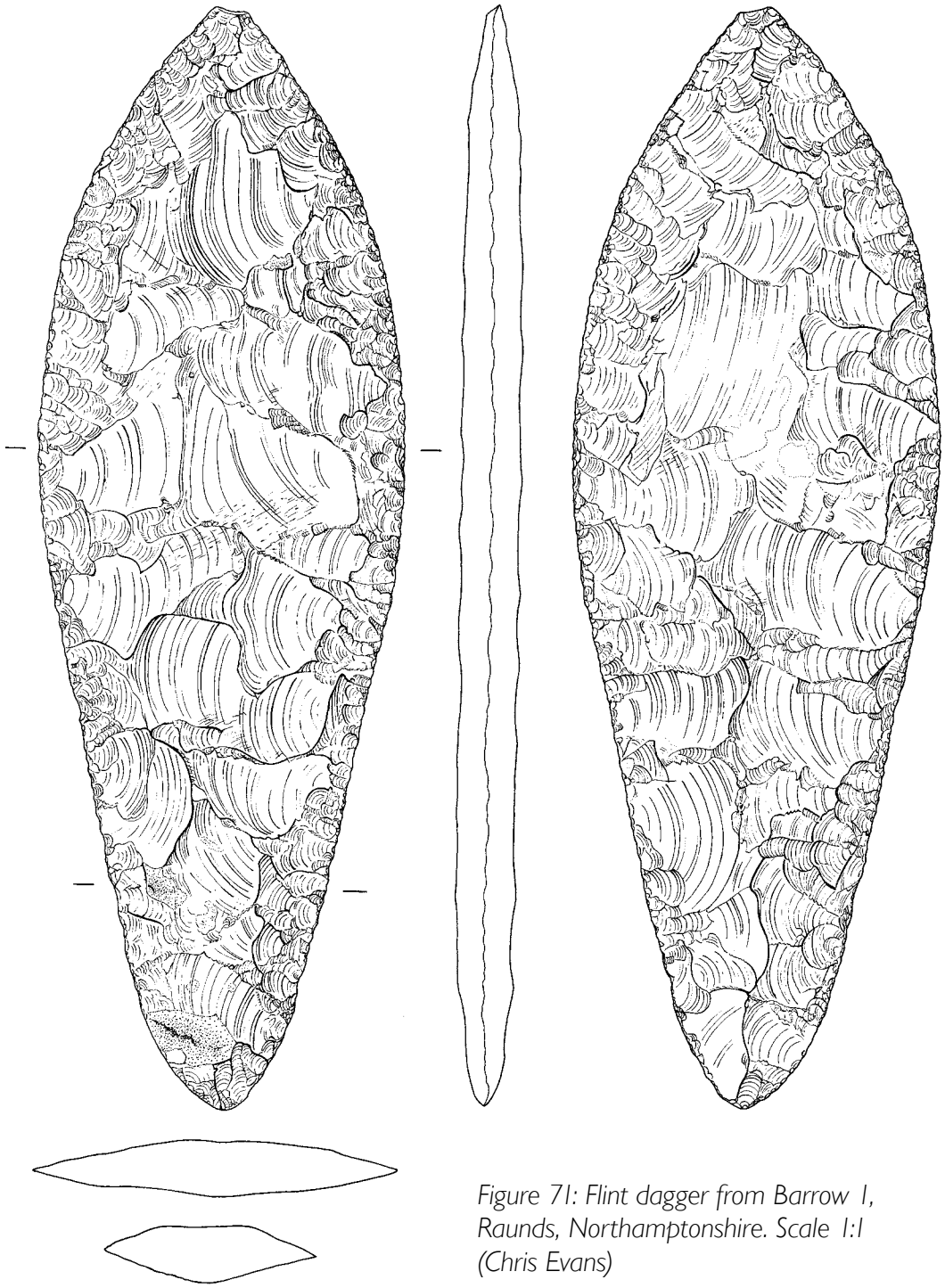


*Figure 71: Flint dagger from Barrow 1, Raunds, Northamptonshire. Scale 1:1 (Chris Evans)*

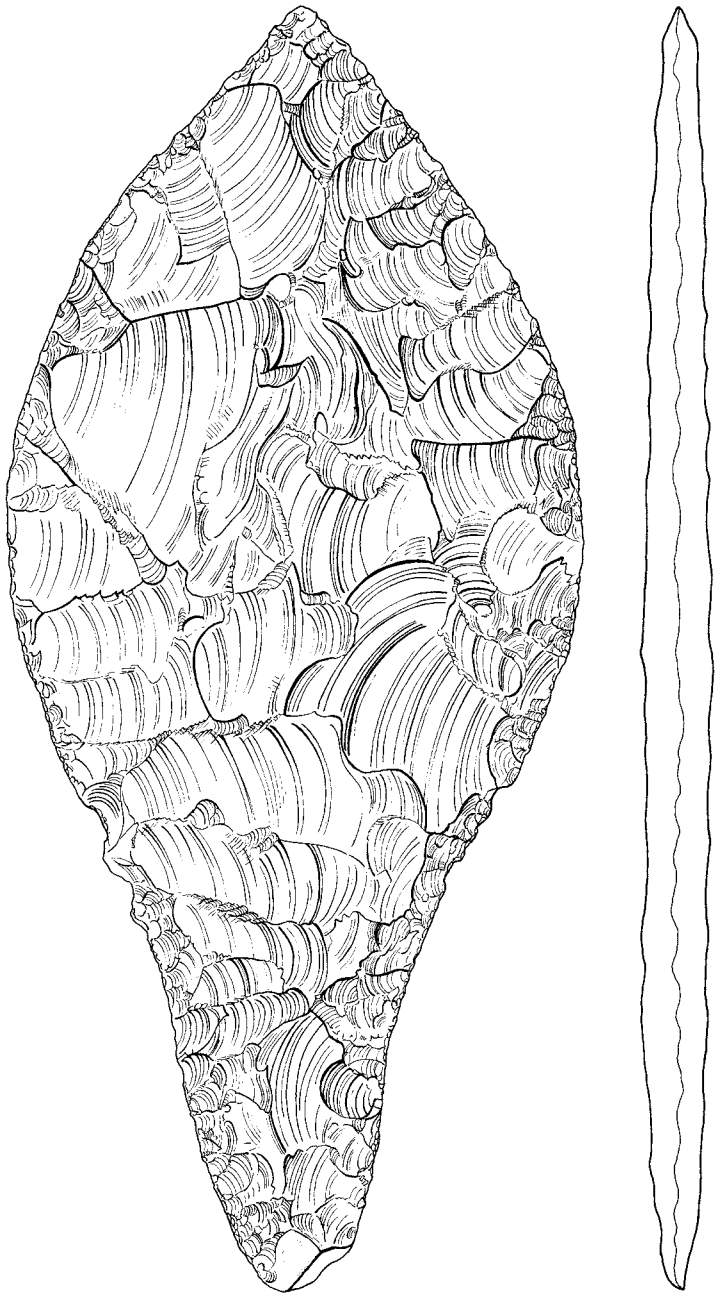
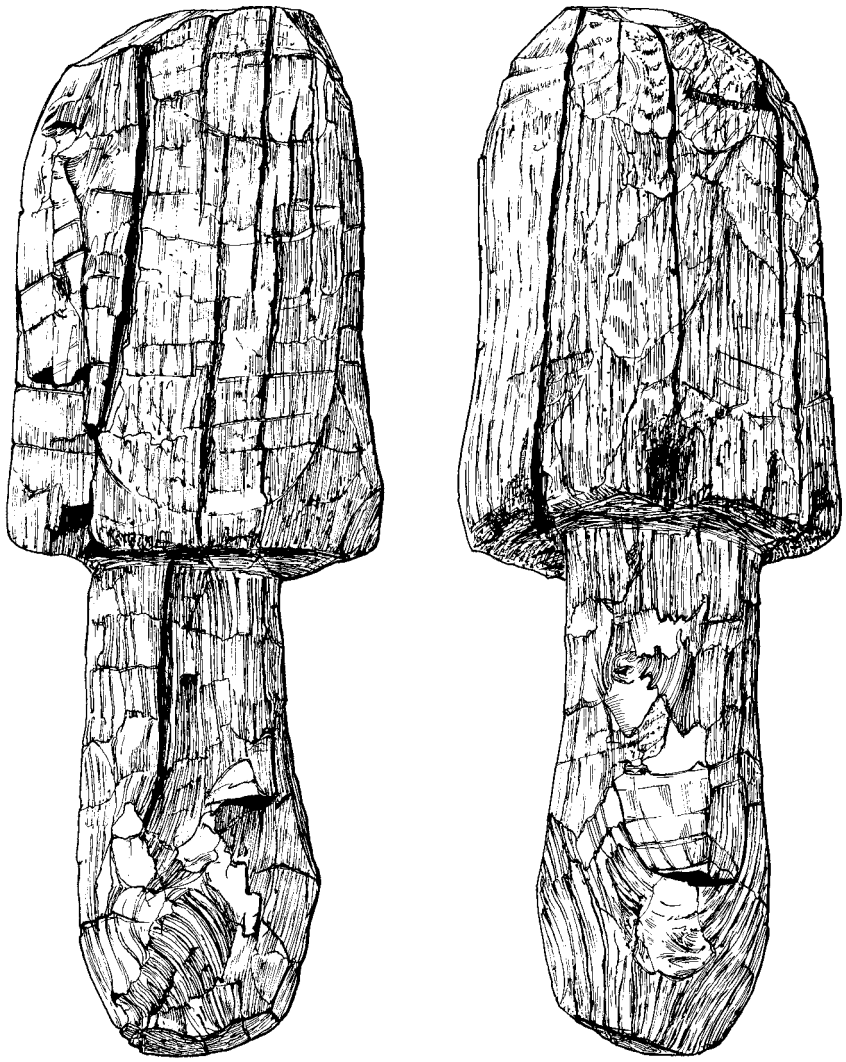


*Figure 72: Flint dagger from Barrow 6, Raunds, Northampton. Scale 1:1 (Chris Evans)*

## Drawing Organic Finds

Before there was a freeze dryer in the laboratories we usually drew wood finds wet. If you didn't keep it moist it dried out and distorted. David Neal tells of a plank he drew which had shrunk by four inches from the time he started the drawing to when he finished. The Anglo-Saxon coffins from St Peter's church, Barton on Humber were stored in tanks of water in the basement of Fortress House and I spent days in that gloomy, concrete bunker recording them. The conservationist Marjorie Hutchinson and I dredged them out plank by plank, coffin by coffin for drawing. We wore white nylon boiler suits and Wellingtons and made a noteworthy pair in the lift from laboratory to basement. To draw the wood I laid a sheet of acetate over the planks and traced the outline and all the detail I could see - the dowel holes, adze marks and wood grain - searching and hoping for letters or inscriptions. The tracings were reduced photographically and the finished drawings made at 1:10 for reduction to 1:20.



*Figures 73: Wooden Mallet, Stanwick, Northamptonshire. Scale 1:2 (Chris Boddington)*

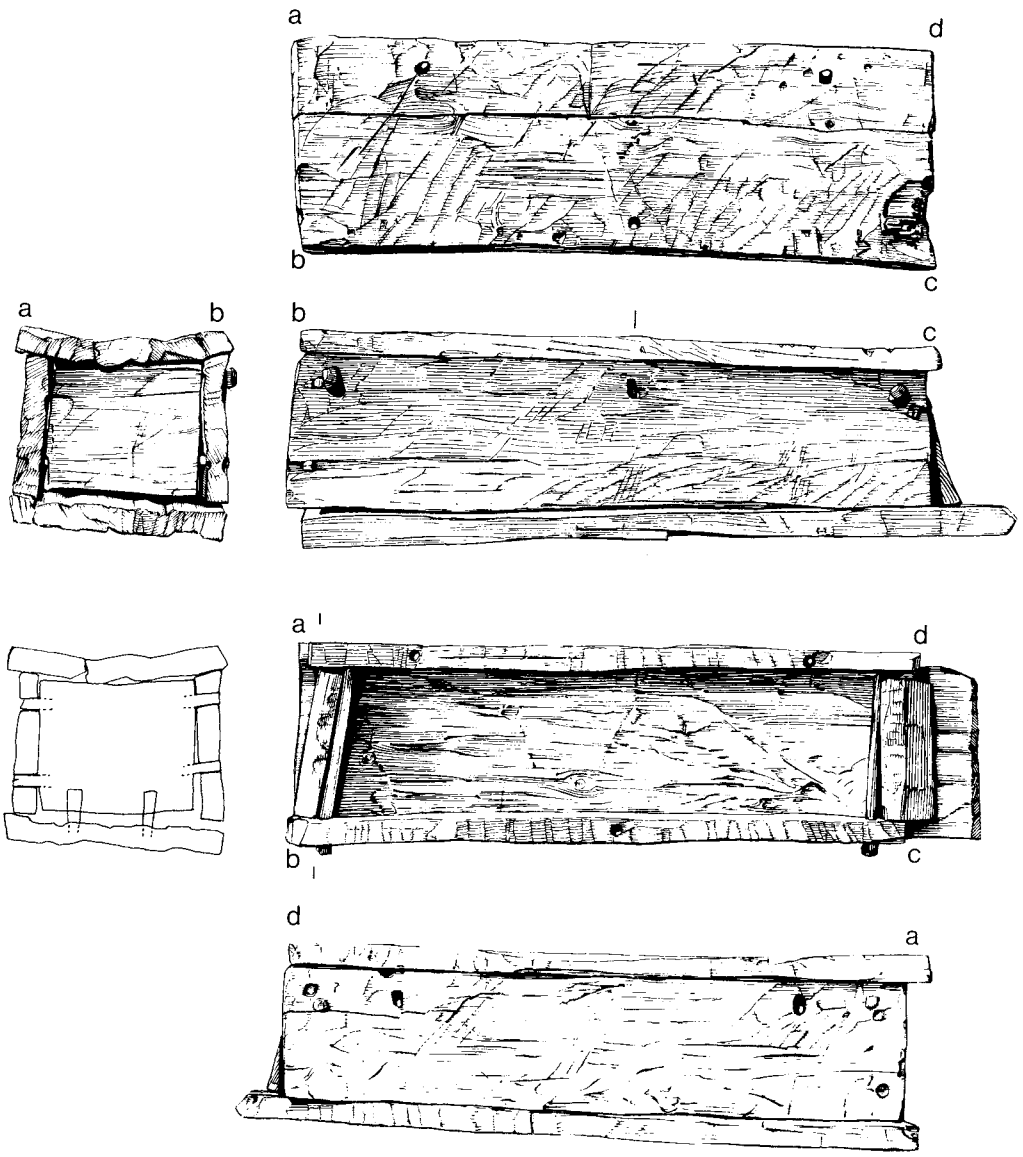



*Figure 74: Childs wooden coffin, Barton-on-Humber, Lincolnshire. Scale 1:10 (Judith Dobie)*

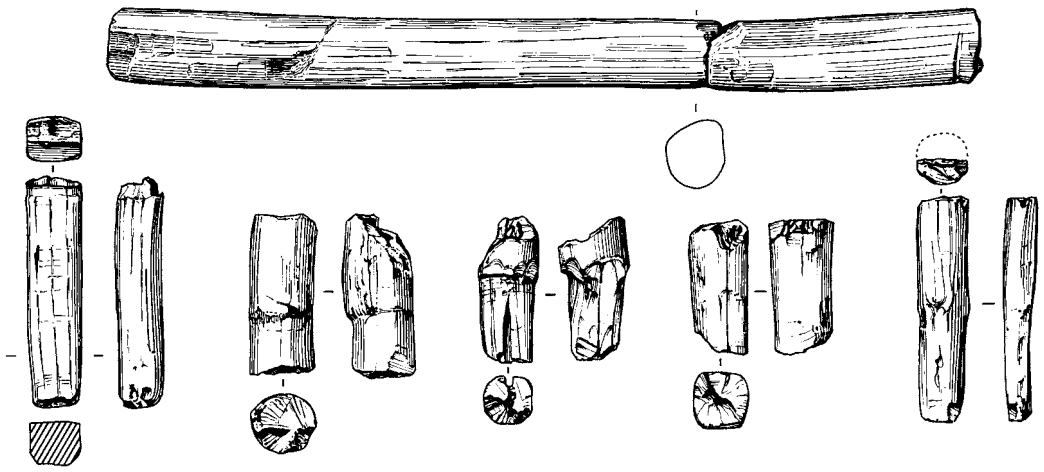


*Figure 75: Wooden dowel and pegs, Barton-on-Humber, Lincolnshire. Scale 1:2, (Judith Dobie)*

Finds were sometimes lifted from an excavation in blocks of soil for further minute excavation in the laboratory. Miranda Scofield drew jumbles of finds, contents of bags, from Saxon graves from West Heslerton as they were dissected by the conservators. Painstakingly recording the position and angle of each object as the soil was removed millimetre by millimetre. Boxes or the remains of buried boxes might be drawn in the same way. By plotting and recording the lock and hinges, the grain of scraps of surviving wood, angle brackets and the contents you could reconstruct the complete object. Such boxes most commonly come from Saxon graves and it can bring the long dead person to life to draw and reconstruct the treasures they were sent to the after world with.

