

## CHAPTER FIVE

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# PHOTOGRAPHY AND ARCHAEOLOGY

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### INTRODUCTION

Photographs are often taken for granted in archaeology. They are treated as technical aids, helping to record or identify features and objects, or they may provide illustrative ambience, landscape backdrop, evocations of setting.

There is little or no questioning of conventional uses of photography. Archaeological photographs are treated as transparent windows to what they are meant to represent. I aim to inspect this apparent clarity. Taking direction from cultural studies (see particularly Hillis Miller 1992) and from the sociology of knowledge (e.g. Fyfe and Law (1988) for visual imagery), my perspective is one of critique, looking within cultural works to reveal sedimented meanings which serve particular interests: it is a negative outlook, aiming, through rational scrutiny, to unveil and debunk neat systems of method and thought, on the grounds that they are always inadequate to reality.<sup>1</sup>

It is proposed that photography, far from being homogeneous, is an unstable category, and that it is better to think less of photographs than of *photoworks*, with emphasis placed upon acts of cultural production: photowork is then one aspect of how the archaeologist may take up the remains of the past and work upon them. This is the positive moment of critique – finding the creative potential within particular modes of cultural production, a potential to express different interests in the material past (Shanks 1992).

In identifying the potential of photowork to relate in different ways to the purpose, interest, and function of archaeological discourses, this chapter is conceived as a contribution to new archaeological methodologies which have been termed *postprocessual*, and which are now better known as *interpretive*, concerned with the interpretation and understanding of the material past.<sup>2</sup> It is considered that the moment is particularly

ripe for this because fundamental shifts are taking place in our relationships with (visual) reproductions of 'reality'; the implications of digital technologies will be assessed. The position taken is that the ability to sample, quote, and seamlessly manipulate the visual world offers great scope for presenting pasts of richer texture, more attuned to our contemporary selves, and more edifying.

### THE PHOTOGRAPH AS RECORD AND WITNESS

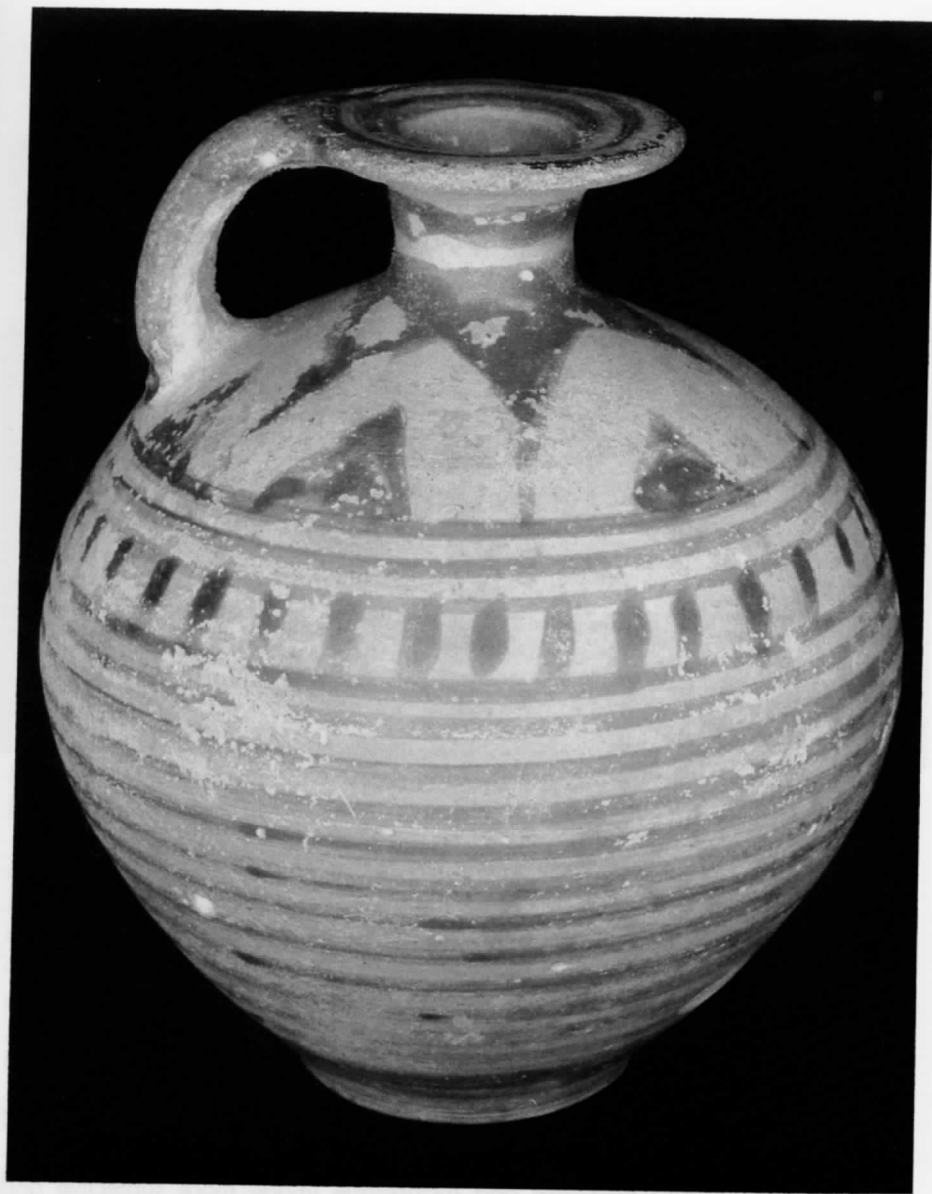
Photographs in archaeology are most often used to record, document, and illustrate what has been found, what is being discussed in a text. Handbooks of archaeological photography are all about how to achieve accurate and full recording (Dorrell 1989 is a recent example). Photography here is a technical issue, to do with means and not ends; the photograph is considered a means to objective recording.

