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AN INTRODUCTION TO ARCHAEOLOGICAL ILLUSTRATION

> The form of a representation cannot be divorced from its purpose and the require-
> ments of the society in which the given visual language gains currency.
>
> Piggott 1978, 7

This statement that an illustration needs to be tailored both to its audience and to the purpose of the illustration is true whatever the level of technology available to the illustrator. After these requirements have been met, however, the level of available technology remains the third major factor in determining any illustration; given a particular level of technology, once the purpose of the illustration is decided and the requirements of the readership are recognised, the illustrator has little room for manoeuvre. As these three variables have changed over the centuries, the result has been a great diversity of types and styles of illustration.

The earliest illustrations of archaeological sites and objects occur in medieval manuscripts from northern and western Europe. Further east in Europe, although there are a few references to 'ancient barrows' in medieval documents, the megalithic structures that excited curiosity in western Europe were lacking, and consequently interest in antiquities was slower to develop (Sklenář 1983, 15ff.). That is not to say that the growth in interest in antiquities in western and northern Europe was particularly rapid: most field monuments were regarded as the work of giants, fairies, elves or other mythical or legendary characters, and this is reflected in the way the monuments were illustrated. One of the earliest representations of Stonehenge, for example, shows the stones being erected by the magician Merlin (fig. 1.1). From these beginnings, the development of archaeological illustration broadly followed the development of archaeology itself, because both were affected by the same influences in the succeeding centuries.

Interest in antiquities was given a boost amid the general broadening of horizons and awakening of curiosity during the Renaissance, and by the end of the sixteenth century illustrations of field monuments were becoming increasingly common. These illustrations often formed part of general topographical works which were intended to record any interesting facet of the landscape, but where the medieval drawings of monuments were often simple and diagrammatic and were probably based on verbal descriptions, the early topographical drawings of antiquities displayed an amount of detail that implies some first-hand observation. However, they still sometimes

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displayed erroneous features that could not have been observed, but presumably originated in a misunderstanding of verbal descriptions (fig. 1.2; see also Piggott 1978, 10–13).

The emphasis on topographical recording of field monuments continued through the seventeenth and into the eighteenth centuries, with illustrations of monuments usually taking the form of one or more views, either from ground level or from a viewpoint well above ground level, so that the illustration approximated to an axonometric projection. Nevertheless, the majority of illustrations at this time were of objects rather than sites. The development of science following the Renaissance led to the realisation of the need for classificatory systems which, in turn, led to the preparation of accurate scientific drawings to help in the process of classification. One notable instance of this was in the field of botany. Doctors and apothecaries were trained in the identification of plants for use as medicines, and special herb gardens were used to familiarise them with many plants (Allen 1976, 6ff.), but from the seventeenth century, books with drawings of plants were increasingly used for identification. This provided a great stimulus for increasing the accuracy of botanical drawings, since a wrong identification of a plant could have fatal consequences. By the end of the seventeenth century, antiquarians were following the lead of science and were preparing illustrated catalogues of antiquities as part of the classification process (Piggott 1965, 169).

Fig. 1.1   A fourteenth-century interpretation of how the lintels at Stonehenge were erected: see also fig. 1.6. *From a fourteenth-century French romance (MS Egerton 3208, f.30r). By permission of the British Library.*

While topographical recording led to the depiction of field monuments, albeit usually in topographical publications, the revival of interest in classical antiquity that began in the Renaissance resulted initially in an emphasis on manuscript texts of classical writings, but this itself led to an interest in the texts of inscriptions. The need for accurate transcriptions of texts, including inscriptions on monuments, coins and so on, led to the more accurate drawing of the letters of the inscriptions, and eventually to attempts at facsimile drawings. Similarly, interest in the classical orders of architecture led to the study of ancient buildings in order to derive from them the rules for drawing the classical orders (Chitham 1980, 6). By the mid eighteenth century it was common for painters, architects and antiquarians, often working together, to measure, draw and paint the buildings of classical civilisations. The culmination of these study expeditions was publications such as *The Antiquities of Athens* by the painter James Stuart and the architect Nicholas Revett. This was a scholarly study of ancient architecture, but its publication was delayed and by the time it was published in 1762 the emphasis was already beginning to change.