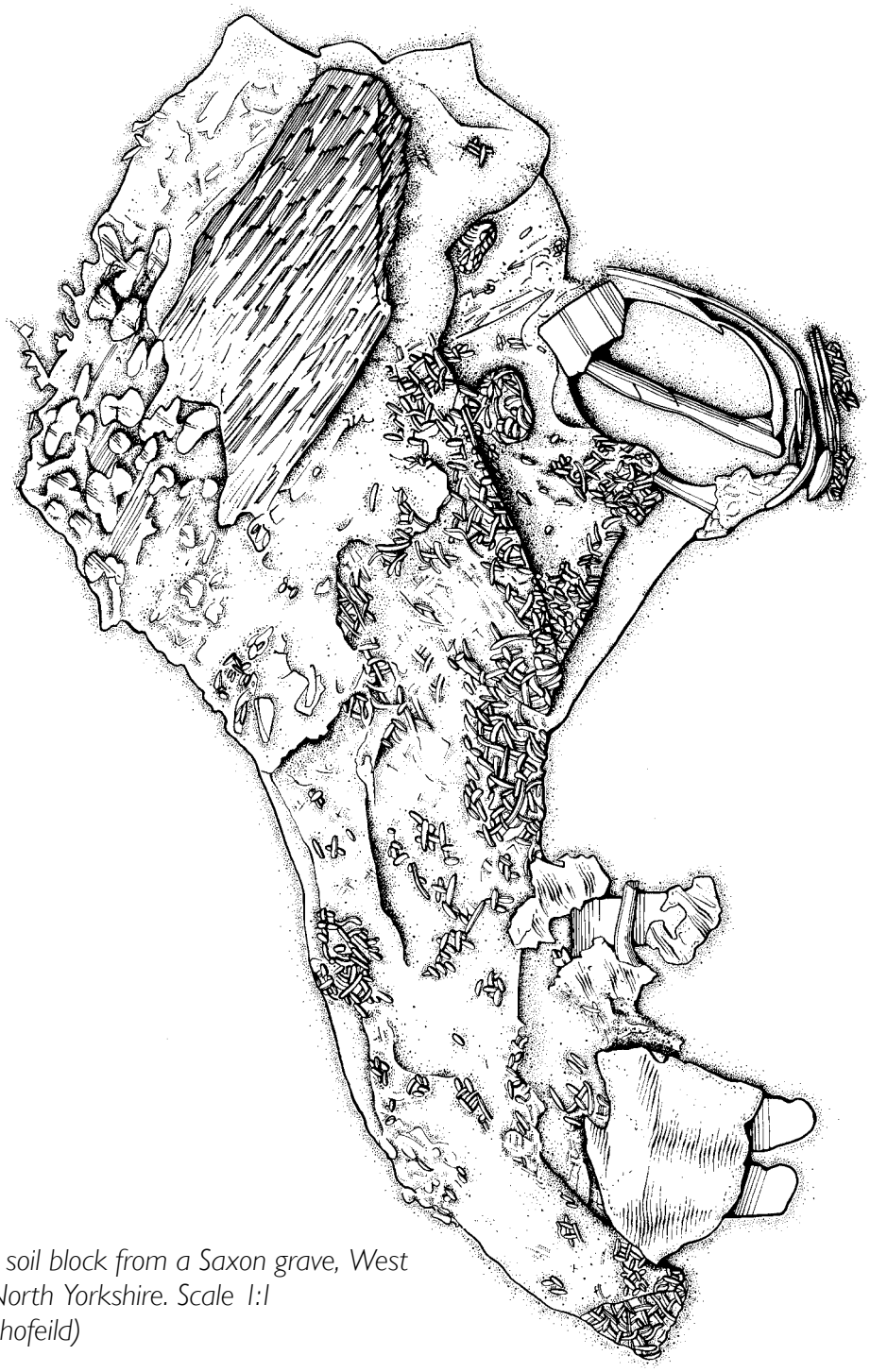


*Figure 76: A soil block from a Saxon grave, West Heslerton, North Yorkshire. Scale 1:1 (Miranda Schofeild)*

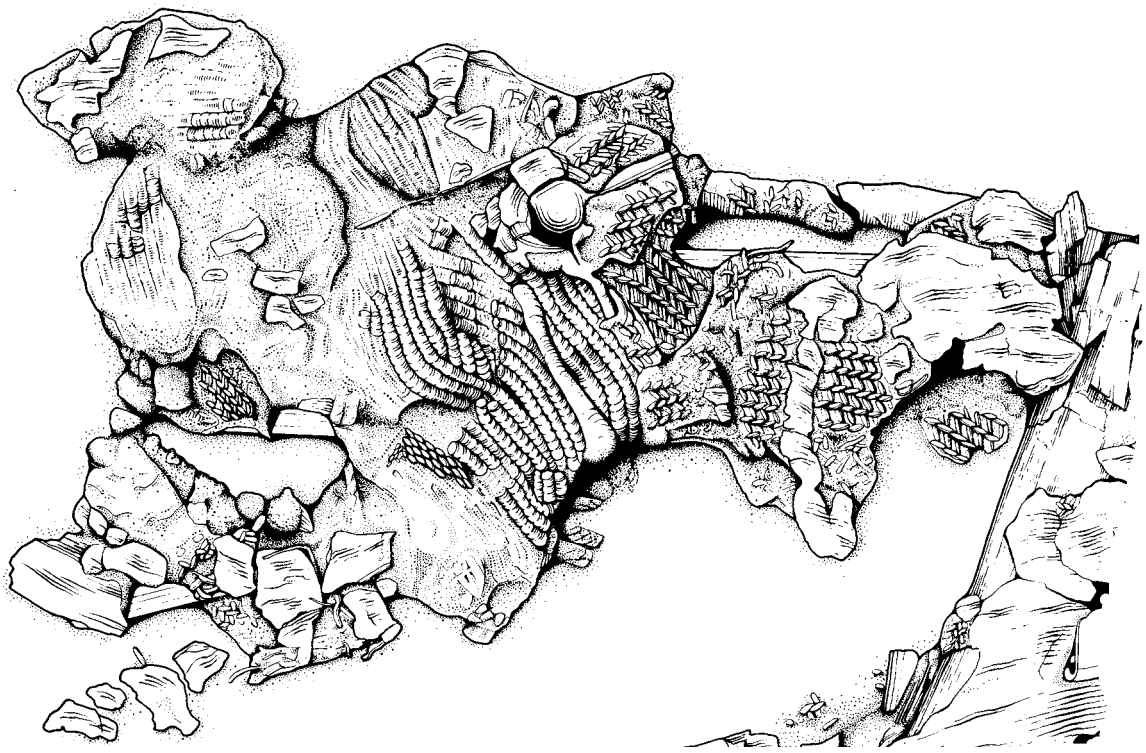


*Figure 77: Detail of soil block from a Saxon grave, West Heslerton, North Yorkshire. Scale 1:1, (Miranda Schofeild)*

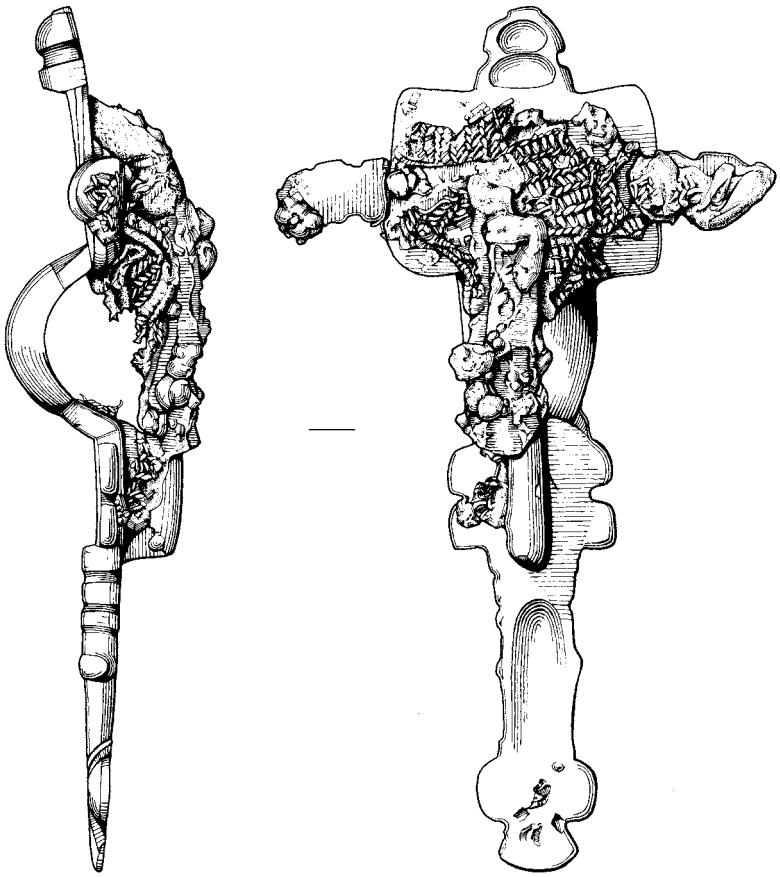


*Figure 78: Brooch from a Saxon grave with textile remains attached, West Heslerton, North Yorkshire. Scale 1:1 (Miranda Schofield)*

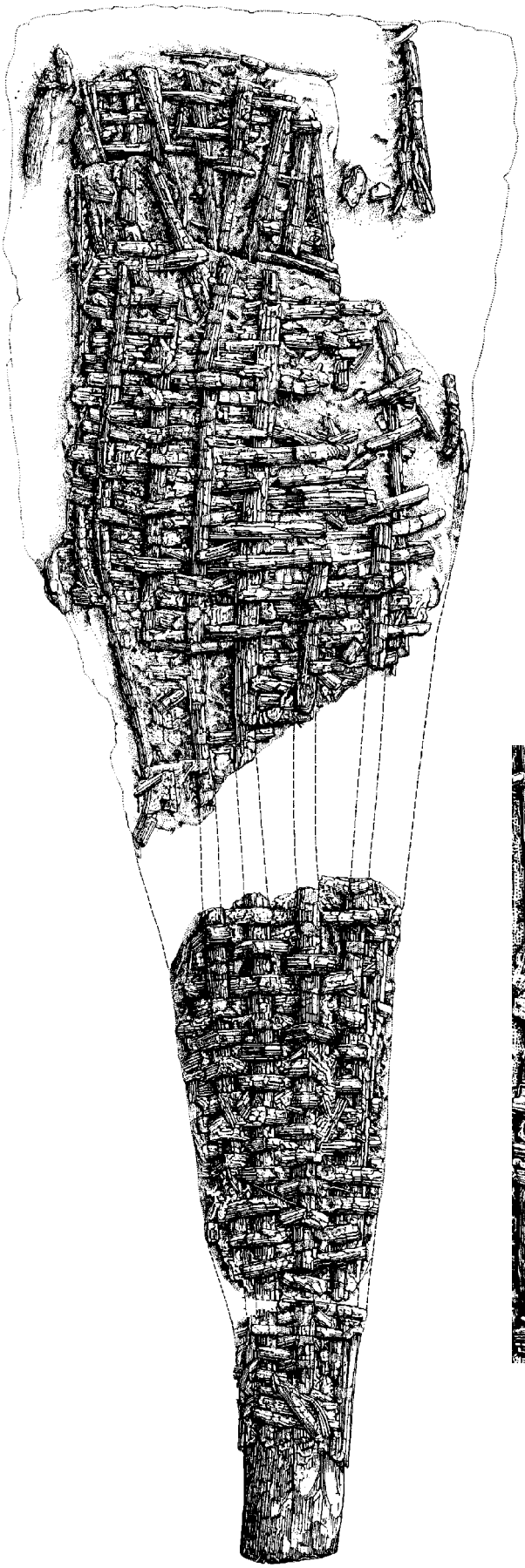
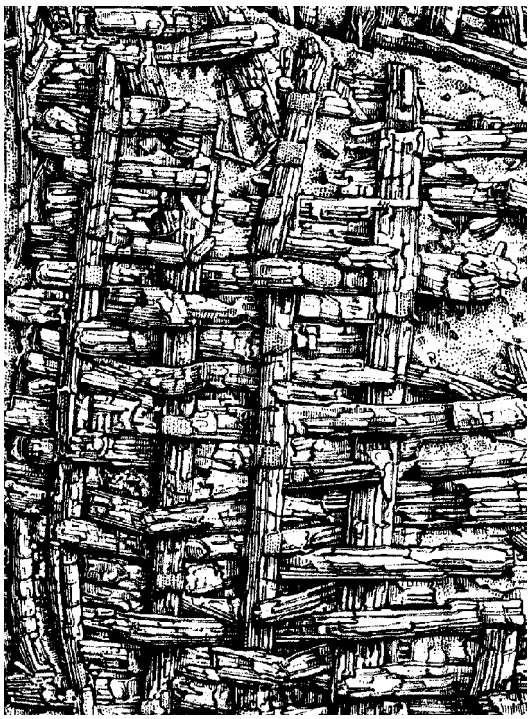


*Figure 79: Wicker fish basket, Anslows Cottages, Berkshire. Scale 1:3, detail 1:1 (Margaret Tremayne)*



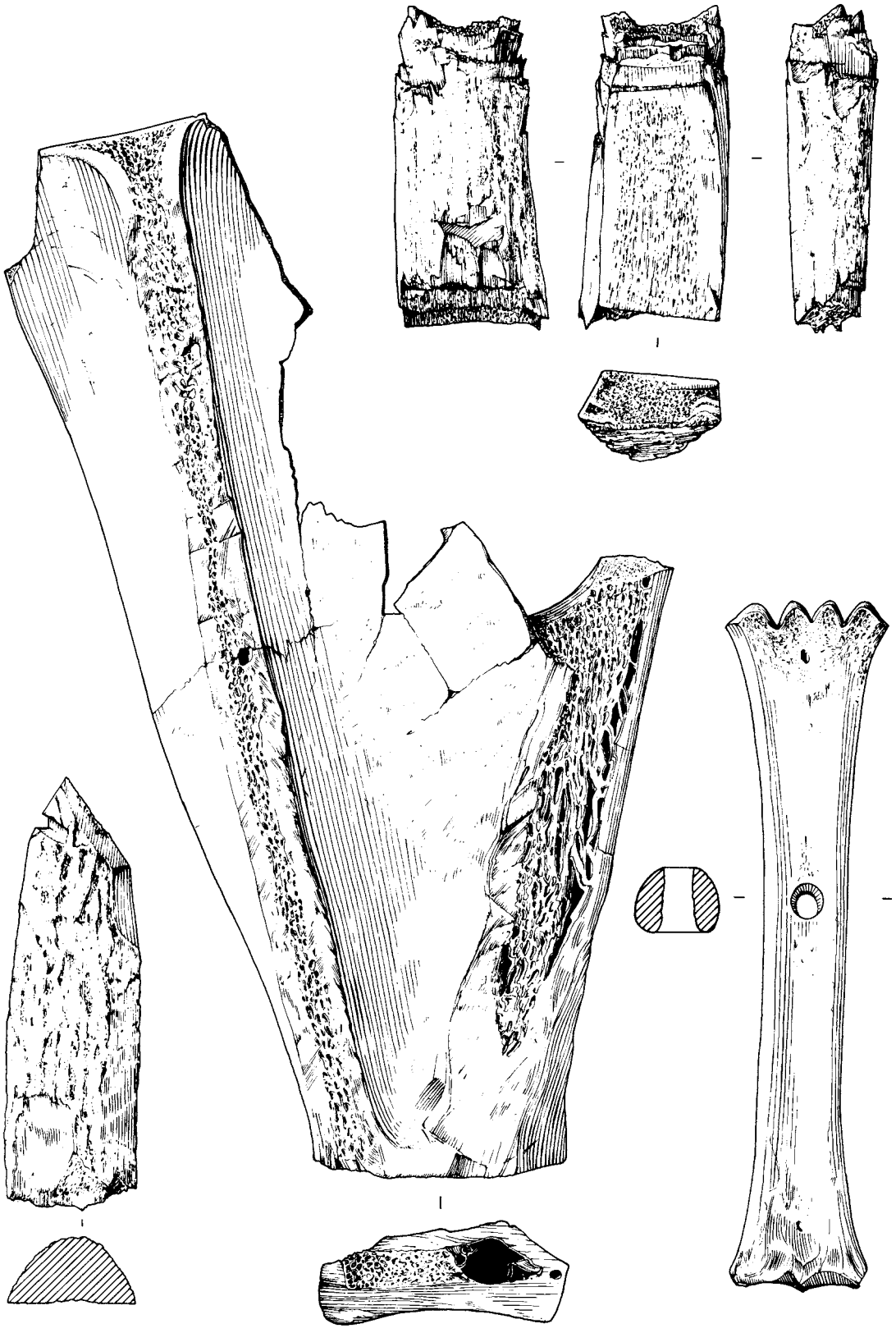


*Figure 80: Bone objects, Hayton, East Yorkshire. Scale 1:1 (illustrator unknown)*