The photograph is demonstrative and pronominal, standing for the thing photographed. A witness says 'I was there'; as a documentary witness, the photograph is held to say 'look and see for yourself'. Thus a photograph may be used to provide authority based upon the notions of presence and seeing.

There are connections with a popular use of photography, the snapshot, which bears witness to a family holiday or the like.<sup>3</sup> Such a photograph shows you have been somewhere. Taking the snapshot of a family occasion is often a response to a desire to capture an objective correlative of an experience or moment, or to capture what will become a memory. Photographs in reports are a way of quoting the material past, attempts to import things directly into text (the objective correlatives) as a support for what is being said; the implication is that material things and looking have primacy over ideas and writing. I will later contrast other modes of quotation.

### PHOTOGRAPHS AS NOTES

Excavators and researchers frequently use photographs as notes. A site may be photographed many times in the process of excavation to aid the process of writing up, and as a record. Involved here may be ideologies of *innocent looking*: the idea that a photograph is basically unaffected by the interpreting 'subjectivity' of the looker, once the camera has been pointed. That photography is a mechanical, electronic, and chemical means of reproduction is crucial here. These fields are considered automatic, machinic, and natural (chemical reactions), opposed to the subjective and personal. With care the photographer can be reduced to an operative, minimizing interference in a natural and objective technique. With the camera as automaton, as machinic eye, technology is divorced from social and personal determination.



**Figure 5.1** The photograph as technological note: a Corinthian aryballos (perfume jar) of the early seventh century BC. Convenience came with 35mm photography in the 1920s and the Leica camera. Here a hand-held single-lens-reflex camera with close-focussing macro lens, complemented by ringflash and automatic off-the-film metering enables fast and accurate results, which approach those of a studio set-up.

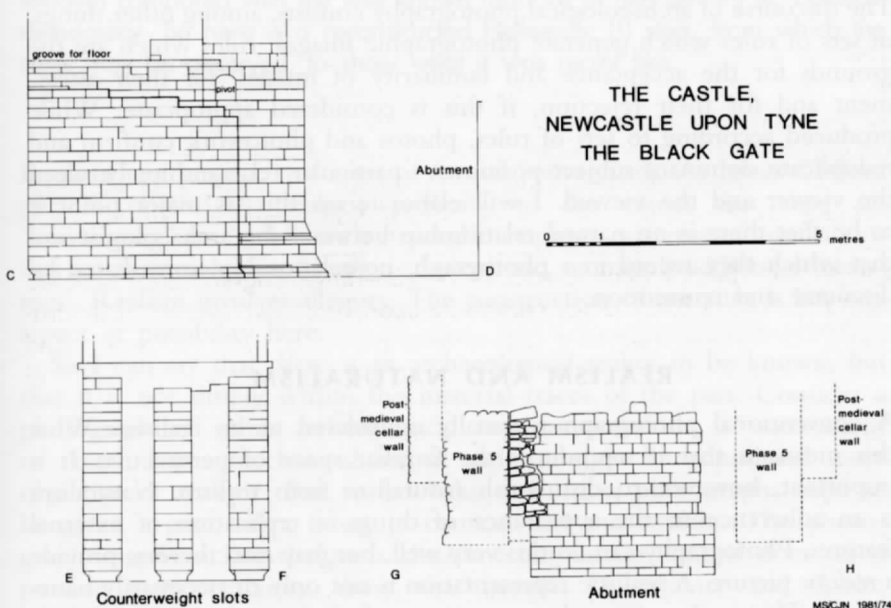
That technique and function are neutral and independent in this way is not a statement of fact but a proposition which is much contested in histories and sociologies of design and technology,<sup>4</sup> as well as in some branches of archaeology.<sup>5</sup> Looking, and the means of its record, are always *situated*. They are from a particular viewpoint, it can be argued, and techniques help constitute particular attitudes to the objects of record and note, particular relations between subject and object positions. This does not invalidate an interest in record and noting, but rather supplies it with motivation and heterogeneity.