Although interest in classical antiquities was part of the cultivation of good taste in the second half of the eighteenth century, European society was moving towards a romanticism that reached its peak in the early nineteenth century. This romanticism, seen most vividly in art and literature, was
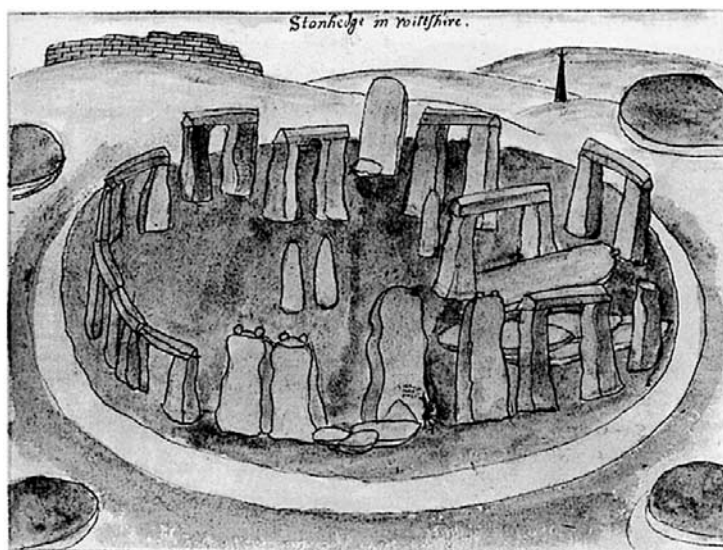

Fig. 1.2   A sixteenth-century view of Stonehenge showing incorrect details (such as the non-existent castle wall), presumably based on verbal description rather than first-hand observation. *From William Smith, View of Stonehenge, 1588, from his unpublished 'Particuler Description of England' (MS Sloane 2596, f.35v). By permission of the British Library.*

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accompanied by a waning of interest in classical antiquities and by a renewed interest in non-classical, local or national antiquities (Daniel 1975, 29). The effect of this on archaeology was an increase in fieldwork, and the focus of attention gradually moved from topographical recording to excavation. Ancient monuments were now seen in terms of the Picturesque (Piggott 1978, 44); this is reflected in paintings and drawings of archaeological subjects which usually stress their dramatic or quaint setting rather than clearly illustrating the sites or objects themselves (fig. 1.3).

The change of emphasis from topographical recording to excavation was to some extent paralleled by developments in the technology available to the illustrator. One of the pioneers of the systematic illustration of finds from excavations was James Douglas, who excavated many sites in south-east England in the second half of the eighteenth century. His *Nenia Britannica* was published in several parts from 1786. Douglas engraved his own plates for printing his illustrations, and to give them extra tone he used aquatint, a technique introduced to England only some 30 years previously. In the early nineteenth century improvements were made in the technology of metal-plate engraving for the printing of illustrations, but there was also a revival and development of the techniques of wood engraving (Chitham 1980, 9), and lithography began to be used as well. By the mid nineteenth century
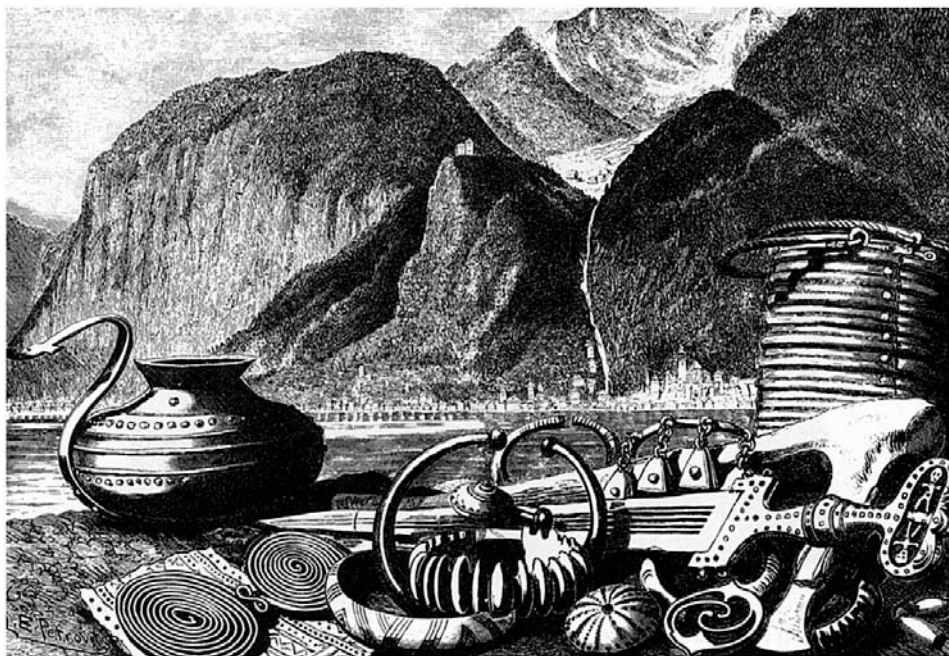