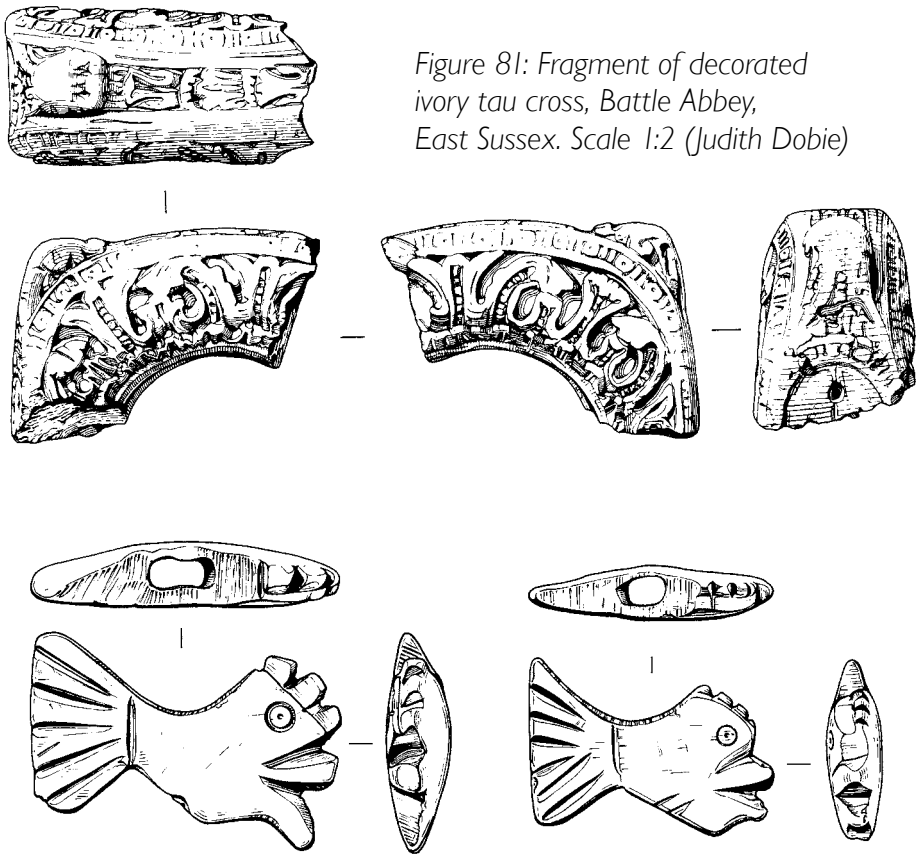


*Figure 81: Fragment of decorated ivory tau cross, Battle Abbey, East Sussex. Scale 1:2 (Judith Dobie)*

*Figure 82: Two bone dolphins , probably part of the same necklace, Catterick, Yorkshire. Scale 1:1 (Chris Evans)*

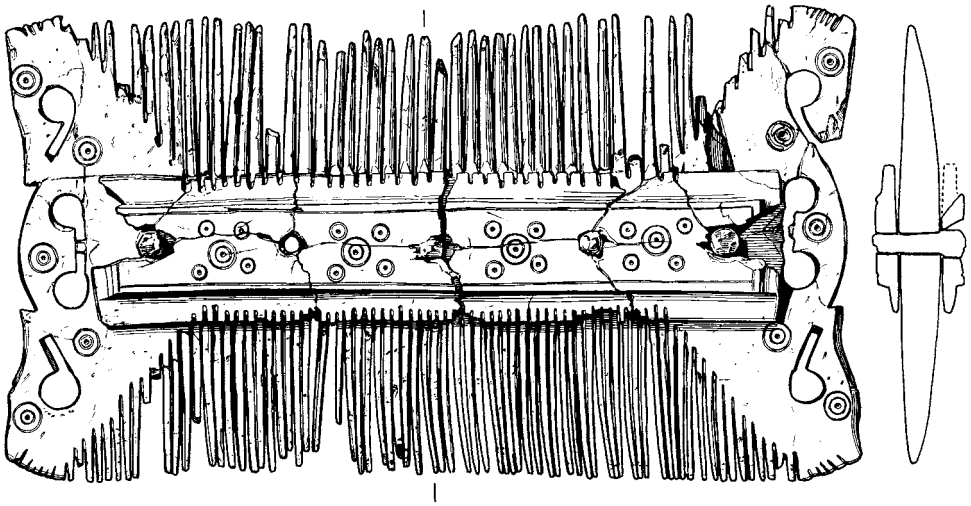


*Figure 83: Decorated bone comb from grave 5, Hyde Street, Winchester, Hampshire. Scale 1:1 (Judith Dobie)*

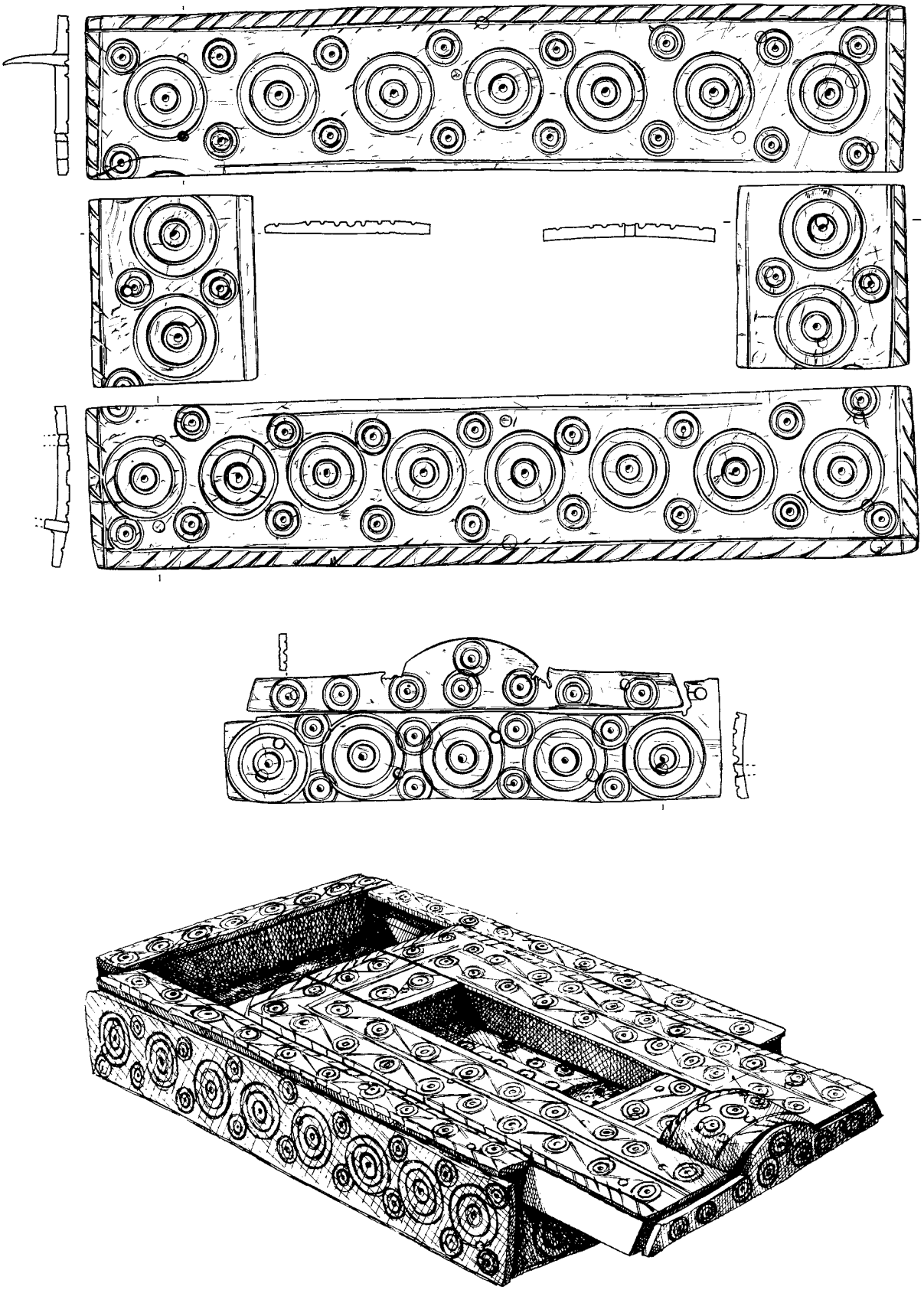


*Figure 84: Views of decorated bone box panels and reconstructed box, Grave 36, Victoria Road, Winchester. Scale 1:1 (Judith Dobie)*

## Drawing Plans and Sections

'An intelligently drawn section is not a skeleton but demonstrates the flesh and blood of its subject' so says Mortimer Wheeler, (Archaeology from the Earth,] In archaeology there was a divergence, in those days, between the schematic and naturalistic style of section and plan drawing. David Neal, who was an archaeologist as well as an illustrator set the drawing office style for plans and sections. He drew his archaeological site records in colour and when he drew them for publication the colour was represented tonally. To print them in colour would have cost too much and this was the next best thing. Philip Rahtz in his book 'Invitation to Archaeology' [Invitation to Archaeology, Rahtz, Basil Blackwell 1985] bemoans the fact that archaeologists 'now rarely draw their own plans and sections for publication' so you don't see the interesting personal style of a Brian Hope-Taylor or a Paul Ashbee but instead' "draft sketches are passed on to a draughtsperson, who then [in consultation with the archaeologist] produces neat drawings for publication. The result is a dull uniformity applied to any excavation anywhere, of any period.'

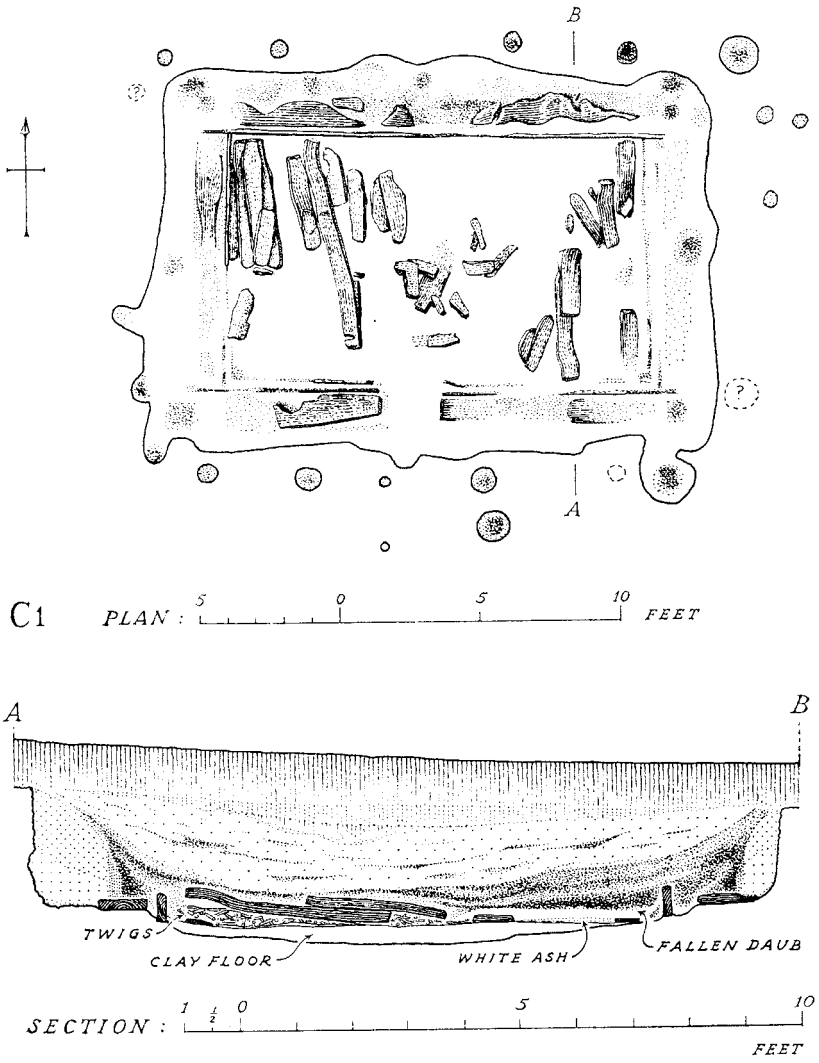



*Figure 85: Plan and section of a Saxon building from Yeavering in Northumberland, a fine example of the individual drawing style of archaeologist Brian Hope-Taylor.*

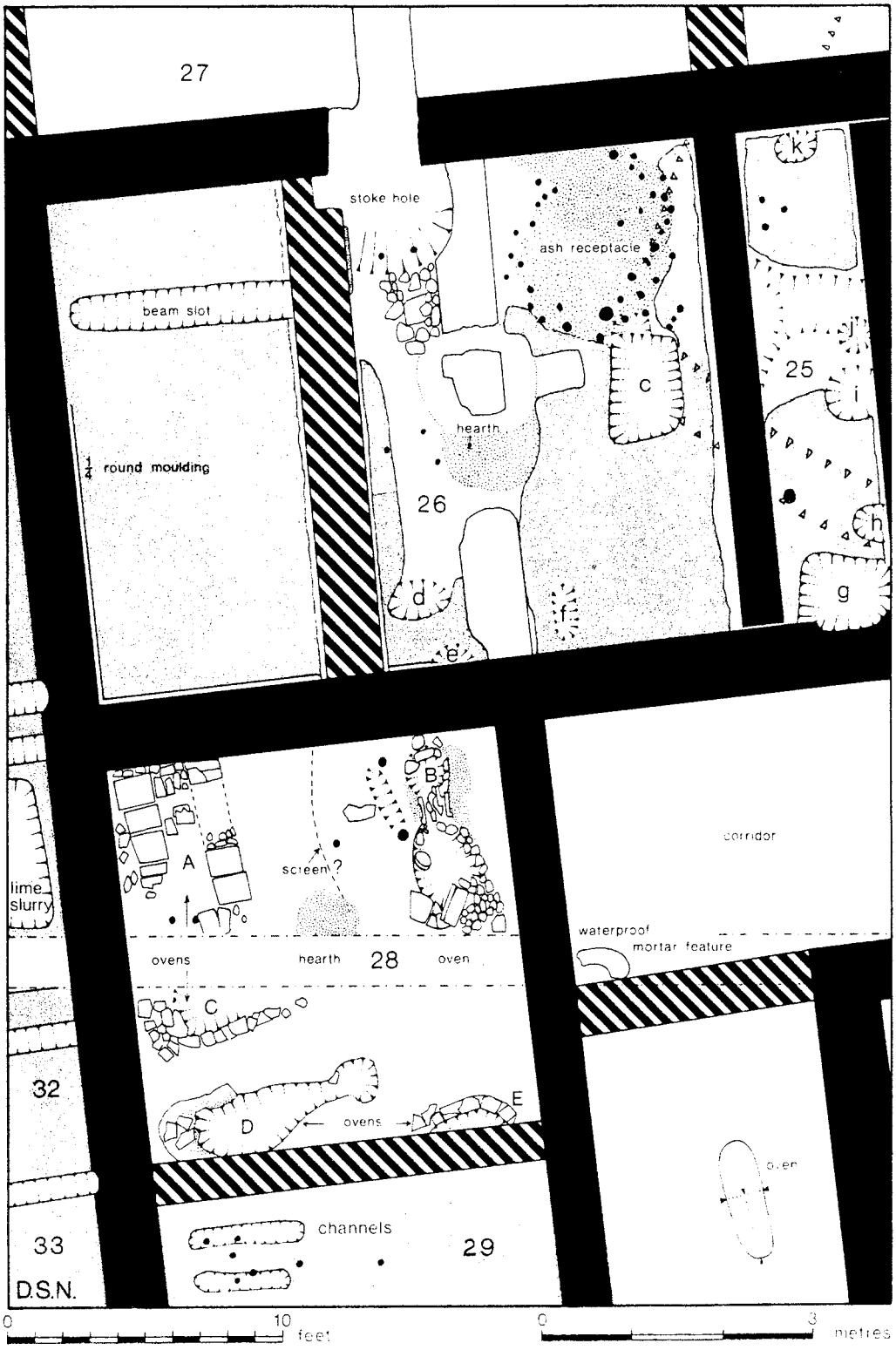



*Figure 86: David Neal, who was an archaeologist as well as an illustrator was influential in establishing the drawing office style for plans and sections. This example is a plan of the Main Villa, Building A (detail), Gadebridge park Roman Villa, Hertfordshire.*

I don't think this was the case in The Inspectorate Drawing Office where illustrators sometimes worked on excavations and were acutely aware of the different textures and colours of the stratigraphy, their significance and what features the archaeologist might need to emphasise. Chris Boddington drew plans and sections for many of Geoff Wainwright's excavations and the rich textures and dark tones of prehistoric occupation reminded me of a slice of fruit cake. Chris was a lithographic printmaker outside of work and she employed the same relish for texture in her archaeological work as she did in her prints. But Philip Rahtz is right about the charm of some author illustrated reports of the 30s, 40s and 50s. Mortimer Wheeler, whose own drawing skills were so sure and elegant influenced artistically a generation of archaeologists. Stuart Piggott's drawing of West Kennet long barrow [West Kennet Long Barrow, Excavations 1955-56 HMSO 1962 London] has a flavour of Hayward Sumner and the Arts and Crafts movement. Paul Ashbee's idiosyncratic lettering of plans and sections and Brian Hope-Taylor's book of Yeavering [Yeavering. An Anglo-British centre of early Northumbria. HMSO 1977] with the authors highly individual illustrations capture the same mood.