## GENRES OF PHOTOGRAPHY

Photographs record and also supply *ambience*. Many archaeology books particularly popular publications, are sumptuously illustrated with photographs, and they almost always conform to familiar genres and styles. One genre, the record shot, has already been introduced; two others are the picturesque and the travelogue. Many archaeological photographs are dark and mysterious images of the past: prime subjects of the picturesque. The picturesque is well established as a genre. Many photographs present a 'travelogue past' of sites and artifacts worth visiting and seeing in a cultural itinerary. Generally, the picturesque, the 'important', and the beautiful are the concepts which guide conventional archaeological photography, but these are concepts negotiated or dictated by discourse, being far from pre-ordained.

Various exposure, processing, and printing materials and techniques produce familiar characteristics of colour balance and saturation. Black and white landscape photographs are often taken through coloured filters and printed with contrasty skies, while infra-red film produces an ambience of mystery and otherness. Tonal balance and degree of contrast, in lighting, *mise-en-scène* (see below), and also in developing and printing, are subjects of consideration and regulation. Some standard compositional

**Figure 5.2** Bamborough Castle, Northumberland, England and surveyed elevations of the Black Gate, Newcastle-upon-Tyne. Two genres of illustration. Is the picture post-card and picturesque image more subjective and arty (or kitsch?) than the drawing? The photograph records a wealth of empirical information about the moment the camera shutter was released: weather conditions, visibility from camera position, the play of light upon different materials. . . . The drawing represents an alternative (subjective) decision to focus attention simply upon the edges of building stones. The photograph is more naturalistic than the drawing which could be argued to supply more 'useful' information (and so, perhaps, more realistic), but it depends on what we are interested in. The comparison shows that both photo and drawing are constituted by interest and purpose which belong with the photographer, draftsman, and their discourses.



rules are evident, having to do with the ratio of sky to foreground, the positioning of central subject matter, and the use, or not, of converging verticals in architectural shots. Focusing conventions require the subject matter to be sharp, perhaps soft-focus for romantic ambience.

Most photography upholds a set of rules around these themes and which can be found outlined explicitly in the standard photographic literatures as well as being so evident simply in the number of photographs which appear merely as variations of the same theme. Histories of photography and illustration are important in understanding these styles and genres. For example, the criteria which apply to the picturesque were explicitly formulated in treatises at the end of the eighteenth century (e.g. Gilpin 1782, 1792). Archaeological photography has borrowed its notions of the important and the beautiful as much from photography generally as from within the discipline.<sup>6</sup>

Around notions of the picturesque, beautiful, and important, there is little use of photography other than to praise or document neutrally, little use of photography to awaken consciousness, an aim to be found, for example, in much American documentary photography of the first half of the century.<sup>7</sup> It might also be noted that there is no *art* photography in archaeology – photowork which emphasizes rule, style, and genre, and perhaps questions convention.

We are here beginning to read images, and discourse is a concept central to such reading (Hodder 1989; more generally see Leitch 1983; Shanks 1995; Tilley 1989; for archaeology see Tilley 1990a; Tilley 1990b). The discourse of archaeological photography consists, among other things, of sets of rules which generate photographic images, rules which are the grounds for the acceptance and familiarity of images, for their assessment and for their rejection, if this is considered appropriate. While produced according to sets of rules, photos and photowork confirm and reduplicate dominant subject positions – particular relationships between the viewer and the viewed. I will elaborate on this. A major point is to be that there is no natural relationship between the archaeologist and that which they record in a photograph, no relationship unmediated by discourse and convention.

### REALISM AND NATURALISM

A conventional photograph is usually considered to be realistic. What this means is that it reproduces the familiar space of perspective. It is important, however, to distinguish naturalism from realism. Naturalism is an adherence to the appearance of things, a replication of external features. Photography can do this very well, but may not, thereby, provide a *realistic* picture. A realistic representation is not only or necessarily naturalistic. This is clear from the experience of photographs of ourselves – how often they do not resemble us but only duplicate momentary facets.



**Figure 5.3** Perspective centred upon the eye of the viewer, and a scene to be photographed: the Stoa of Attalus (reconstructed), Athens. The 'real' centre of ancient Athens a multi-temporal jumble of wall foundations, is a letdown compared with the well known histories of fifth-century BC classical democracy. So here is a reconstructed Hellenistic (!) stoa, from which the ruins may be observed, to show what it was really like.

Realism is a project, not a set of formal conventions. As James Clifford puts it (1988:100) 'realistic portraits, to the extent that they are "convincing" or "rich", are extended metaphors, patterns of associations that point to coherent (theoretical, aesthetic, or moral) additional meanings'. Realism involves allegory. The construction of narrative is but one aspect or possibility here.