Fig. 1.3   A nineteenth-century picturesque portrayal of finds from Hallstatt. *From Hoernes 1892.*

wood engraving and lithography became the most popular methods of repro-
ducing archaeological illustrations, and illustrators like Orlando Jewitt used
these techniques for archaeological and architectural illustrations. Jewitt's
principal interests were antiquities, architecture and natural history, and his
work is an outstanding example of what could be achieved with the available
technology.

   Although such illustrations were often excellent, giving the kind of detail
for which photography is nowadays used, it was not until the publication of
Pitt-Rivers' work in the late nineteenth century that archaeological illus-
tration came of age. As well as his pioneering work on typology, Pitt-Rivers
excavated several sites in southern Britain before concentrating on the
thorough excavation and publication of sites on the Cranborne Chase estate,
which he inherited in 1880. In his work the illustrations have pride of place,
with the accompanying text subordinate to them (see Piggott 1978, 53–5). In
illustration, as in much else, Pitt-Rivers was ahead of his time, and his illus-
trations came closer to the requirements of modern-day archaeologists than
they did to the requirements of many of his contemporaries.

   During the twentieth century archaeology and also archaeological illus-
tration have seen a rapid development, and have been subject to the influ-
ence of new ideas and techniques. Continued improvement in the techniques
of printing from photographic originals has meant that drawings and paint-
ings are no longer the only method of making archaeological illustrations.
The need to choose which medium to use for a particular illustration has
gradually led to an awareness of each medium's strengths and weaknesses.

   After the First World War, the realisation of the usefulness of aerial
photography as an archaeological tool led to renewed interest in fieldwork
and the need to find ways of illustrating the hundreds of new sites found by
aerial photography. Alongside this, the application of analytical techniques
borrowed from the study of geography produced a new range of charts,
diagrams and distribution maps. Distribution maps were first used in the
nineteenth century, and among the earliest examples are those produced by
the surveyor Philip Crocker in Sir Richard Colt Hoare's *History of Ancient
Wiltshire* (published 1810–21). Since the First World War distribution maps
have been extensively used to illustrate theoretical arguments and analyses.

   The modern approach to illustration, with the conscious realisation that
the purpose of the illustration is to convey not only information but also an
interpretation of that information, made its appearance in the work of
Mortimer Wheeler. His drawing of the section across the strongroom of the
Roman fort at Segontium (fig. 1.4) has been hailed as a landmark in the
history of British archaeological illustration (Piggott 1965, 175). Since its
publication in 1922, irrespective of differing styles and approaches, the best
archaeological illustrations have been based on the principles so clearly
demonstrated in that drawing.