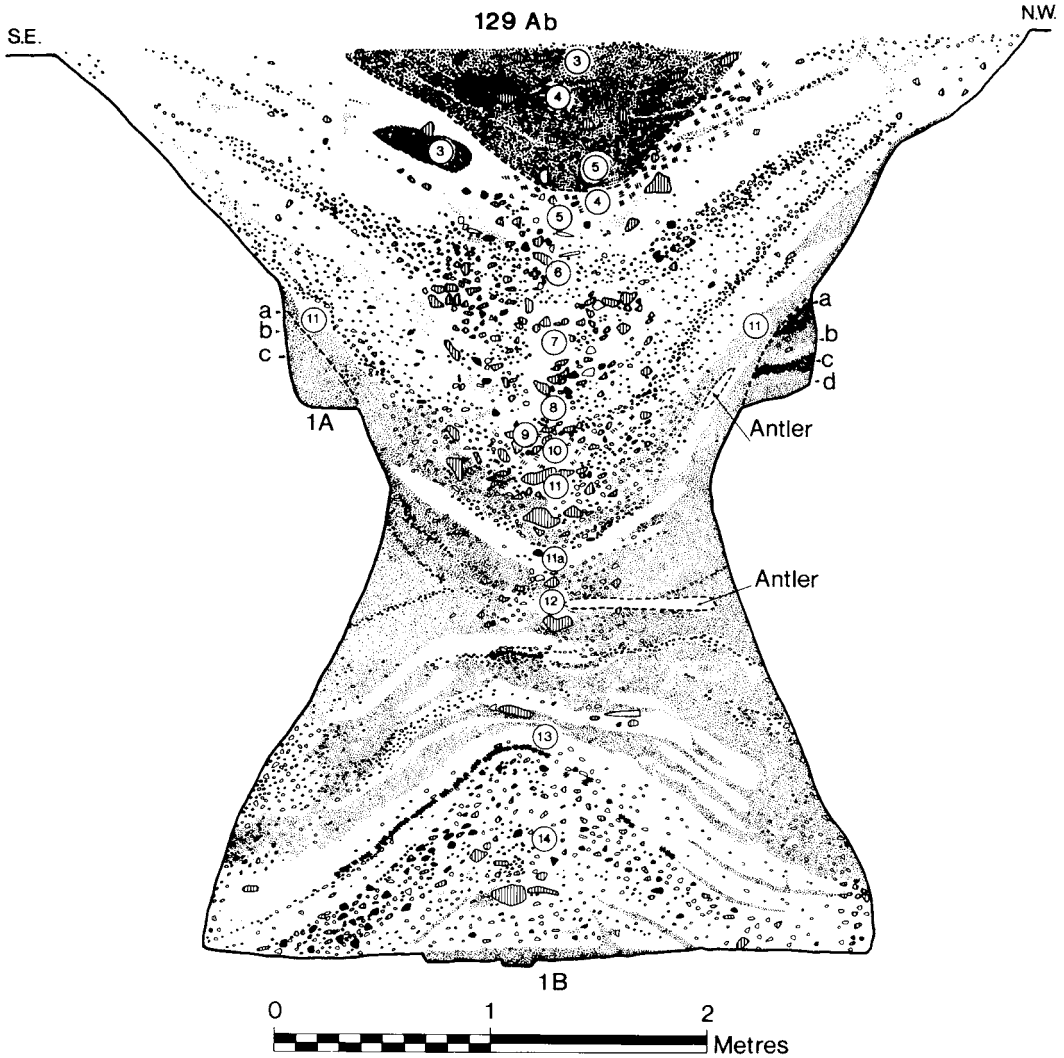



*Figure 87: This section drawing of a Late Iron Age/Early Roman pit from Balksbury Camp, Hampshire clearly shows Christine Boddington's skills in portraying the rich textures and dark tones of prehistoric occupation.*

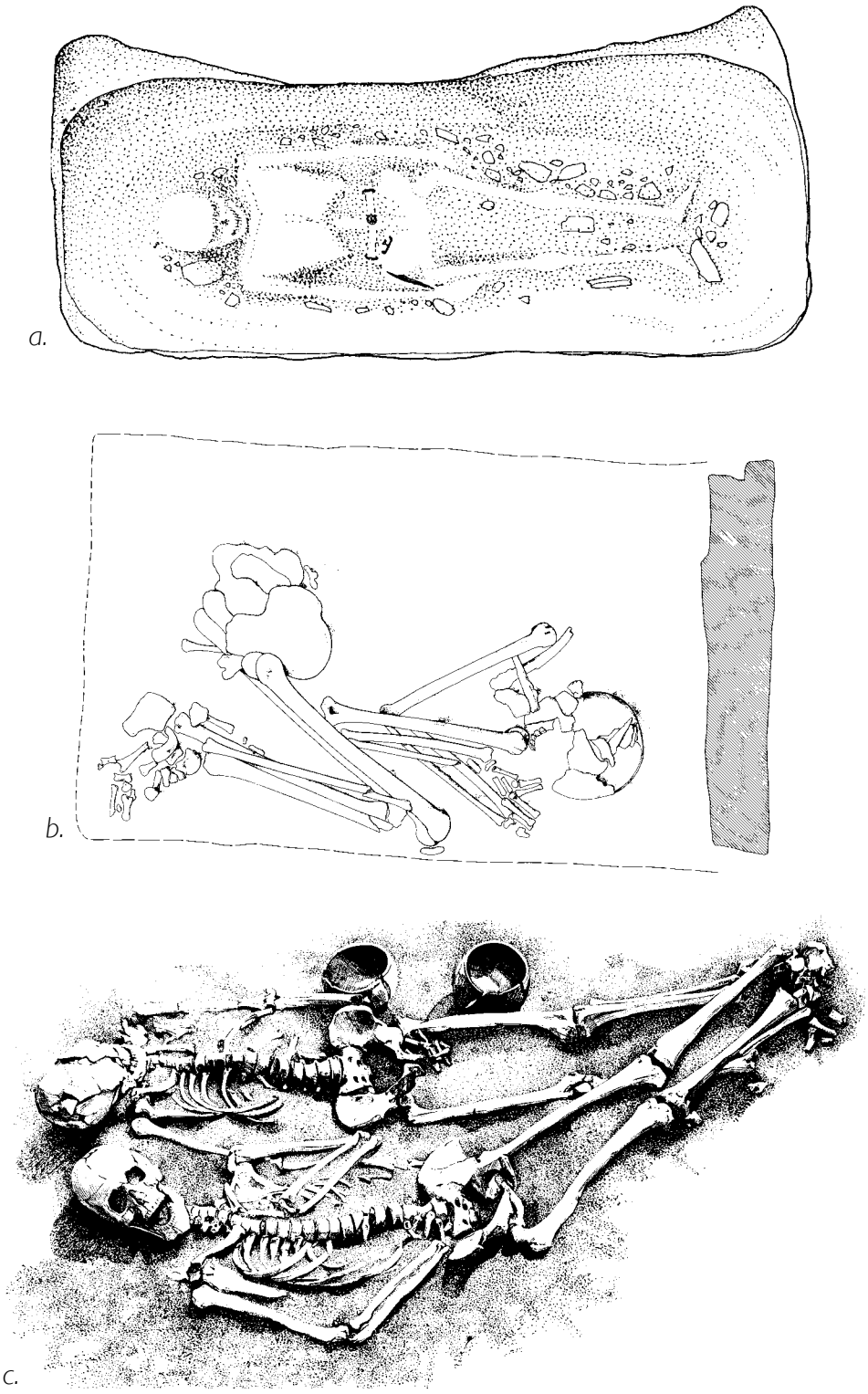


*Figure 88: Three different styles and approaches to drawing burials.*
*a. Saxon burial from Yeavering, Northumbria. (Brian-Hope Taylor)*
*b. Bronze-Age burial from Bincombe Down, Dorset. (Margaret Tremayne)*
*c. Iron-Age burial from Maidencastle Castle, Dorset. (Judith Dobie)*

## Painting Mosaics

David Neal had specialised in recording mosaics before he came to work for the Department of Ancient Monuments. While working as a volunteer on Sheppard Frere's excavations he drew his first designs. Later, when employed by the Department he developed and refined his style. When he joined the Inspectorate there were many mosaics to draw. In his first year in the Department he had something of a breakthrough when he realised the connection between the Hinton St Mary and the Frampton mosaics, each having a broken panel and a depiction of Bellerophone killing the Chimaera. This enabled him to reconstruct the Frampton mosaic and led to a correspondence with the scholar Jocelyn Toynbee then Professor of Classical Archaeology at Cambridge. When he visited her in college, the first time he had been in such a place, he felt he was on his way and had a foot in this academic, scholarly world. A landmark for him was the recording of the Woodchester mosaic in 1972. This is the largest Roman mosaic in Britain, a fabulous depiction of Orpheus enchanting the animals.

Chris Boddington and I visited the site in Gloucestershire one broiling hot summer's day when David and Jim Thorn and Frank Gardiner were working. David's mosaic recording was usually solo but the Woodchester mosaic was so large and uncovered for such a short time that he needed help. We could see the site across a field as we approached. There was a gantry around the mosaic and David lay on it to draw the tessera; his face was as crimson as his red t-shirt. The site was open to the public and all week he had been enraged by the guides who tripped over his grid of string and nails and ripped it out. Even as we approached poor Jim caught the sole of his sandal in a string and we could see and hear David's fury. They were on a tight deadline and the heat was on in more ways than one.

*Figure 89: David Neal working on the Woodchester mosaic painting in the drawing office at Fortress House.*

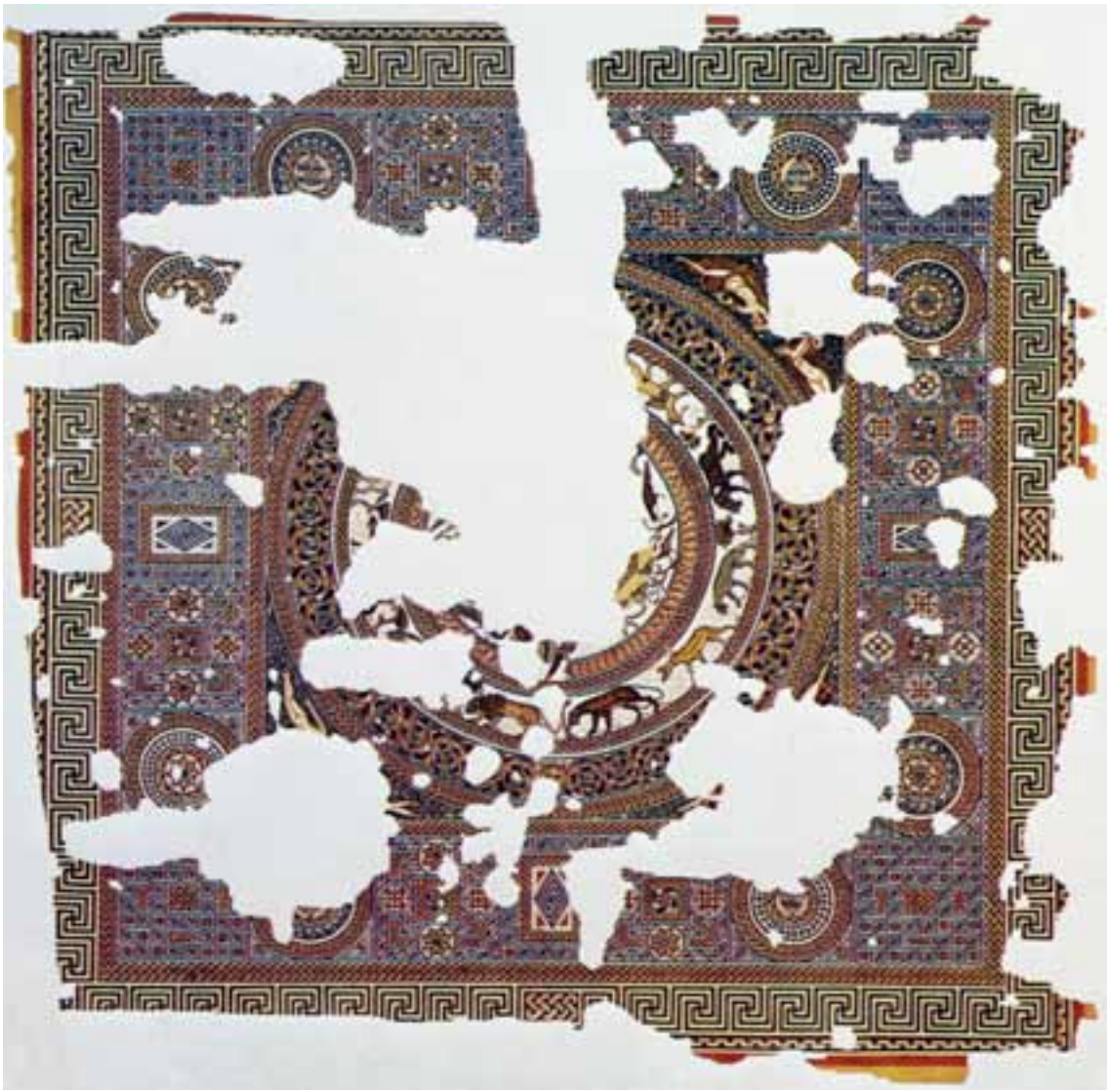


*Figure 90: Woodchester, The Great Pavement, Gloucestershire. (David Neal)*

The Woodchester mosaic was a landmark too for thirteen year old Andrew MacLaren, who worked in the office from 1986. On his way to Cornwall for a family holiday, he visited the site and was enthralled. He bought a post card, which he still has, wrote an account of his visit for his history teacher, received a high mark and decided on a career in archaeology. When he first came to work in the drawing office he was overawed, he says, to be working with the illustrators he first saw at Woodchester.

------So large was the Woodchester site drawing that a special piece of paper had to be bought direct from the paper mill for the finished painting. For weeks and weeks Elsa Hollingshead worked on the light table tracing the field drawings onto the newly made watercolour paper. It was dry mounted onto acid free board and lay on a series of tables in the centre of the room while David painted in each tesserae. It took him 18 months to complete and by then he was so wearied of it that it was a year before he could think of painting another mosaic.

*Figure 91: Two mosaics from Stanwick, Northamptonshire. (David Neal)*

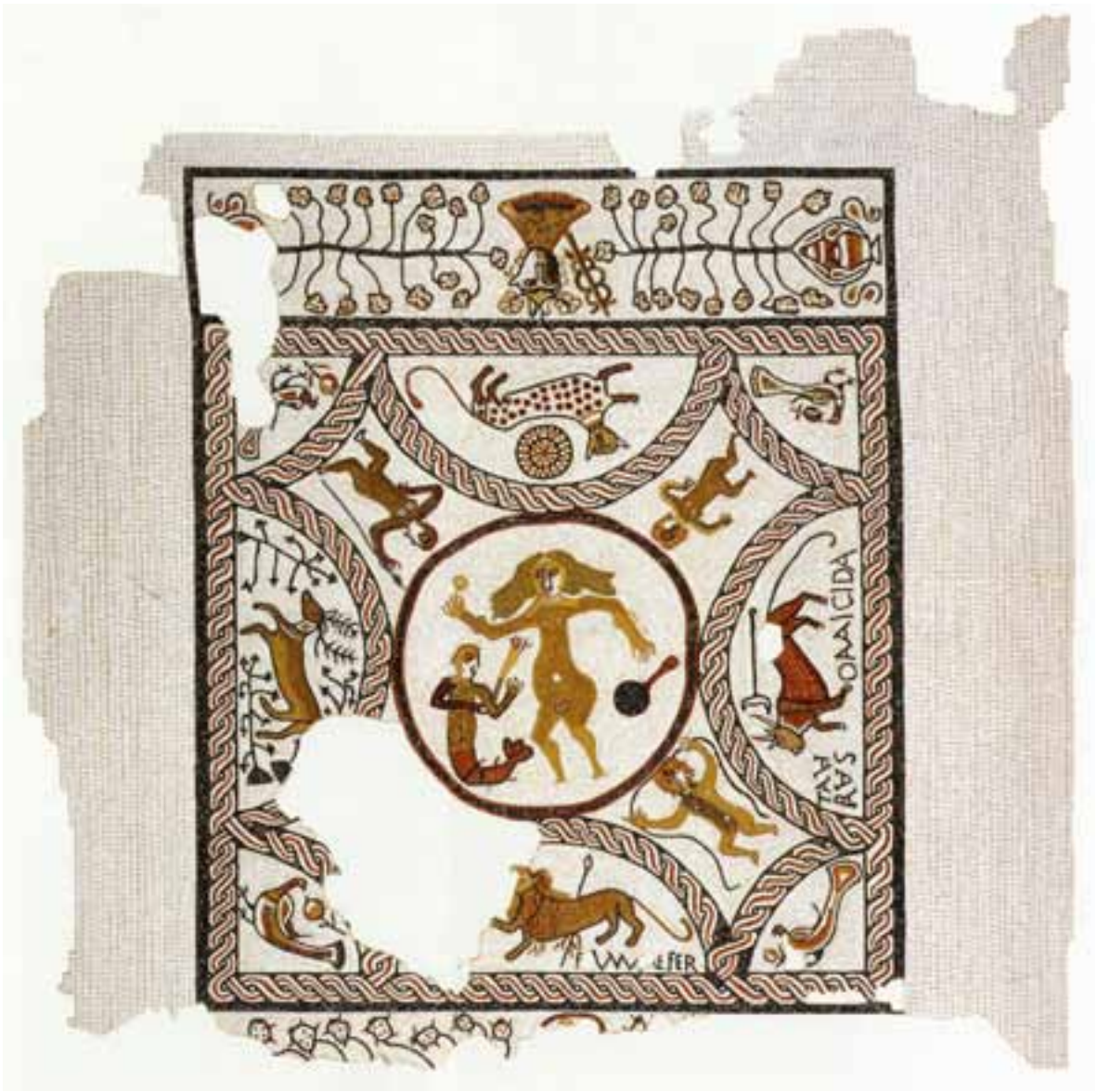


*Figure 92: Mosaic from Rudston Roman Villa, Yorkshire. In the central circle are two lively figures, the more dominant being a somewhat ungainly nude representing Venus. She has broad hips, a flat, narrow chest, outstretched arms and diminutive feet. Her sex is clearly apparent from a mass of streaming hair and a pronounced red pubic area. In her right hand is the golden apple won in the celebrated beauty contest (The Judgement of Paris) and, placed beneath her left hand, a grey mirror with a red handle; a bracelet is on each arm. She looks to the right where, below her outstretched arm, is a figure facing her, interpreted as a merman or triton, with an olive green human torso and a red fish tail.*