So I can say that there is an archaeological reality to be known, but that it is not simply within the material traces of the past. Consider a photograph of some archaeological remains. It is not a watercolour or sketch but a mechanical record and so might be considered more objective or realistic. But to be realistic, I argue, photographs need to be given a past and a future, a context. Let me explain. The photograph merely acknowledges a disconnected instant, but it does often provide some certainty about that instant. Uncertainty and doubt, however, the roots of interpretation, require time for deliberation. Meaning comes from the two, from certainty and doubt, from the *process*

of making sense. Meaning comes from making connections and exploring contexts. This is something brought to the photograph by the maker and the viewer and it may involve considerable deviation, temporal, spatial, and conceptual, away from the naturalism of the photograph.<sup>8</sup>

Paul Valery declared that photography freed the writer from describing,<sup>9</sup> but photographs do not describe in the same way as writing: they do not have the same temporality as text. They require duration and interpretation, the contextualization mentioned above. Note also how a photograph may become a reality which is then experienced as a let-down. Visitors may experience the confusion of an excavation, contrasting with the cleaned-up photographed vistas, as a disappointment. Visitors to a site may search for the picturesque view whose photograph has drawn them there, missing other details of the 'real' site.

A photo replicates perspective which is considered the hallmark of a realistic image.<sup>10</sup> But perspective is very much a post-Renaissance convention of realism that has been much questioned in modernist and postmodernist projects, just as the contrast between naturalism and realism has been the focus of much literary experiment and critique. The point is that there is no easy and natural relationship between reality and its depiction. The concept of discourse may be introduced again here. A photograph may be considered realistic because it conforms to the canon of realism laid down by discourse, rather than because it has some special and objective relationship with reality. What is considered photographic realism then becomes a network of mutually referring references which by repetition and cross reference create a generally perceived picture of what may be regarded as real or realistic. This picture is not recognized as a picture, but as what it represents itself as – reality.<sup>11</sup>

### THE RHETORIC OF THE IMAGE

The rhetoric of the photograph (Barthes 1977) is to conflate naturalism and realism. The artifact becomes reality. So even when photographs are acknowledged as artifacts, they may also take on something of the status of found objects, harnessing the magic of the real.

There is also an ideology of intimate knowledge gained through seeing. As I mentioned above, the photo may seem to say 'look and believe your eyes'. There is an imaginary plenitude to the photo here: it is supposedly full of meaning. An impulse may be to document an archaeological site with as many photographs as possible; the photo image is considered to be related to knowledge because it presents the real directly to that sense which is imagined to have immediate access to reality – sight. But a multitude of photographs of a site are not so much a means of knowing it as a means of diverting its puzzles and uncertainties. Seeing is not congruent with knowing or understanding, of course, and

criticism may justifiably be made of the apparent voyeurism in the will to photograph (Burgin 1982:187f).<sup>12</sup>

This supposed innocence of the photograph-as-analogue is now being corrupted by digitally-based computer technologies, so it is argued by some (see discussion in the journal *Ten-8*, Anon 1991). Digitized images can be manipulated at will without losing the appearance of photographic verisimilitude. Substantial criticism, associated with opposition to the hyperrealities of postmodernism, is being directed against this new sophistry.<sup>13</sup> The fear is that reality itself is being challenged and questioned, replaced instead by information systems, megabitmapped images. We can be presented with a *totally constructed* photographic 'reality'. Made homogeneous by binary encoding, the world appears debased and ready for acquisition, appropriation, and technical control.

But the technologies of photography have *never* been innocent. The will to photograph may involve a desire to grab bits of reality and to own, rather than to understand. Since the early days of photography Reijlander and others have produced compound images, faking pictorial forms. Photographs are constantly used out of 'context', juxtaposed with other images and words in rhetorical forms, backing up particular interests and arguments. Advertising and journalism regularly do this.

Even the technology of photography has often involved manipulation in order 'objectively' to represent: orthochromatic film, for example, a normal emulsion used before panchromatic, cannot do justice to both foreground and sky in an outdoor picture because it is not sensitive to red light; effects have to be manipulated for the final photograph to 'look right'. It might even be argued that the association of objectivity and the photograph is relatively recent (Rosler 1991).

Radical critiques of advertising have made much of the rhetorical function of photography: the objective light-wave image attesting to the truth of an argument to buy a product. The advertising photo says to you 'look, it really could be like this, if you buy' (Williamson 1978 and many after this classic work; see also Haug 1986).

I argue that we should attend to such critiques and be suspicious of the easy identification of objective knowledge with naturalistic representation.

## THE RHETORIC OF DISCOURSE

Photographs which seem to represent reality are products of discourse; naturalistic replication does not have a necessary connection with knowledge or understanding of reality. An extension of this argument is that what we take to be objective reality is rhetorically constructed.