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In the 1950s the emphasis in archaeology swung back to excavation. This situation still prevails, but there are now strong contributions from other types of fieldwork, with practical and theoretical analysis, anthropology and environmental science also having a significant impact on the discipline. The range of activities covered by the term *archaeology* is the widest it has ever been, and consequently the diversity of archaeological illustration is the greatest so far seen, with drawings and photographs appearing in most archaeological publications.

Once it became possible to print good reproductions of photographs, it was no longer necessary to use drawings to provide a 'realistic' representation, and yet in most publications, drawings still outnumber photographs. Although drawings can be so detailed and so well shaded that they are almost like photographs (as was often achieved before the advent of photography: fig. 1.5), the more that drawings resemble photographs, the less easy they are to comprehend, and it is usually better to use a photograph instead. Obviously, in some cases such as reconstruction drawings, there is no 'original' to be photographed, but finds and sites can be photographed instead of being drawn. The reason for drawings continuing to be the dominant form of illustration is that a drawing can convey much more relevant and comparable information and can be edited more easily than a photograph.

A photograph records all that is visible to the camera with nothing added or taken away. Photography usually gives a good overall *realistic* impression of the subject, but it has the disadvantage of being unselective. A single photograph may not be capable of showing various details visible to the illustrator in differing lighting conditions, and yet may show a great deal of detail that is of little or no use to the reader. It is possible to touch up photographs to some extent, but the amount that can be done is limited. By
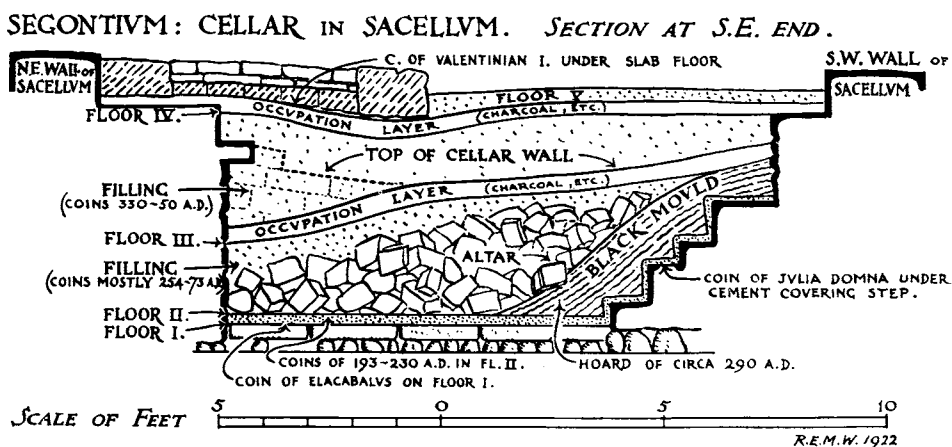

Fig. 1.4   The classic section drawing across the strongroom at Segontium, Gwynedd. *Drawn by Mortimer Wheeler. From Wheeler 1922.*

contrast, a good drawing selectively portrays the details that the reader needs to see and edits out irrelevant details, so that the illustration can be understood much more easily.