*The combination of Venus at her toilet with marine elements is is unusual and it has been suggested that the reason why Venus is not actually holding the mirror is that she has dropped it in surprise on being seen as she emerges naked from the water. (David Neal)*

## Painting Wall Plaster

When David joined the department one of his first jobs was to assist in the piecing together and reconstruction painting of the wall plaster from Lullingstone Roman villa. At his job interview he'd been asked if he could paint wall plaster to which he replied that he could- although he omitted to say that he never had. For months he worked with the Roman expert C. N. P. Nicholson in a subterranean room in Regent's Park. The plaster, which had been excavated from the cellar of the Roman Villa at Lullingstone was laid out there. There were  thousands of pieces which had fallen from the walls of the room above. Piecing them together was like doing a gigantic jigsaw. Nicholson managed to recover the painting of a group of six figures about half the size of real people and standing in the attitude of the early Christians at prayer with arms outstretched. He also pieced together the painting of a large Chi-Rho, an early Christian symbol. Together this proved that the rooms above the cellar had been a chapel and that the villa owners in the late fourth century were Christian. David painted the Lullingstone figures at actual size using gouache to imitate the thick, opaque Roman paint.


*Figure 93: Chi-Rho or Christian monogram. Drawn from plaster fragments, Lullingstone Roman Villa, Kent. (David Neal)*

*Figure 95: Wall painting of figure with arms outstretched in the attitude of a christian at prayer. Drawn from plaster fragments, Lullingstone Roman Villa, Kent. (David Neal)*

Much later the illustrators of the drawing office worked as a group to record Roman painted plaster for Norman Davey and Roger Ling's book Wall-Painting in Roman Britain. [Norman Davey and Roger Ling, Britannia monograph, Society for the promotion of Roman Studies1982]. The painted plaster pieces reconstructed from fragments were displayed in museums all over England. Our task was to show what was original and what was reconstruction. We divided the sites amongst us and recorded the actual pieces in their true colour and the restoration in a paler tone. It was often hard to tell what was original; you had to flatten your face against the surface and squint, trying to see where the surface changed.

## Creating reconstructions

In the early days the only reconstructions drawn in the office were isometric projections. David Neal who excavated Roman villa sites in the summer drew them to explain his archaeological findings. Archaeologists were nervous of getting it wrong. As it was explained to me by an eminent archaeologist 'pictures get into peoples heads' and once there the image is hard to shift. Philip Rahtz writes in "Invitation to Archaeology" of his misgivings when Alan Sorrell's drawing of the Royal Palace at Cheddar – a reconstruction of Philip's excavation findings was printed and reprinted until it was regarded as true and accurate and not just one interpretation of the archaeological evidence.

In the department there was no inclination to engage a wider audience. The guide books of the time were the highly academic blue books aimed at fellow academics. Geoff Wainwright in his article for Antiquity', Time Please' tells of the memorandum sent in 1952 by Bryan O'Neil, then Chief Inspector of Ancient Monuments, to his director, reviewing developments in the heritage field since 1945 and notes that there was no mention "of the legitimate and latent interest of the public in archaeological discoveries." Similarly he tells of the great conference held in 1943 to discuss the contribution of archaeology to the post war world which totally ignored the interests of the general public. The discovery in 1954, in London, of the Temple of Mithras, when people queued for hours to see the remains, demonstrated just what interest there was but it took a long time for professional attitudes to change.

*Figure 96: The Royal Palace at Cheddar, Somerset. (Alan Sorrell).* Copyright Mary Evans Picture Library.

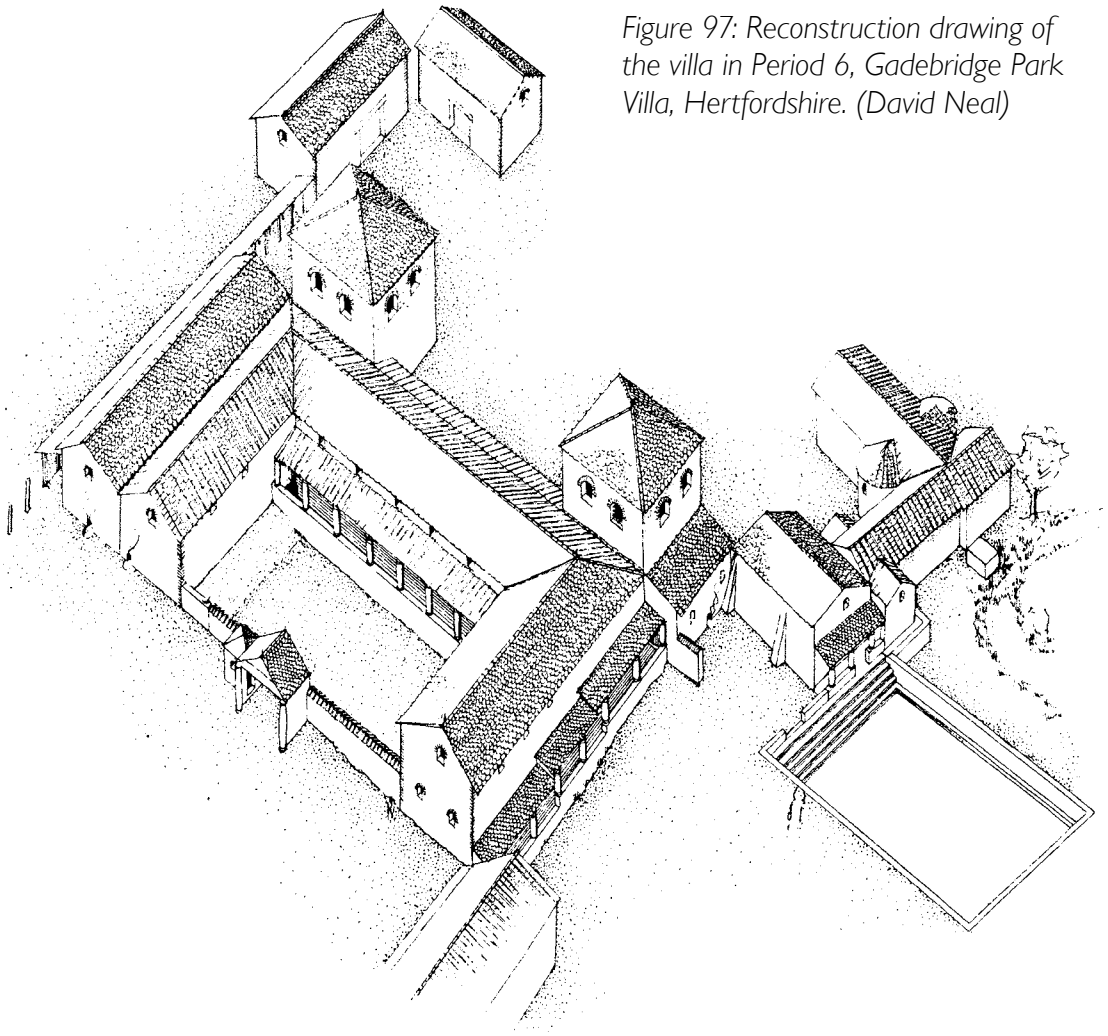


*Figure 97: Reconstruction drawing of the villa in Period 6, Gadebridge Park Villa, Hertfordshire. (David Neal)*

The first reconstruction I drew was for a guide book, not actually a blue book, the next stage on, slightly less academic but still austere and black and white. It was a drawing of a house in the Romano-British village of Chysauster in Cornwall near Penzance. I'd worked on the archaeological report of the excavations of the nearby site of Carn Euny and when the excavator Paddy Christie was commissioned to write the combined guide book of both sites she thought we might dare a reconstruction. The house chosen had walls existing to lintel height so it was only the form of the roofs that could be questioned. I was helped by Bill Startin an Inspector of Ancient Monuments and a pre-historian, who excavated in Cornwall. He was worried and said he would write down exactly why we had reconstructed the house in this way and put the explanation in the file so if we were challenged we would have our defence ready.

Although there was this anxiety, many original Alan Sorrell reconstructions were displayed on the walls of Fortress House. Maybe you could take more risks when commissioning an outsider or perhaps it was Sorrell's particular talents they desired. For a while we had his paintings of the Cornish site of Mawgan Porth in the office and used to marvel at the mood he created and the quality of the marks he made, much of which is lost in reproduction.

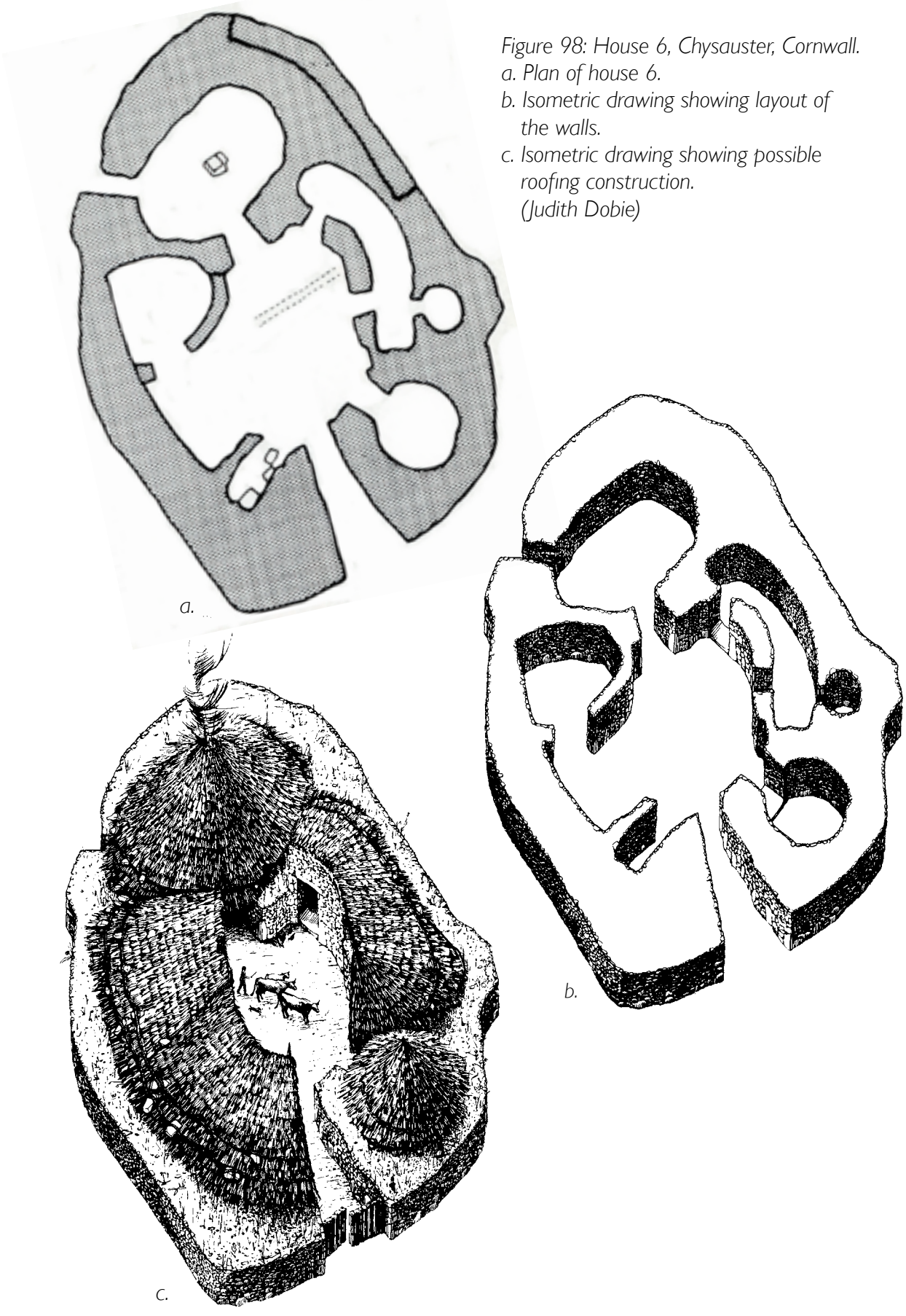


*Figure 98: House 6, Chysauster, Cornwall.*
*a. Plan of house 6.*
*b. Isometric drawing showing layout of the walls.*
*c. Isometric drawing showing possible roofing construction.*
*(Judith Dobie)*

*Figure 99: Detail of a reconstruction of the settlement at Chysauster, Cornwall and its surrounding landscape. The village is still extremely well preserved, the individual houses with their garden plots, cluster along a street. Occupation probably began in the Iron Age and continued well into the Roman period. (Judith Dobie)*

Frank Gardiner's first reconstruction was of Furness Abbey. By then the Department of Ancient Monuments had become English Heritage and had a mission to explain the monuments to the public. The view he took for his picture was from the window of the visitors centre so you could look through the window at the ruins and then look at the picture of the reconstructed abbey positioned beside you. It was a huge painting and created a lovely serene mood and was later commandeered for the Chairman's room. Although this was the first reconstruction painting Frank did in the drawing office he was an accomplished marine artist so it was not such a great step forward for him.

Frank sold his watercolours in two galleries in Albemarle Street, not far from Fortress House in Savile Row, the Parker Gallery and the Omell Gallery. He often arrived at work with a painting tucked under his arm and sometimes we would pass the gallery windows and see one of his ships in full sail inside. He was generous with help and advice. Sue Heaser recollects him demonstrating how he painted the skies in his seascapes and how he laid on his colour washes. She also remembers him returning from the art shop Cornellisons in Bloomsbury with a precious packet of blue lapis lazuli. Sue who had been an unhappy student at Falmouth art school when representational art was out of fashion found this romantic and thrilling.