Arguments presented in constructivist philosophy of science<sup>14</sup> hold that objectivity is a quality of strength or robustness considered to be held by a statement, but it is not some quality of reality, for example, which

exists independently of history and society. Objectivity and truth do not stand up for themselves, but have to be argued for, by people. So the strength of objectivity comes partly from rhetoric. Elements of rhetoric include techniques of persuasion, styles of presentation, forms of argument, and archives for reference and support. Consider archaeology:<sup>15</sup> a statement about or image of the archaeological past is not strong and good because it is true or objective; but because it holds together and makes sense when interrogated it is described as objective. Whence then does a statement or image derive strength, if not from objectivity? There is no necessary answer. It can be many things. An objective image, a true representation of reality, is one connected to anything more solid than itself, so that if it is challenged as being misrepresentative, all to which it is connected threatens also to fall. Rhetoric is the art and science of making these connections and persuading people of their strength. As I have already argued, a photograph has to be lent a past and a future, its disconnected instant reconnected. The multiplicity of the possible connections is the heterogeneity of photowork.

Images can have tremendous rhetorical force because they can gather together so much: information, attitudes, and relationships (Latour 1990). If the image is a photograph, all the more weight is lent to the image by the conception of the photograph as direct replication, or objective correlative. A photograph somehow always seems to attest to some truth; it draws on scientific conceptions of value-free or objective truth, but more importantly upon an ethics of truth-telling rooted in a valuation of sight over words. With observation bound to a moral duty of telling the truth, a hierarchy of experience is erected, with seeing having primacy over telling, and telling possibly involving lies. If the visual is associated with immediacy it seems to avoid the pitfalls of discourse, those rules and conventions which determine expression.

Let us assume that we want objective archaeological accounts and let us define objective as strong, resisting attempts to prove falsity. An archaeological report usually aims to present data as objectively as possible – a strong basis for subsequent inference. Where is the quality of objectivity? Whence the strength of an objective report? It comes, I suggest, from all those diagrams and photographs, the many words of detailed description, the references to comparative sites and materials which give further context to the findings. These all attest to the actual happening of the excavation and to the trustworthiness of the excavation team. The objectivity of the report, its strength, is a rhetorical achievement, but nonetheless real. Because the report is coherent and reads well (no contradictions betraying lies and artifice), and the photographs witness things actually being found, because its style and rhetoric are found acceptable, because it delivers what is required (from format to types of information), it is described as sound. Objectivity is that which holds together. If a report holds together it is considered objective. How, after all, are

we to judge a report on an excavation we had no part in? Even if possible, it would be expensive of time and resources, almost certainly impractical, to go back and re-excavate. Trust and goodness are essential considerations in judging truth. We look for evidence pertaining to these in the report. Photographs may be particularly effective instruments of persuasion, hence the term *photowork* also implies the work 'good' photos do for the author.

If, against this constructivist position, objectivity is conceived to be an abstract quality or principal held by reality, how does it argue for itself, how does it display its strength? It cannot, just as a photograph cannot supply for itself a past and a future, a temporality that makes it sensible. People are needed, and their projects. So gravity, as an objective principle held to describe reality, does not appear to all and everyone on its own. Gravity needed Newton. Microbes needed the likes of Pasteur (Latour 1988). And photowork needs people and discourse.

### TEXT AND THE PHOTOGRAPH

My argument is that photographs are powerful rhetorical instruments in establishing objectivity: they work as images, and as products of a technique which apparently captures an objective correlative. This has led me to introduce discourse as a concept vital for understanding the social and historical production of knowledge. Some critiques in archaeology have recently foregrounded truth as an effect of discourse (see Hodder 1989, Tilley 1990b), *a posteriori*, social, and historical. But attention has remained largely with discourse as *text* and *word*: writing archaeology. We should look as well to *imagery* and its particular discursive character.

### PHOTOWORK AND THE WORKING OF ILLUSTRATIVE DISCOURSE

To make sense, a photograph needs to have established connections and contexts which work within and beyond the image. This may occur in its subject matter and composition. The viewer may recognize particular social relationships in the photo; the shot may have been set up to make a particular point. *Mise-en-scène* refers to what goes on in front of the camera in cinematography and the term may also be used here. An excavation is cleaned up and prepared for photography, with diggers removed and key features highlighted, ranging pole sited strategically.

The photograph may be given a caption, and is positioned in relation to other images and text (Hillis Miller 1992). The concepts of collage and montage are important (Berger, et al. 1972). Collage is an extension of an artist's palette or a writer's vocabulary, prose, and poetic art, to include actual pieces of reality or fragments of what the artist or writer is referring to. It is direct quotation, literal repetition, or citation

of something taken out of its context and placed in another. The photograph, seen as objective correlative, may especially lend itself to collage and quotation. Montage is the cutting and reassembling of fragments of meanings, images, things, quotations, and borrowings, to create new juxtapositions. When recognized for what it is, collage simply questions the notion of representation as finding some *correspondence* with an exterior reality. 'Reality' is instead brought into the picture; collage may be tangible representation without attempting some sort of an illusion. It represents in terms of change – the shift of borrowings from one context to another, from 'reality' to 'representation', and from representation to representation. Indeed the distinction is suspended; reality is actually put in quotation marks, if photography, for example, is recognized as *photowork*.