The real strength of drawings is the amount of information they can convey, since several views and sections can show much more useful information than one or more photographs. Drawings done to scale also enable direct comparisons to be made with other drawings. The illustrator must, of course, know which details are important and should be included, and which can be omitted. By omitting the type of detail which renders a drawing realistic, like a photographic representation, and by using other conventions, archaeological drawings become diagrammatic. In essence, archaeological illustrations are interpretive diagrams rather than attempts at *realistic* or *artistic*
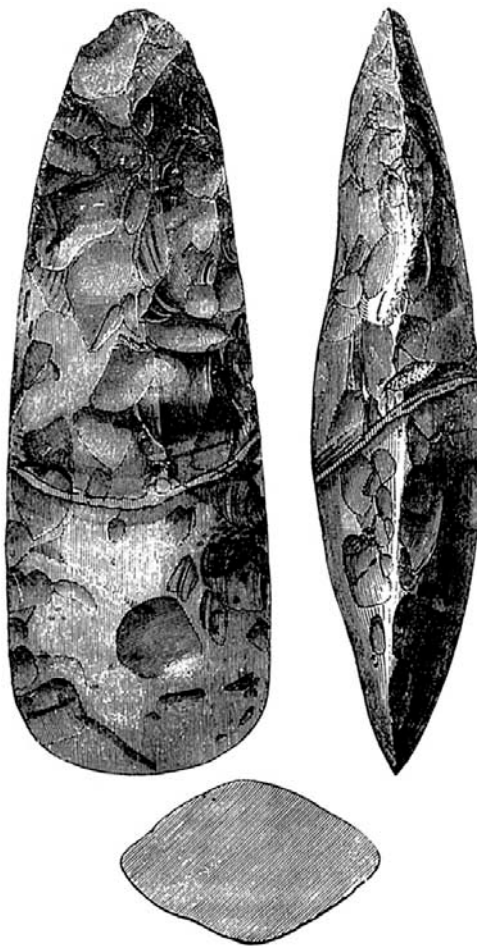

Fig. 1.5   A woodcut illustration of a flint axe (plan view, side view, cross-section). *Engraved by Mr Swain of Bouverie Street. From Evans 1897.*

portrayal. Since each drawing is the illustrator's interpretation of a subject, it is of paramount importance to understand what is being drawn and why, whether it is a survey of an extensive landscape or a drawing of one small find.

The element of interpretation in archaeological illustrations can even be seen in some of the earliest illustrations. The medieval drawing of Merlin erecting the stones of Stonehenge (fig. 1.1) shows the illustrator's interpretation of how the stones were erected just as clearly as the modern illustration drawn over five hundred years later (fig. 1.6) shows a different interpretation.

The interpretive elements influence what information is conveyed, and the other two significant factors are the available technology and the potential audience. However, there is now such a range of tools, techniques, materials and printing methods at the disposal of an illustrator that the level of technology is no longer a constraint, although the cost of some of the more expensive materials and printing methods may be inhibiting.

The purpose of a drawing inevitably restricts the freedom of an illustrator. For example, once the decision has been made to illustrate a particular aspect of a building, there is only a limited number of ways of portraying it. The readership at which the drawing is aimed is likewise a limiting factor. The purpose of a drawing cannot be divorced from the readership: if the intention is to portray a reconstruction of a building, this may be done for a specialist readership as a metric projection, but if the reconstruction is to be viewed by schoolchildren, a better approach might be to undertake a perspective view of the building, complete with people, animals, trees and so on. Instead of being a monochrome line drawing, the latter would be better portrayed in realistic colours in order to give a more comprehensible illustration of the original building in use.

Many conventions and symbols have been devised for use in archaeological illustrations so that the maximum amount of information can be conveyed as economically as possible. Such drawings have to be read and interpreted in
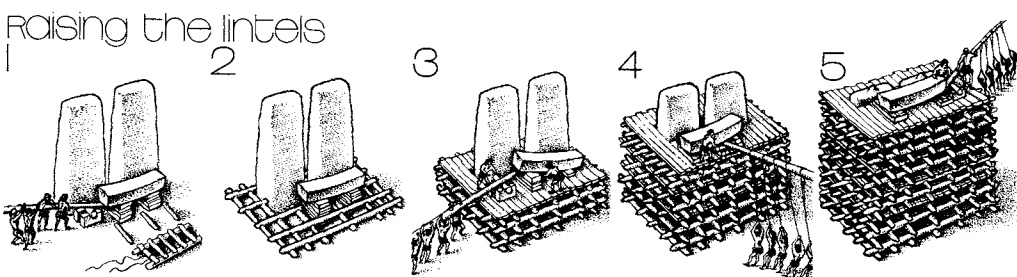