*Figure 100: A reconstruction of the Hospital at Chesters Roman Fort, Hadrian's Wall. (Frank Gardiner)*

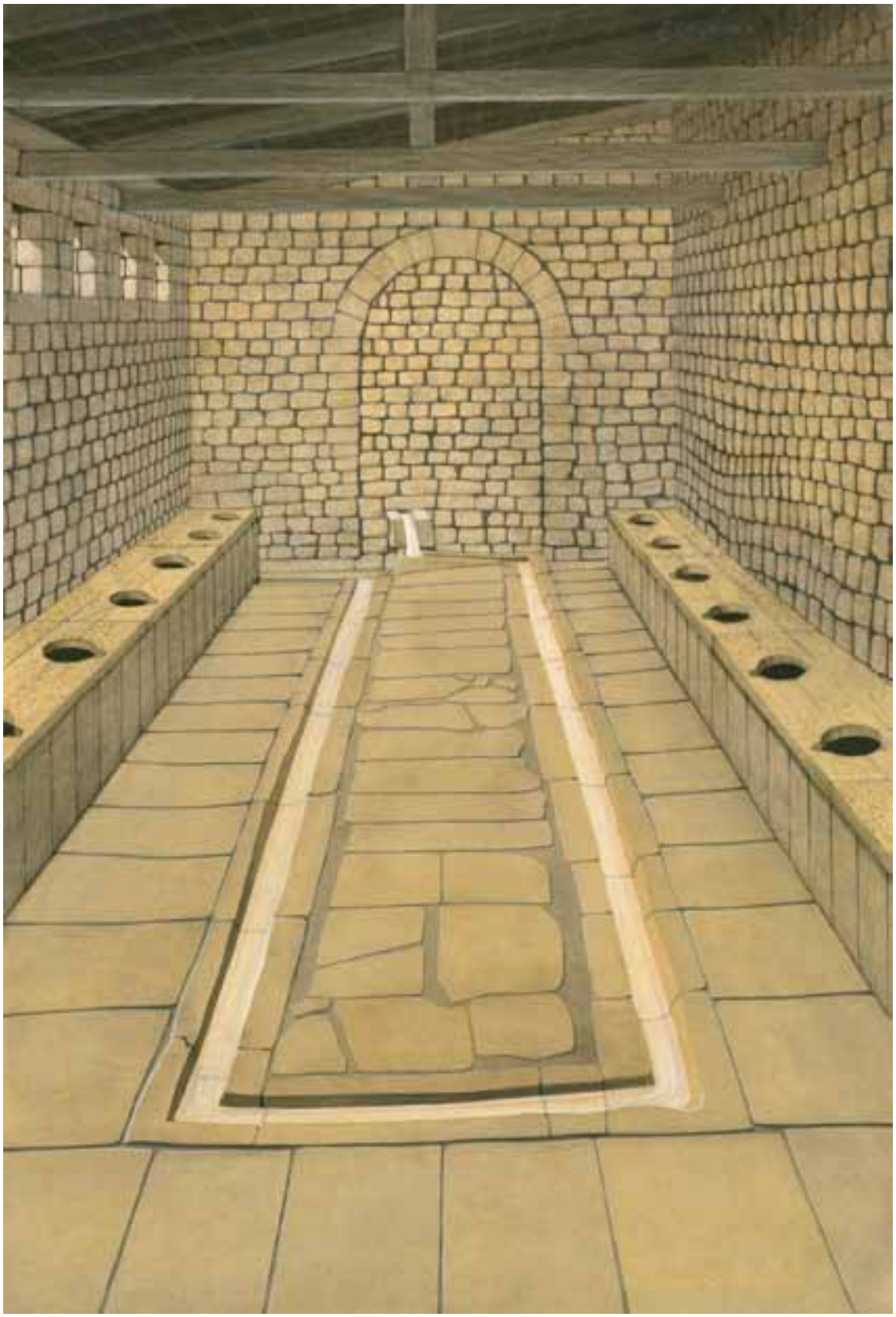


*Figure 101: A reconstruction of the latrines at Chesters Roman Fort, Hadrian's Wall. (Frank Gardiner)*

There was no set office style of painting. Initially most of us worried a lot about perspective but Frank was intrigued and delighted by geometry and enjoyed setting up vanishing points and picture planes and encouraged the rest of us to follow. I couldn't do it at all and would spend time setting up the perspective only to find the composition didn't work and I'd have to do it all over again.I found my own way around this and I think everyone else did too. One method was to make a model. We had an expert model maker in the office – David Honour. When Frank had to paint reconstructions of rooms at Chiswick House David made a model of the interior of the rooms with accurate décor and furniture. Frank photographed it and based his paintings on the prints.

David told me I should build the buildings in my reconstructions from the foundations up. This was a different way of looking at things for me, I hadn't thought in that way. David, who was always making things, did so instinctively. When Hampton Court went on fire in 1986, badly damaging the King's rooms and the Cartoon gallery, a group from the drawing office were requisitioned to record the charred timbers. David and Jim Thorn joined Daphne Hart's team. Daphne was by then archaeological recorder to the palace.

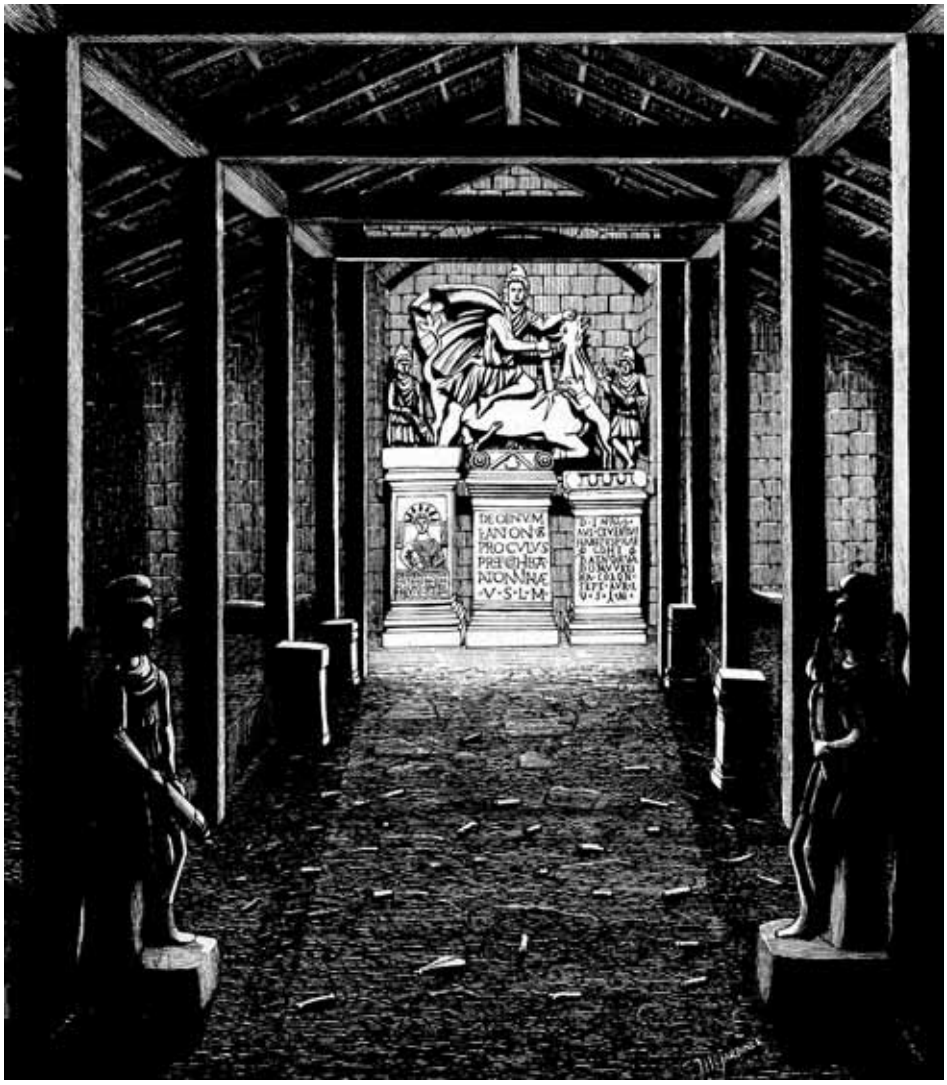


*Figure 102: Reconstructed impression of the innermost portion of Carrawburgh mithraeum. Mithras' two attendants flank the narrow aisle. (Frank Gardiner)*

David took over the examination and recording of all roof structures and Jim all floor structures. The examination, recording and production of detailed, annotated drawings of the fire damaged area took a year. They produced over 100 A1 sheets of drawings. Each one detailed the methods of construction used by Christopher Wren and enabled the eventual reconstruction of these structures.

*Chris Evans*

*Figure 103: Jim Thorn surveys the fire damage at Hampton Court Palace, 1986. Charred timber salvaged from the fire can be seen in the foreground.*

It was revealed afterwards that Jim spent much of the year at Hampton Court with stomach pains which he characteristically ignored. It was only later when he was working at Langford Church in Oxfordshire drawing a rood on the outside of the church that he collapsed, was found lying on a slab in the grave yard and rushed to hospital with peritonitis. Daphne, grateful for his rescue work at Hampton Court writes, "Jim was heroic."

David Honour became involved in archaeological illustration thanks to Mortimer Wheeler. I should think Wheeler saw in him his "perfect creative draughtsman". As a student, David's thesis at the Royal Academy Schools was a survey of two Lancashire farmsteads. His tutors were nonplussed, this not being the sort of subject they were used to judging. The thesis was shown to Mortimer Wheeler at the British Academy and David received an invitation to tea at Burlington House and was offered a job on the excavations of York Minster by Wheeler who was chairman of the excavation committee. Archaeologically David never looked back.

One of his most notable projects was the reconstruction from hundreds of stucco fragments, of elements of the façade of Nonesuch Palace. The stucco was stored in the basement of Fortress House. David sometimes worked there with Nonesuch's archaeologist Martin Biddle but mostly he worked alone. He had a good eye for what pieces joined and amongst the finds conservationists of the Ancient Monuments Laboratory was notorious for his ability to reassemble finds they had given up on. This talent was invaluable when working with the stucco pieces. He could remember shapes from one box to another and was able to reconstruct motifs and panels. As certain elements were identical he realised that some of the stucco had been cast and by adjusting the perspective on the famous engraving of the palace façade he was able to show that it was an accurate drawing and that the size of each panel it depicted married with his reconstructed panels.

At the time David was drawing Nonesuch Palace the IRA was operating a bombing campaign in London. Security was high and carrying a cardboard box up from the basement through the foyer and heading for the drawing office David was stopped, taken to one side and ordered dramatically to open the box which he did to reveal not a bomb but a stucco Cupid's head.

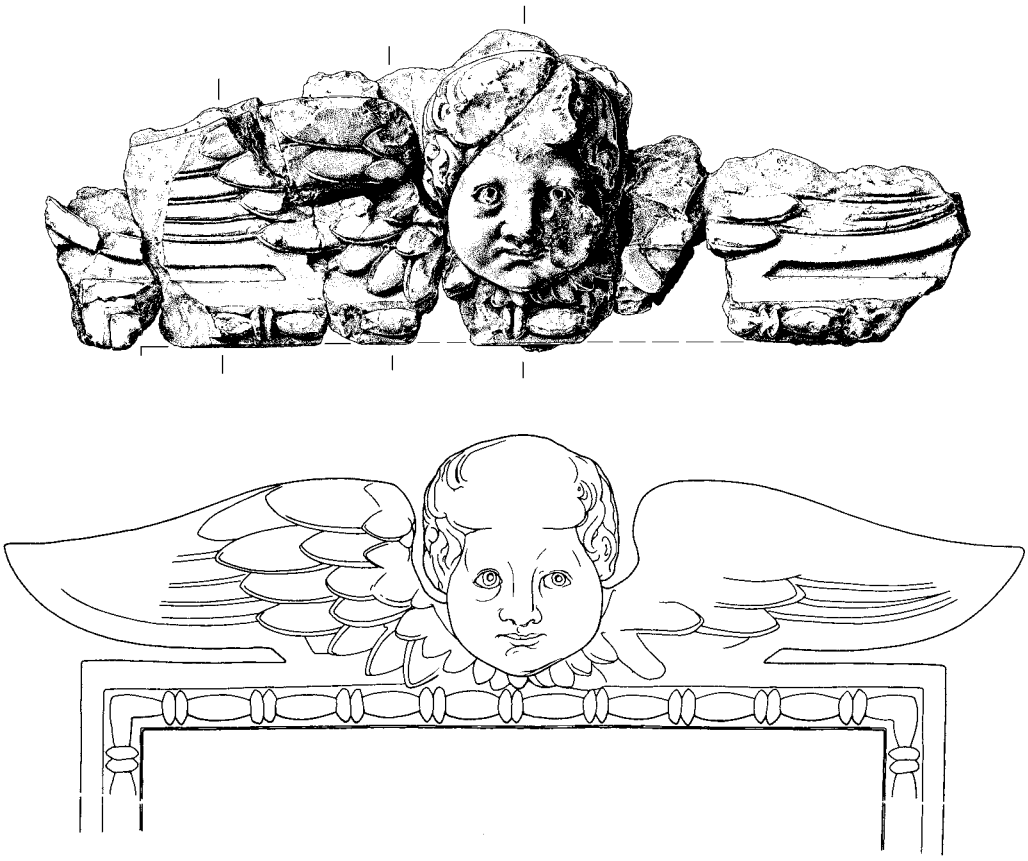


*Figure 104: From the hundreds of stucco fragments stored in the basement at Fortreess House it was possible to reconstruct elements of the facade of Nonsuch Palace, Surrey. This impressive illustration and accompantying reconstruction of the Roman god of love, Cupid, was produced by David Honour. Scale 1:6*

*Figure 105: Reconstructed plasterwork figure, Nonsuch Palace, Surrey. (David Honour)*

## THE CLIENTS

My first job in the department was for one of the contract archaeologists from Yorkshire, Tony Brewster. He excavated the famous site at Garton Slack where he found an Iron Age chariot burial. There were many stories of Tony, about the Russian car he drove from Eastern Europe, how he fell from a helicopter, how he got his glass eye, how he policed his excavation with men from Securicor and turned away the Inspector of Ancient Monuments whose special subject was chariot burials. When the said inspector left the department Frank Gardiner made a leaving card showing him driving a chariot over Tony Brewster's prone body. I drew barrow sections of Garton Slack, probably not very well, for I didn't know what a barrow was. I remember Tony saying "I won't tell David Neal" and me saying heatedly, "I don't care if you do."

Life could be hard for contract archaeologists, digging in all weathers, for not much money and even less for post excavation work. Sometimes the illustrators would visit them on their sites. Debby Fulford tells of her visit to Guy Berisford's excavation at Caldecot in Hertfordshire. Arriving at ten o'clock, she was given a large tumbler of gin to drink before tottering round the trenches. Debby drew several of Guy's sites and he was a frequent visitor to the office in duffel coat and bowler hat.

Tom and Margaret Jones were the excavators of Mucking a multi-period site on the Thames estuary. We illustrated finds from the excavations for over thirty years. Gilly Jones who drew the finds from the Anglo-Saxon cemeteries in the early years remembers how apprehensive she felt when a visit from the Jones's was due. Tom was tricky to deal with. He would hijack our drawings, which he considered his drawings and threaten to alter them. Once on a visit to Mucking we were escorted, to our dismay, on the train by Margaret Jones. We hadn't expected Margaret to accompany us she just appeared in the carriage. It wasn't that we didn't like her, we did but she was brusque and formidable and lived up to her image by interrogating Chris Boddington, "Well Chris you're being remarkably silent". Chris remained silent and intimidated for the rest of the visit.

*Figure 106: A caricature of Tom Jones by Frank Gardiner.*

It was late in the year and the site made me think of the Somme so thick and furrowed was the mud. They dug every day of the year even Christmas day and had a cottage in Herefordshire, Snowberry Cottage, which they seldom saw. They lived in caravans on site and it seemed a hard life. Many of their student diggers came from Eastern Europe and spoke no English. Working on the Mucking

material at the British Museum I once came across a set of cards with drawings of the sort of tools you would use on an excavation - a trowel, a pick, a spade. They must have communicated by holding these up. In spite of these difficulties and hardships the site was very well dug and recorded, as we found after they'd died and it was written up by others.

I worked for a while drawing finds from Brian Hope-Taylor's Saxon palace site of Old Windsor. At this time Brian was disaffected with English Heritage and all its employees. He was suspicious and difficult to work with and insisted the illustrator did a test before he accepted them to draw his finds. I didn't mind, I'd been drawing objects for a long time and felt quite confident. Also I liked to work with an archaeologist who cared so much about the illustrations. I didn't know then that before the war Brian had made his living as an illustrator. When I duly passed his test and was drawing his finds and was accepted he showed me some of his work for Lilliput magazine, an arts magazine of the 30s and 40s and books he'd illustrated with wood engravings. We had his excavation report of Yeavering [Yeavering. An Anglo-British centre of early Northumbria. Dr Brian Hope-Taylor HMSO 1977] in the office and liked very much his excavation drawings. Philip Rahtz who co-wrote a book about preparing and publishing archaeological reports remembers the review he received from Hope-Taylor, it was disapproving. "To him the compilation of an archaeological report was a work of art and to him we had reduced this to the level of 'How to write a business letter'.

There was a group of archaeologists of this time who had had their lives interrupted by the war or national service and who afterwards changed direction and came to work in archaeology. One noticed that they sometimes brought a different view to those who had followed a direct path into the profession. As well as Hope-Taylor I think of Philip Barker who had been an art teacher and how his artist's eye and careful site planning recorded the fleeting traces of wooden buildings at Wroxeter which others would not have seen. I am not a keen pottery illustrator but when Brian talked about the drawings he wanted me to make of the black cooking pots from Old Windsor and his ideas about different surface textures and what they might mean and how we could show them I was enthused. Alas, I never did the drawings for he became ill and died, leaving the site unpublished.

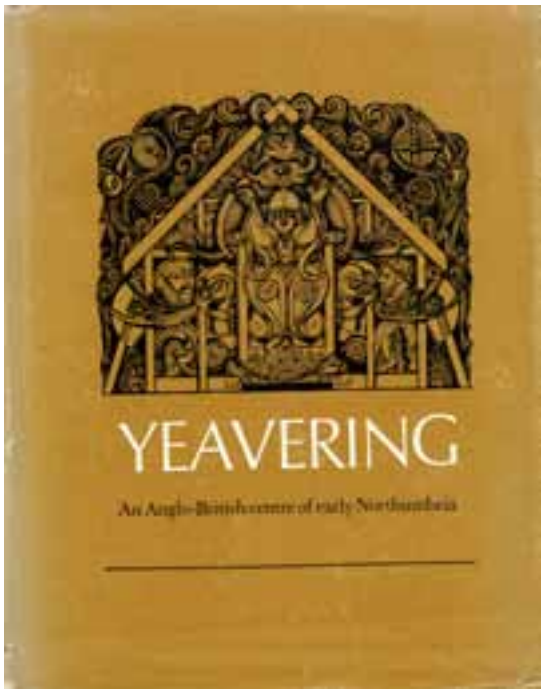



*Figure 107: The dust cover for Brian Hope-Taylor's Yeavering monograph.*

## WORKING AWAY

There were projects that entailed working away from the office, sometimes for considerable periods. Claire Thorne writes of working at Furness Abbey in Cumbria. 'One of my away jobs was to record the structure and details of the sedila at Furness Abbey before further erosion took place. I travelled up by train with my bicycle, coming back at weekends for the three weeks it took. Each day I was there I would cycle the six miles to the site with a packed lunch and a flask of tea. I would climb up and down a ladder with a plumb bob and spirit level and plot in the shape and size of the structure and then look closely to draw in the details, balancing my drawing board on the ladder or my knees. It was quite physically demanding work, on tiptoe or straining at awkward angles to make sure I'd captured the worn and corroded decoration in the dark corners of the sedila. It was sometimes cold as the sedila was mostly in the shadow of the ruins and it was only in the early afternoon that I had the benefit of the warm sun. And it was a bit lonely but mostly enjoyable and lovely being outside in the countryside."