The aim, whether it is recognized or not, is to construct something new out of old, to connect things that may appear dissimilar in order to achieve new insights and understanding. This emergence of new meaning depends on the perception of instability, of retaining energies of interruption and disruption – the quotation interrupts the smooth surface or text; it is distracting. The interruption of illusion and distraction by collage sets off allusions through the juxtaposed, montaged elements. So the new understanding comes through 'contaminated' representation rather than pure reference to the depicted subject matter. The quotations are cut out of context to create new meanings.

Disruption, cutting, and juxtaposition make of discourse an *unstable* set of links between images, words and concepts, and the material world, between signifiers and signifieds. Things and words and images can always be disengaged from their meanings and inlayed into new combinations. This disassembly *should* be constant. The discovery of *new* insight depends on a nervous novelty which avoids the settling of montages into accepted equations and identities. A certain degree of shock and jolting are necessary, moving on when the juxtaposition becomes too homely. In doing this collage maintains an ambiguity of presence and absence: the presence of fragments of absent items is referenced.

Montage and collage may occur along both syntactic and paradigmatic axes. Discourse may use syntactic sequence and narrative of images and words; paradigmatic connection is a harmony of association within a photo and its reading.<sup>16</sup>

So there is much more to using photographs as a means of quoting the past than is commonly realized. Creative photowork should be aware of the rhetorical potential and subtlety of collage and montage. There is also irony in that instead of bringing in an objective witness, archaeological photographs actually attest to the working of discourse, the practice of heterogeneous association.

## FURTHER WORKINGS OF A PHOTOGRAPH

A photograph has a subject matter and pictorial structure which we may read according to discourse – interpreting sense and reference. However, in its attestation to the infinite detail of materiality, in its unwitting record, a photograph sometimes has its transparency clouded. A detail may intrude and indicate that the photograph is in fact only an item of



**Figure 5.4** The Rocher Bono, Brittany. This photograph is so much more than an illustration of a megalithic chambered tomb of the type *allée coucée*. The photograph captures the ineffable, translating experiences of dark stone interiors. Photographs also, of course, have different relationships to the creator and the viewer and themselves change with time. Here what began as a snapshot and evokes memories for me of a field trip, can also be interpreted as a genre image of the type 'romantic past', and, should the monument change or be destroyed, this photograph could also become an historical document itself.

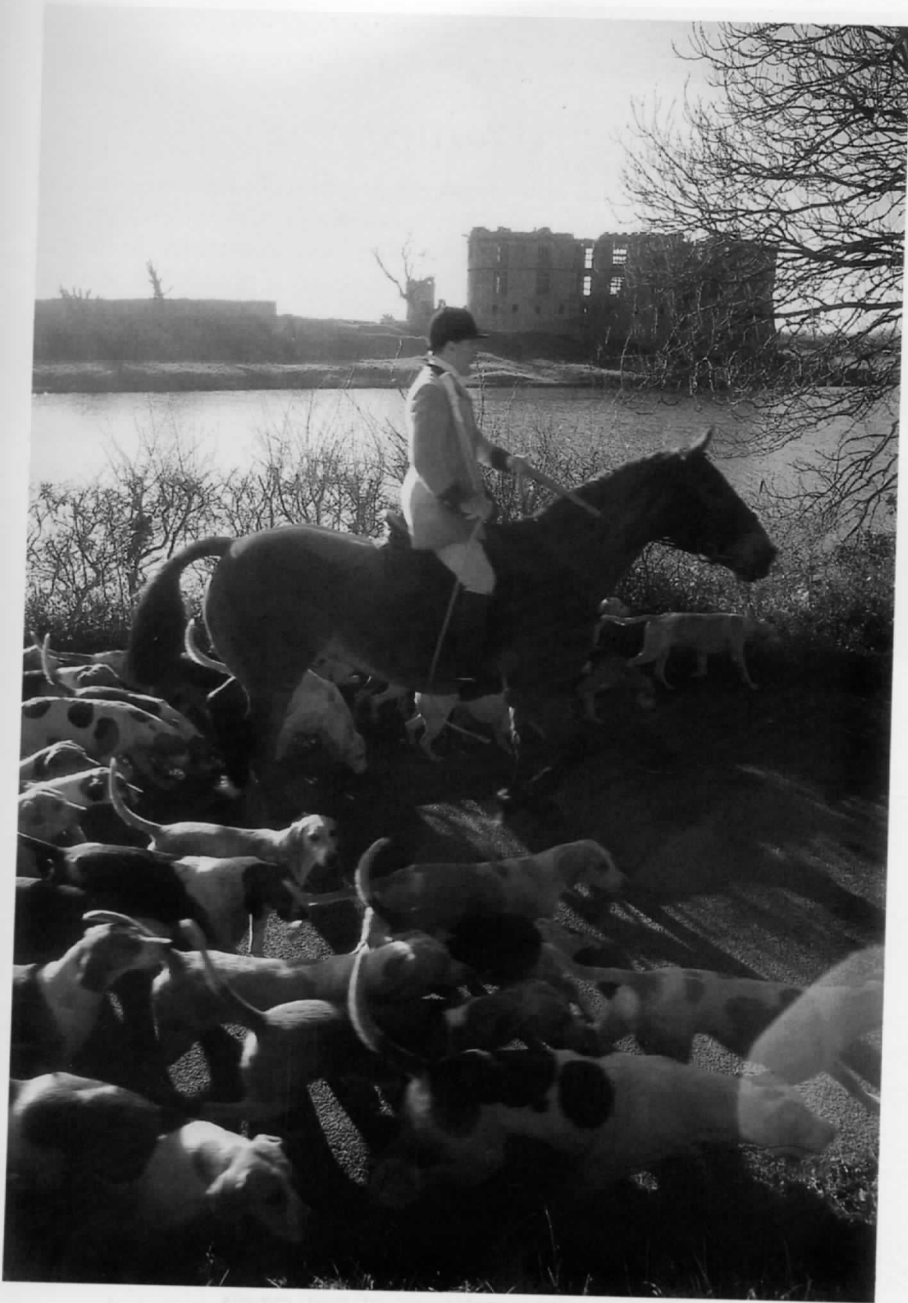
discourse. Perhaps we know something of someone or something in a photograph which subverts its apparent message; perhaps an anomaly disturbs the categorization and genre. The photographed world is rarely fully controlled. The heterogeneity of photowork, with all its possible interconnections, may break the predictability of the *mise-en-scène*. Indeed this is part of the working of association and discourse: resistances to the order imposed upon the world are endemic.<sup>17</sup>