Fig. 1.6   A modern interpretation of how the lintels at Stonehenge were erected; see also fig. 1.1. *Drawn by William Brouard, Archaeological Drawing Office, English Heritage. From Atkinson 1978. By permission of the Historic Buildings & Monuments Commission for England.*

order to be understood, but if the intended audience is unlikely to have a specialist knowledge of archaeology, these conventions and symbols cannot be used. On the other hand, a drawing which aims at realism for a specialist audience of archaeologists is usually inappropriate and fails in its purpose. An illustrator should be flexible in the approach to illustration: it is not the illustrator but the audience that dictates the type of drawing. In general terms, the more specialist knowledge and understanding that the audience is likely to possess, the more economical and diagrammatic the drawing can be, reflecting the requirements of the audience. Just as a lay audience gleans less information from a plan of a Roman villa than from a reconstruction drawing, so the Roman villa specialist is not able to gain as much information from a reconstruction drawing as from an accurate plan. This is because, in each case, the information selected and portrayed by the illustrator does not meet the requirements of the user.

In fulfilling the requirements of the audience, the illustrator must aim to make an illustration convey as much information as possible, as accurately and clearly as possible, using universally recognised conventions if such exist and are appropriate. If the illustrator can also produce a drawing that has a good design and layout and an attractive use of symbols and shading so that it not only conveys information but is aesthetically pleasing, this is an added bonus: an aesthetically pleasing drawing that does not meet the essential requirements has failed as an archaeological illustration.

In the history of archaeological illustration, many types of people have been responsible for the best and the worst illustrations. Some archaeologists hired professional illustrators and surveyors, while others prevailed on the talents of family and friends. Artists turned archaeologists like Heywood Sumner (Cunliffe 1985) drew their own illustrations, while some archaeologists like James Douglas were so concerned to ensure the illustrations met their specifications that, not content with drawing the original illustrations, they engraved the printing plates themselves, to eliminate any errors of accuracy or style that might be made by the plate engraver. With modern technology, such painstaking effort is no longer essential, it being necessary only to produce a good original drawing to enable a good printed illustration to be made.

Even today, archaeological illustration is still not confined to any particular group of people. While there is a growing number of skilled professional and amateur archaeological illustrators, most archaeologists should also be capable of doing illustrations. Many archaeologists suppose that they are not capable of producing good illustrations, but the number of people completely incapable of producing a reasonable drawing is very small; an understanding of the subject being drawn and knowledge of what is required in the drawing, guidance from skilled illustrators and sufficient practice are usually all that is needed to enable adequate illustrations to be produced. However, archaeo-

logical illustration is a specialism among many other specialisms within the discipline of archaeology, and so any archaeologist, however skilled at illustration, should consider whether it is more efficient to delegate the task to a specialist illustrator.

Even if archaeologists have no desire or time to prepare their own illustrations, it is fundamentally important that they have some experience of preparing illustrations: this not only makes the archaeologist familiar with the symbols and conventions that make up the visual language of the illustrator, but also gives an insight into the scope and limitations of what information can be conveyed. It also enables archaeologists to be able to read and comprehend illustrations instead of being illustration-illiterate, so that the level and standards of research and publication can be enhanced.

With the rest of archaeology, archaeological illustration is about to feel the main impact of the development of computing power (see chapter 10), and with the new power that this will give to illustrators, it is even more necessary for all archaeologists to be able to assess critically and evaluate the information contained in illustrations.

Recommended sources

Allen 1976: discusses the development of natural history in Britain (of relevance to the early history of archaeology) and should be read in conjunction with Daniel 1975 and Sklenář 1983.

Chitham 1980: includes a chapter on the history of architectural drawings.

Daniel 1975: a general history of archaeology written from the viewpoint of Western Europe.

Grinsell 1972: has a short section on the history of distribution maps.

Hodgkiss 1981 and Hodgkiss and Tatham 1986: both publications give a history of maps and mapmaking.

Piggott 1965 and Piggott 1978: the best overviews of the history of archaeological illustration.

Sklenář 1983: a history of archaeology in Central Europe, complementing Daniel 1975.