Frank Gardiner remembers a week on the Isle of Wight staying in Queen Victoria's cottage at Osborne. There was a group from the Inspectorate and it was very jolly and pleasant with good food and drink. Frank felt though that it was too much of a good thing. He had come to draw Queen Victoria's bathing machine and couldn't get the others interested in the mechanics of it. He knew it would have been housed and been pulled out on rails and he searched for traces of these structures but the others didn't want to know. In his frustration he thought there was a lack of rigour and that their knowledge was narrow. In those days there was no one in the Department with specialist knowledge of industrial archaeology. Each Christmas the Department's party had a theme and the drawing office made the decorations. One year it was Brunel and Frank found it impossible to find any one who knew much about him, even for the ephemeral party decorations Frank wanted things true and accurate. He was the same when the conservationist Glynis Edwards retired and I made a card for her. Glynis had once dressed up for me when I was drawing reconstructions of Saxon clothing and for the card I used her photograph as a Saxon and around her drew a Saxon house, Glynis on the threshold. I was deflated when Frank pointed out that the door I'd drawn couldn't open correctly. "Well, I suppose it doesn't matter". But I knew he thought it did.

On his first trip away from London he accompanied David Neal to survey the Commandant's House at Housteads, on Hadrian's Wall in Northumberland. It was terribly cold. They stayed at The Bognor Guesthouse, a detached dwelling with about 16 sides all exposed to the bitter wind. It was as cold inside as out and David in bed at night, wore his sweater like trousers with his legs down the arms. Frank, an East End boy had hardly been out of London, in Northumberland it was so foreign to him he felt he might as well be on the moon.

Each summer, for several years I spent time drawing grave slabs at the Yorkshire Abbeys of Rievaulx, Monk Bretton, and Roche. I loved doing this; I liked setting out on the train going to a different town and site, not knowing what I'd find. Monk Bretton is on the outskirts of Barnsley. I stayed in a truckers B&B, there was no choice. I had to pay in advance and my feet stuck to the clatty, greasy floor. Breakfast was tinned tomatoes and

*Figure 108: Gravemarker of Abbot Henry Burton, Rievaulx Abbey, Yorkshire. Scale 1:12 (Judith Dobie)*

tinned mushrooms. (Better though than Jim Thorn's breakfast of a boiled egg at Chesters. It had been reboiled so often it had turned black). The Monk Bretton summer was very hot. The slabs were in the open with no shade. Coal was still being mined and the air was full of dust. At lunchtime I went to the pub to recover and felt conspicuous in my archaeological working clothes. A note was sent over, 'Do you want some company?' Working at Rievaux Abbey in its lush valley and staying at The Black Bull at Helmsley, inconspicuous among the tourists, was easier. The grave slabs were badly weathered and I would return to each one as the sun went round casting different shadows, to try and decipher the letters and patterns. Back in London I would examine the old photographs in the site photographic albums," the blue books". Sometimes one of my slabs would be shown and I could reconstruct it in my drawing.

Peter Dunn who worked in the office from 1985-1997 remembers an expedition to County Durham in winter to draw Richard III's crest which was carved on the underside of a stone used to make an oriel window at Barnard Castle. The window projected over the castle wall and the River Tees far below. Peter lay on his back on a scaffold to draw, his head sticking through the window. It was February and snow drifted in the wind settling on his head and in his hair.

*Figure 109: Peter Dunn at work in Fortress House with Chris Evans and Christine Boddington in the background.*

We often seemed to work outside in February. I think it was the last moment before the scaffold on the monument came down for the seasons opening. Sue Heaser and David Honour both had tales of sweeping snow from their drawing boards in February at Fountains Abbey. My story of working at Fountains is of drawing a carving of St. James the Apostle high up in the triforium reached by two linked ladders and a scaffold. To keep warm I wore my mother's old fur coat which my grandfather had bought her to wear during the miserable war years.

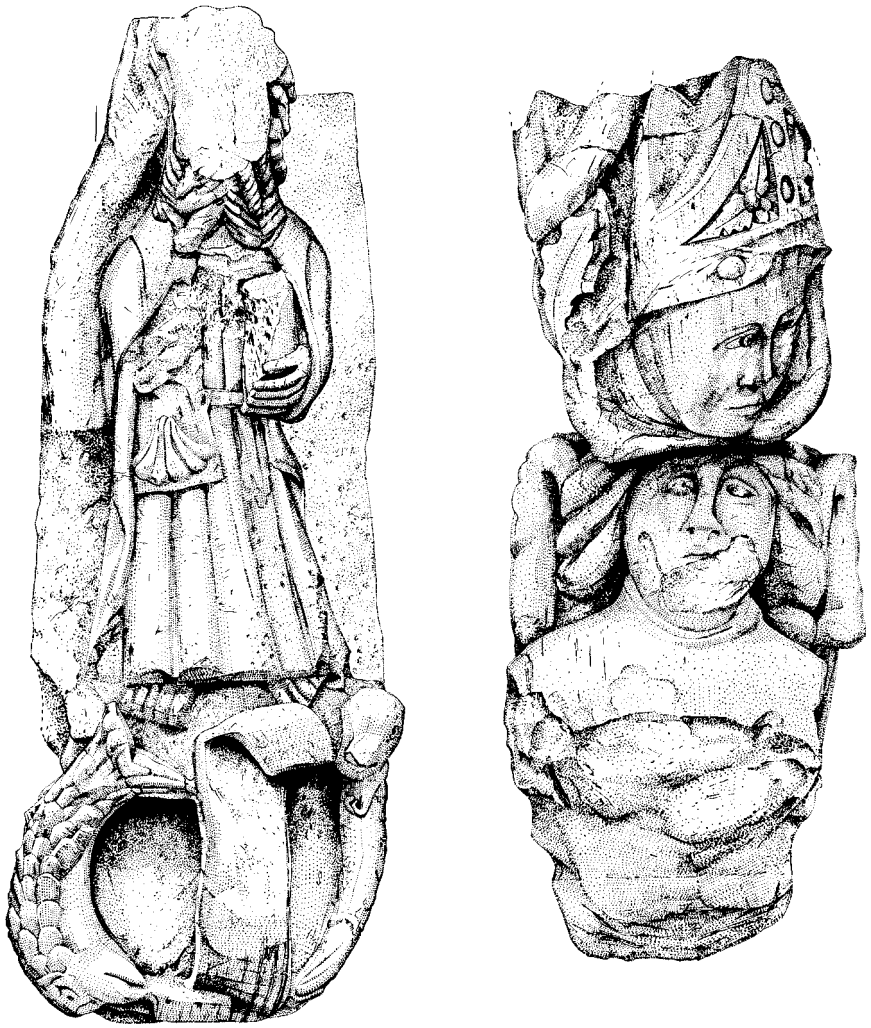


*Figure 110: Sculpture from the south wall of the Chapel of Nine Altars, Fountains Abbey, Yorkshire. Scale 1:4 (Judith Dobie)*

## DIFFERENT PLACES OF WORK

### Lambeth Bridge House Office

Elizabeth Fry-Stone and David Neal's first drawing office was at Lambeth Bridge House in Southwark, south of the river Thames. They shared a room with Gerald Dunning. Gerald had been one of Mortimer Wheeler's colleagues at the London Museum and was a member of the interview panel when David got his job at Ancient Monuments. David tells how the flamboyant Gerald would arrive for work at ten, purple duffle bag_ slung over his shoulder, carrying a brass topped cane, throw open the windows and a blizzard of soot from Battersea Power Station would fly in and settle on their drawings. At 12.30 he would get out a bottle of sherry and glasses from his filing cabinet for all to have a pre-lunch drink. This was the style then, though sadly not by the time I worked in the department. When Roger Mercer joined the Ministry of Public Buildings and Works in 1969 as an assistant Inspector, Arnold Taylor the Chief Inspector asked him to "treat this office more as a gentleman's club than a work place" and Roger describes the atmosphere in the department as being "constructively busy and spiritually relaxing". [Antiquity 80 2006] It was Gerald Dunning who first took David to meetings at the Society of Antiquaries, he included him in everything. It was a harmonious group of people at the Inspectorate of Ancient Monuments with similar interests and enthusiasms. Although David was young and from a different background to most, people were valued for the quality of their work and he felt very much at home.

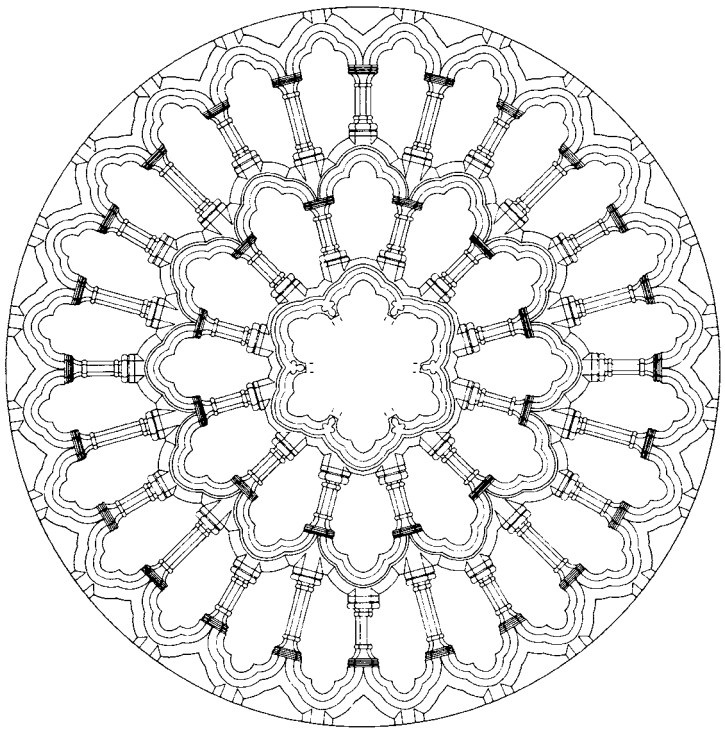


*Figure 111: East rose window, Fountains Abbey, Yorkshire. Scale 1:70 (Karen Guffogg)*

## Sanctuary Buildings

Daphne Hart joined the Ancient Monuments drawing office in 1969 when it was in Sanctuary Buildings in Great Smith Street behind Westminster Abbey. Daphne, who had trained as a theatrical designer relished the 'dark, cramped Dickensian building with its air of neglected Victorian Civil Service. 'I loved every ugly brick'. The drawing office was in a long narrow room on the second floor looking out into Great Smith Street and across to Westminster School. Gilly Jones remembers views into a common room with pool tables and boys with ties askew, playing. This dusty, dingy building was just right for archaeologists. As you walked along the corridors there were glimpses into a myriad of small dark rooms; tables covered in pot sherds; heaps of little, mud stained, brown envelopes stamped with site names and containing finds; archaeologist Brian Davidson illuminated by a lamp, absorbed in a report, a skull he'd excavated by his side on the desk.

The Ancient Monuments Laboratory was in the basement where hot water pipes lined the walls. There was a general office where the administration was done and this was the hub of the department. Tea was made at 10:30am and at 3pm and everyone gathered with their cups. The clerks in the office took turns to make it. When it was Irish Paddy's afternoon we had late tea as Paddy hot from 2:40pm race, sped up the corridor with the brown, tin teapot. When he retired, Frank Gardiner's ingenious leaving card unfolded to show a teapot with a horse's head for a spout.

Round the corner from Sanctuary Buildings was a Salvation Army hostel and there were always raggedy men wandering the street talking to themselves. One thrilling afternoon Chris Boddington, as first aider for the second floor, was summoned and ordered to go to each room and tell the occupants to beware as a lunatic had escaped from an asylum. Chris started off purposefully but soon, at the sight of startled faces was overcome by laughter and unable to continue. In contrast to Dickensian London there was –as Daphne put it – 'A glimpse of Granada', views into Westminster Abbey close; little courtyards and arches and fountains and the Chapter House with its glorious tiled floor that you glided over in special slippers.

I first came to Sanctuary Buildings from Durham where I was drawing finds from Rosemary Cramp's excavations at Monkwearmouth and Jarrow. I'd no experience of archaeological illustration and Professor Cramp thought it would do me good to spend a fortnight under David Neal's tutelage. Over the years many people did the same. Maybe the Department would be financing a publication and the illustrator would be sent to work with us for a while or David or Frank would sit on an interview board and decide the person appointed could do with more experience. Once we had an illustrator from abroad, Chris Polycarpou from The National Museum of Cyprus in Nicosia who worked alongside us for several months. It was as one of the many contract illustrators who drew for the Mucking project that Kate Morton came to work for a period in the office. Kate was doubly qualified having a degree in fine art as well as an archaeology degree but she remembers how daunting her first days in the office were, how foreign were the methods of drawing to her and how helpful she found Frank's advice. She thought if it wasn't for his instruction she would never have persisted in archaeological illustration. The department was small and friendly. Frank Gardiner tells how different the atmosphere was to his previous jobs at Waterlow and Sons the printers or at Pergamen

Press with the proprietor Robert Maxwell's threatening presence. Then life was pressured and frenzied and if you didn't complete a job in the time allotted you'd be sacked. At the Department of Ancient Monuments there was no pressure and little close management. There was no urgency and responses to your work were slow. He liked his colleagues very much. He found them intellectual, eccentric and endearing. From them he felt he learnt a lot.

In some ways things were timeless. People worked for years drawing and saw nothing published. Big sites like Mucking, an Anglo-Saxon site on the Thames Estuary, continued year after year, illustrator after illustrator. The drawing office was not in itself slow. David Neal was the opposite of slow he could draw faster than anyone and would shout at us "Whistle and ride" if he thought we were chatting too much. He meant we could talk but we must draw as well. I once met an illustrator from East Anglia who told me how furious she'd been thirty years previously and still was, when David Neal said she should be able to draw 300 pot sherds in a day as he could. We had to keep a note of how many drawings we completed and each six months they were added up and presented to the head of department John Hamilton. We didn't like this but both David and Frank did, saying it was the only way we could be seen to be productive. If the numbers were lower than the previous six months someone would be volunteered to churn out something quick and easy to boost them.

*Figure 112: Reconstructions of children's costume, based on evidence found in graves excavated at the Anglo-Saxon Settlement, Mucking, Essex. (Judith Dobie)*

## Fortress House

In 1970 the Ministry of Public Buildings and Works was absorbed by the new Department of the Environment and in 1972 the entire Department of Ancient Monuments and Historic Buildings moved to Fortress House in Savile Row. Compared to Sanctuary Buildings, Fortress House was light and airy. The drawing office was in a large room on the fourth floor. By employing people on contract, the numbers of illustrators had grown. David was empire building. With Frank Gardiner as his second in command he was now at the head of a group of nine illustrators. There were five civil service posts and four contract positions which eventually became permanent. David was a fulcrum of energy. He rose early, was first at his desk and went to bed early, I recollect his disappointment when "Book at Bedtime" on the radio moved from 9.45 to 10.45 and he heard it no more. In the office he was all activity. I remember him galloping around the room wearing on his heel the magnificent silver-gilt spur he'd dug up at King's Langley and which I was drawing. It survived unhurt. Debby Fulford tells of him in Raoul Dahlesque mode skating round the room on the newly laid shiny lino saying he was the man who scooped up the chopped off fingers at the ice rink, swooping low to gather them into an imaginary bag that hung round his neck. After he had been chased by the bull on his site at Gorhambury he enacted for us the gathering excitement of the herd, the rousing of the normally docile bull who lowered his head and made little runs at him, the stampede and the *coup de theatre*, the bullock that slipped and landed flailing and thrashing on the grass. David imitating the beast with gusto.

Sue Heaser, who had been employed as a finds assistant for the Museum of London remembers how bright and sunny and pleasant the office at Fortress House was with geraniums on the windowsills. She had been working in an unheated warehouse so it was a welcome contrast.

David Honour, on first entering the drawing office thought he was in a room of deaf people for we all listened to the radio with earpieces or headphones. This lead to what sounded like bizarre disjointed conversations if you weren't on wave length, as we commented and reacted to what we were hearing. Chris Boddington, Margaret Tremayne and I all listened to the test match ball by ball commentary and even now I can look at certain illustrations and think "that's what I was drawing the afternoon Bob Willis bowled out the Australians and England won the Headingly test".