### TEMPORALITY OF THE PHOTOGRAPH

I have had cause to mention several times the temporality of the photograph as a product of the camera, a clock for making images. For archaeology I think it is something of an instructive irony that photography, the medium which relates most to authenticity in conventional thought, involves the 'truest' image of the past showing its present state of decay. The true picture of the past thus appears ephemeral – the captured moment of the photograph. (I repeat that photographic naturalism is not necessarily realistic, and our models of realism are historical.) There is irony also in that reconstructions of the archaeological past 'as it was' are almost always aiming at visual verisimilitude – a moment arrested before the viewer, or a reconstruction which is a naturalistic *mise-en-scène* ready to be photographed. Consider the number of museum



**Figure 5.5** Timeless landscapes? Clennel Street, Northumberland, England. A medieval track c. 1990. Timeless as convoluted, folded time.



**Figure 5.6** The actuality of the past: Carew Castle, Pembrokeshire, Wales, October 1993. The Feudal Lord riding the land in the hunt was a constituting ideological structure of the Middle Ages. This technology of power, centred upon lifestyle, is transformed here into the Carew hunt.

displays which go to considerable expense and use every technological device to do just this (Shanks and Tilley 1992, Chapter 4).

### ACTUALITY

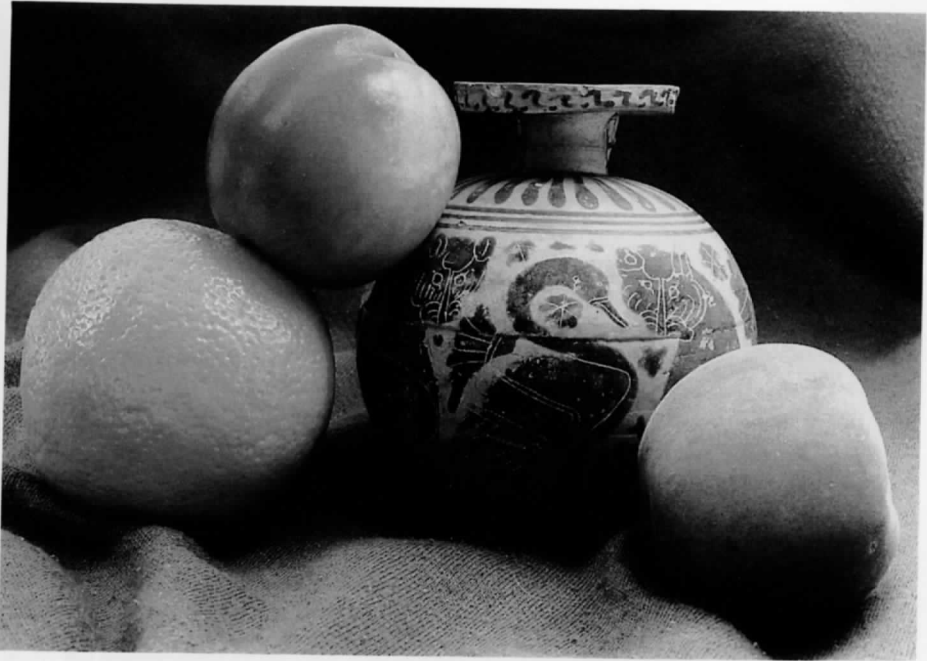
If we consider some issues on the subject of time, photography, and the material artifact, we can begin with three categories of photographic time in archaeology: the moment arrested, date, and continuity from past through present. But consider what I have outlined as photowork and add *actuality* – a return of what is no longer the same. Actuality is the non-arbitrary conjunction of presents: the past's present, the instant of photography, and the time of reading. I contend that actuality so defined is a key concept in understanding photography and the discourse of archaeology.<sup>18</sup>