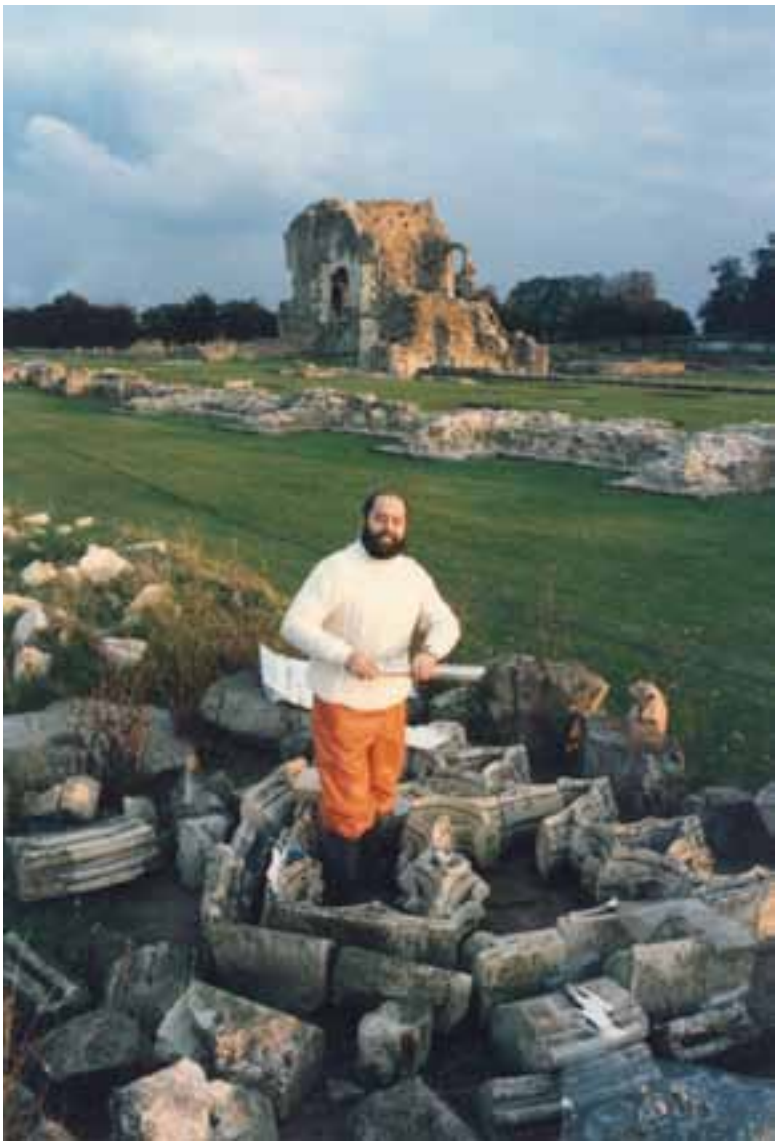
Peter Dunn who joined the drawing office in 1985 was impressed by the skills of the illustrators. Not just artistic skills, Chris Boddington grew seedlings on the windowsill, was a printmaker and had a side line in medical massage. Claire Thorne had cycled across Africa and Debby Fulford kept a bowl of tadpoles as an aid to her free-lance work. She was illustrating a book on frogs. We liked the tadpoles until returning on a Monday morning to find there was only one huge fat one left with its last remaining sibling dangling from its mouth. There was a canteen at the top of the building which gave access to the roof and we would hang over the rail of the parapet and watch the comings and goings at Savile Row police station opposite. Jim Thorn once volunteered for an identification parade and we waited in suspense to hear if he'd been arrested. The same Jim once, on a hot day, stripped to his underpants and wallowed in the water tank on the roof. All over the building people marvelled at the black sediment-full water coming from the taps.


*Figure 113: Inspectorate employees assembled on the roof of Fortress House, December, 1972. (1. Judith Dobie, 2. Christine Boddington, 3. Brian Davidson, 4. Frank Gardiner, 5. Geoff Wainwright, 6. John Hurst, 7. David Neal, 8. Roger Mercer, 9. Ian Stead, 10. Arnold Taylor)*

Fortress House was central; we could walk to Charlotte Street with its Greek restaurants for lunch or to Gerrard Street for a Chinese meal or to Dean Street in Soho to eat Indian at The Red Fort. We shopped in Berwick Street Market and went swimming at Marshall Street baths off Carnaby Street. We visited the galleries of Cork Street and The Fine Art Society in Bond Street. We had time in our lunch break to travel to the South Bank and once went to see a Lucien Freud exhibition at the Hayward Gallery, David Neal sprinting up the escalators on the underground with the rest of us streaming behind trying to keep up. Archaeologically we were in the middle of things too. Burlington House was at the end of Savile Row and on Thursdays we often attended the lectures of The Society of Antiquaries and had afternoon tea beforehand. Once, when the bell had sounded and everyone crowded to the lecture room, I saw one of our inspectors tipping the remains of the plate of sandwiches into his briefcase to eat later.

From Savile Row it was a twenty minute walk to Bloomsbury and the British Museum. Those of us who hadn't studied archaeology took courses at the Institute of Archaeology in Gordon Square. Chris Boddington, Margaret Tremayne and I went each week to 'An Introduction to Archaeology' and the following year to Peter Dewitt's course on

prehistory. We had a weekend in Wessex visiting Neolithic and Bronze Age sites and a day on the South Downs to see the site of his excavation at Blackpatch. After this I knew all about barrows. It was stressed to us that work in the department was not simply a job but a career.



Chris Evans

*Figure 114: The former head of the Ancient Monuments Drawing Office, Frank Gardiner recording a cloister arch, Thornton Abbey, North Lincolnshire.*

## CHANGED TIMES

The drawing office thrived and expanded at Fortress House but in 1990 the organization of archaeology changed with the introduction of PPG16 [DOE 1990] which required assessment and possibly excavation before site development. To supply this need for archaeological investigation, commercial, archaeological units expanded all over England. These units had their own graphic departments and had no need of our illustrations. The Central Excavation Unit was formed in 1976 by English Heritage to excavate sites not taken on by commercial units and to dig on our own monuments. It was based at Fort Cumberland in Portsmouth and had a graphics studio but it also had the time of one illustrator from the Inspectorate drawing office dedicated to its projects. We used to tease David Honour - who had joined the department at the same time as the Central Unit was formed - that he was the dedicated illustrator and pretend we'd overheard conversations about his being relocated to Portsmouth. Initially the CEU had a wild and woolly reputation; David did not see himself fitting in with this and was adamant he'd never leave London.

The effect on the drawing office was masked for some time as much of our work was on backlog sites that had been excavated years before and were only now being prepared for publication but gradually this work was also diverted to the commercial units. One solution to our marginalisation was to use illustrators to design English Heritage's own monograph series of archaeological reports. The books were edited in our publications department, so it seemed a natural development for them to be designed there too. Some posts were designated as illustrator/designer jobs. The drawing office style of drawing with its emphasis on line drawn with a dip pen demanded constant practice to achieve the control necessary to make a confident illustration. If you were switching between drawing with a dip pen and design on a computer screen it was hard to maintain the high standards gained by those who concentrated on just one element of the job.

A diversion was created for a time by English Heritage's joint publication with the publishers Batsford of a series of archaeological books. The books were aimed at a knowledgeable but not necessarily academic audience and pulled together current thinking and evidence, much of it unpublished, on a subject, site, period or place. Stephen Johnson was head of publications then and the drawing office was part of his section. We had a list of titles and divided them amongst ourselves. The authors had only a small amount of money for illustration so were often glad of our work. Stephen was encouraging. I think he probably saw that our future as a finds drawing office was limited and realised we should seek new avenues of work. Frank was less sure. He had always put a high premium on certainty and accuracy. His own reconstructions were architectural and academic. He disliked for instance including figures in his pictures for it raised a whole series of questions as to clothes and appearance that were often unanswerable. The rest of us seized the opportunity. The books ranged wide and you often found yourself immersed in a subject beyond your experience. Illustrating a book could mean a site visit with the author. Tracey Croft tells of walking the walls of York with Patrick Ottaway of the York Archaeological Trust before painting her illustrations of


*Figure 115: The Batsford series of archaeological books were aimed at a knowledgeable but not necessarily academic audience.*

the Roman defences and how it was a highlight of her time in the Drawing Office. Peter Dunn worked with Mike Parker-Pearson on reconstructions of some of the major sites of the Neolithic and Bronze Age for his book 'Bronze Age Britain'. [Bronze Age Britain, Mike Parker Pearson. B.T. Batsford Ltd/ English Heritage 1993]. This rekindled an interest he'd had as a child and led him to specialise in the reconstruction of pre-historic sites. As well as the Batsford books there were other sorts of illustration to do for different parts of English Heritage. For Tim Darvell's report" Monuments in the Countryside" [Darvell1987] I painted a series of pictures to demonstrate how human activity shapes the landscape. The report was influential and was accompanied by a grant scheme that enabled farmers to manage their historic assets to benefit both themselves and the heritage.

Frank Gardiner took early retirement in 1993 and was succeeded by Ann Jenner who had been in charge of the drawing office at the Museum of London. She came into an unstable situation and describes her two years at English Heritage as" wading through treacle". The fashion of the period was for public bodies to have smaller permanent work forces and where possible for work to be contracted out. This put the drawing office in a precarious position. In addition, new technology had affected everyone's jobs and those of us who drew and painted suddenly looked out of time. Old sites continued to be drawn and English Heritage's Central Excavation Unit still provided work but

gradually it too did less excavation and more monitoring of projects published by others. In some parts of English Heritage the publication of excavation reports was seen as slow, expensive and dull.

There was a review of the drawing office in 1997 and the 8 staff were split into different sections; design, site graphics and archaeology. We had several moves of office from Fortress House to Oxford Street and then to Victoria Street. Chris Evans and I were the only dedicated archaeological illustrators by then. It was a difficult time for there was little space in the open plan tower block Portland House our last London location and no one wanted to give us space. When we unpacked our belongings at Portland House, the first time we hadn't our own room, I remember how shabby and dirty our things looked, inevitable when working in archaeology. Nearly every one else worked neatly at a computer. Finally in 1997, Chris and I moved to the Centre for Archaeology at Fort Cumberland in Portsmouth. Archaeologists at the Fort do a small amount of excavation and we draw finds for them and do other illustrative work for English Heritage. Finds from all over the country are still processed in the laboratories and it is tantalising to see

*Figure 116: Reconstruction of a funeral at Bush Barrow, near Stonehenge. The painting is by Peter Dunn and features on the cover of Mike Parker-Pearson's Batsford book 'Bronze Age Britain'.*

them. These are finds we would previously have drawn but are now illustrated in the units who excavated them. There are many good archaeological finds illustrators but few have the chance to work as we once did.

When the drawing office was founded in the early1960s the selection of illustrators and the ethos of the office was influenced by the idiosyncratic, usually archaeologist illustrated, excavation reports of the 1930s, 40s and 50s, which in turn were influenced by Mortimer Wheeler and his ideas. Already by the 1960s there was a view that excavations and their publications should be less subjective more impersonal – as this approach was believed, to be more scientific, [this was the age of Harold Wilson and "the white - hot heat of a scientific revolution".] but the character of the drawing office was unsympathetic to these ideas and a strong, dramatic style of illustration developed using black shadow to make the often small drawings stand out boldly on the page.

*Figure117: Reconstruction of Edwin's Royal Villa at Yeavering, Northumberland. The painting by Peter Dunn appears on the cover of the Martin Welch's Batsford book 'Anglo-Saxon England.'*

*Figure 118: Brunton Turret (no 26b), Hadrian's Wall by Frank Gardiner, one of several reconstructions produced by Frank for the Batsford book 'Hadrian's Wall'.*

*The Anglo-Saxon monastery on the summit of Glastonbury Tor, Somerset. The painting by Judith Dobie is published in the Batsford Glastonbury book by Philip Rahtz.*

The tools of the time - the fine nibbed dip pen, the line block method of printing, the influence of Victorian engravings and earlier woodcuts and then the talents of individual illustrators formed and drove on the style.

The individuality of the office was fostered by it having for most of its existence, two chiefs both with strong views about archaeology and its illustration. The large group of illustrators, the influence of the head of the drawing office on external interview panels, the overseeing of department funded publications and the training of illustrators all helped to spread the drawing style beyond the department and into the profession at large.

Art reflects the age it is made in - even as prescribed and conventionalized a form of drawing as archaeological illustration. There is a drawing made by Peter Paul Rubens in about 1530 of a first century cameo, the Gemma Tiberiana. Compare the cameo with the illustration and you can see how accurately it is drawn but in the quality of line and rhythm and flow of the drawing the spirit is all Rubens and reflects him and the time he lived in. In the same way the Victorian illustrator Orlando Jewitt's lithographs of the early Celtic masterpieces of ironwork, which so influenced the appreciation of British Early Celtic art, are in style and feeling Victorian and could not have been drawn in another age.

*Figure 120 Claire Thorne at Fortress House, working on a reconstruction for the Mount Grace Priory guidebook.*

*Figure 121: Reconstruction of Windmill Hill by Judith Dobie. Windmill Hill is a Neolithic site in Wiltshire and may have been a meeting place for people who farmed the surrounding downlands.*

The tools and reproduction methods used fasten an image to a time. In the drawing office we used dip pens and mechanical pens, letraset and watercolours, hot pressed CS10 paper with a surface so hard it shone and cracked if you bent it. Earlier illustrators might have used cartridge paper or even tracing paper which would give a softer less emphatic line. Before transfer letters there were stencils or your own calligraphy. One of the elements that make the drawings of the archaeologists of the1950s so redolent of their age is their lettering. Now such drawings are most likely to be made on computer with digital typefaces used for the lettering.

From the beginning, apart from the exceptional cases where an artist was also an engraver, there were two interpreters between the drawn object and reader - the artist who drew the illustration and the craftsman who cut into a block of softwood to make a wood cut, or engraved the end grain of a hardwood block, or engraved, etched, mezzo tinted, aquatinted or lithographed metal or stone. The introduction of photographic processes at the end of the 19th century and the use of line blocks meant for the first time a drawing was reproduced in facsimile without going through another's mind. All these different processes gave the artist opportunities but also imposed limitations. New methods of reproduction encouraged new methods of depiction and so a style reflects its time.

In the 1960s the Drawing office style was fashioned for print by line block and for reduction. There was no point in a beautiful drawing which did not reproduce well. So make your drawings simple and clear. Space the lines just far enough apart so they don't merge when reduced but close enough together to make a tone and create a shape. Make each line black and emphatic so the block will be sure and even. Don't cross hatch for in reduction the lines can combine to make an ugly patch. Likewise when stippling keep the individual dots apart so when reduced you get an even tone. Always think of reduction and the block maker.

As soon as digital printing was introduced the rules were changed, sometime to advantage. When drawing prehistoric pottery the initial pencil drawing often seemed more sympatric to the surface of the pot than a hard black line but a pencil line had been difficult to reproduce. Now it wasn't. Colour printing became cheaper. Our carefully graded tonal stratigraphic sections weren't necessary; the different layers could be shown in colour.

So methods and the styles they influence move on. Ann Jenner, head of the Drawing Office from 1995-7, writes that she feels that the craft and heart has gone from archaeological illustration and that this is a reflection of our impatient, expendable age. But then Stuart Piggott, Professor of pre-history, fine draughtsman and historian of archaeological illustration writes in "Aspects of Archaeological Illustration" in 1978, of his hero Mortimer-Wheeler in the 1920s and 30s the last archaeological statement in draughtmanship before elegance became suspect and outmoded and diagrammatic austerity and the ineptitudes of misused Letraset took its place'. The truth is that we are all inclined to think our time the best, but we are just a piece in the story of those who strove like Stukely 'to illustrate the monuments.'






## *ENGLISH HERITAGE RESEARCH DEPARTMENT*

*English Heritage undertakes and commissions research into the historic environment, and the issues that affect its condition and survival, in order to provide the understanding necessary for informed policy and decision making, for sustainable management, and to promote the widest access, appreciation and enjoyment of our heritage.*

*The Research Department provides English Heritage with this capacity in the fields of buildings history, archaeology, and landscape history. It brings together seven teams with complementary investigative and analytical skills to provide integrated research expertise across the range of the historic environment. These are:*

* *Aerial Survey and Investigation*
* *Archaeological Projects (excavation)*
* *Archaeological Science*
* *Archaeological Survey and Investigation (landscape analysis)*
* *Architectural Investigation*
* *Imaging, Graphics and Survey (including measured and metric survey, and photography)*
* *Survey of London*

*The Research Department undertakes a wide range of investigative and analytical projects, and provides quality assurance and management support for externally-commissioned research. We aim for innovative work of the highest quality which will set agendas and standards for the historic environment sector. In support of this, and to build capacity and promote best practice in the sector, we also publish guidance and provide advice and training. We support outreach and education activities and build these in to our projects and programmes wherever possible.*

*We make the results of our work available through the Research Department Report Series, and through journal publications and monographs. Our publication Research News, which appears three times a year, aims to keep our partners within and outside English Heritage up-to-date with our projects and activities. A full list of Research Department Reports, with abstracts and information on how to obtain copies, may be found on www.english-heritage.org.uk/researchreports*

*For further information visit www.english-heritage.org.uk*

ENGLISH HERITAGE