Compare photowork with memory. Memories live on with us, as do photographs, and as we reinterpret memories and incorporate them into new stories of our life, so photographs change: what was once a holiday shot becomes social document or historical source. Memories sometimes seem to escape time in that they stay with us. We may feel too that photographs sometimes witness that which escapes time, the timeless. The timeless here is not an unbounded infinity, but is convoluted or folded time, a folding or recycling of past moments. As conjuncture between the temporality of person remembering and past event, memory crosses time, just as the photo before you now witnesses a lost instant in time past.

Memory is in fact the *act* of memorizing. The past as memory does not just exist as it was. The past has to be recalled: memory is the act of recalling from the viewpoint of a subsequent time. So too a photograph is meaningless unless lent a past and a future. The captured moment of the photo needs a past and a present to make sense. This is done by the contextualization that takes place in interpretation: we read signs within the photograph (its *mise-en-scène*) and add to these connections made through montage and juxtaposition with text. This too is photowork.

We may add also the idea of rapturous temporality: memory holds onto the past, just as a photograph grabs the moment, potentially missed, now lost. In memory time stands still: there are no clocks (Bauman 1993:52). In the world remembered there is no bottom line, no horizon, no past-as-it-was, no ordained chronology. There are instead only enfoldings. Photowork shares also this art and science of assemblage, while the photograph snatches and attempts to hold onto the connections. Naturalism may require a chronicle: dates and linear chronology. A realistic memory (or indeed history) may need flashbacks, long-term backgrounds, reflexive reinterpretations of past events.

To point out the affinities between memory and photography, and to emphasize the temporality of actuality, is not a call for 'relevance', to recognize simply that archaeology and its photography happens in the present, that this matters above all else and so we should ensure the relevance of



**Figure 5.7** Surrealist still-life: 'Nature morte'.

archaeology to present interests. Such an argument simply corresponds (as opposite or negation) to an historicism which denies the present in a self-effacing posture, emphasizing simply what happened in the past as the measure of all archaeology. Instead we should retain the ambiguity and tension which is actuality; actuality is the *primacy*, but not the *superiority*, of the present over the past. This is simply to acknowledge that the soluble present is the medium of knowing the past.<sup>19</sup>

Archaeology has a multiple temporality involving the past, its decay, and the encounter with remains in our future-orientated projects. Photography, with an analogous multiple temporality, thus seems appropriate for the archaeological. Photowork presents us with inventories of mortality, quoting fragments, creating juxtapositions potentially as strange as a fibula, quernstone and ox scapula which may be found together in a typical archaeological report. Photographs turn the now into the past, or more grandly, into history, depending upon the rhetoric. Reality is turned antique, and documented triviality is made memorable.

### MELANCHOLY AND RUIN

The last points, about photographs turning the now into the past, bearing witness to the abrasions of time, bring me to melancholy and the romance





**Figure 5.9** Moments of ruin, formation processes: old buildings in a forestry plantation in west Wales.

of ruin. The point is the fundamental importance to archaeology of formation processes, yet it is very little theorized as *ruination* (Shanks forthcoming, Shanks 1992). Following this line of argument about the temporality of the past, Michael Schiffer's standard work on formation processes (Schiffer 1987) appears as a sanitization of ruination and an attempt to bring to it an order of formulaic association between an objective past and a separate interpreting present.

### NEW TECHNOLOGIES

I have already mentioned the technology dimension: clocks, cameras, light, chemicals, and now digital information. Benjamin (1970) argued that the mechanical reproduction of works of art heralded profound changes in people's relationship with cultural production. The arrival of

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**Figure 5.8** Archaeological temporalities: a room in Cambridge, England, 28 July 1991, 15.17.48pm. What date or time is this room? There is no one answer, but possible answers are date of original architectural fabric; dates of structural modifications; dates of manufacture of artifacts; dates of their styles; moment of capture on photographic film? (see Olivier 1994).

sophisticated and cheap means of electronic reproduction and storage, of image scanning, of digital camera input into image manipulation computer software, has transformed the darkroom into a computer. With software such as Adobe Systems' *Photoshop*, digitally encoded images can be manipulated instantly at will, then outputted to video screen or printer, the best of which provide photographic quality or higher. The photographic image has lost its link, via light wave and chemical process, with reality. The integrity of the photographic image is questionable, because photographs are now so evidently 'made'. Any image can be sampled, manipulated, joined with another and the result will still be naturalistic, as this is defined above.

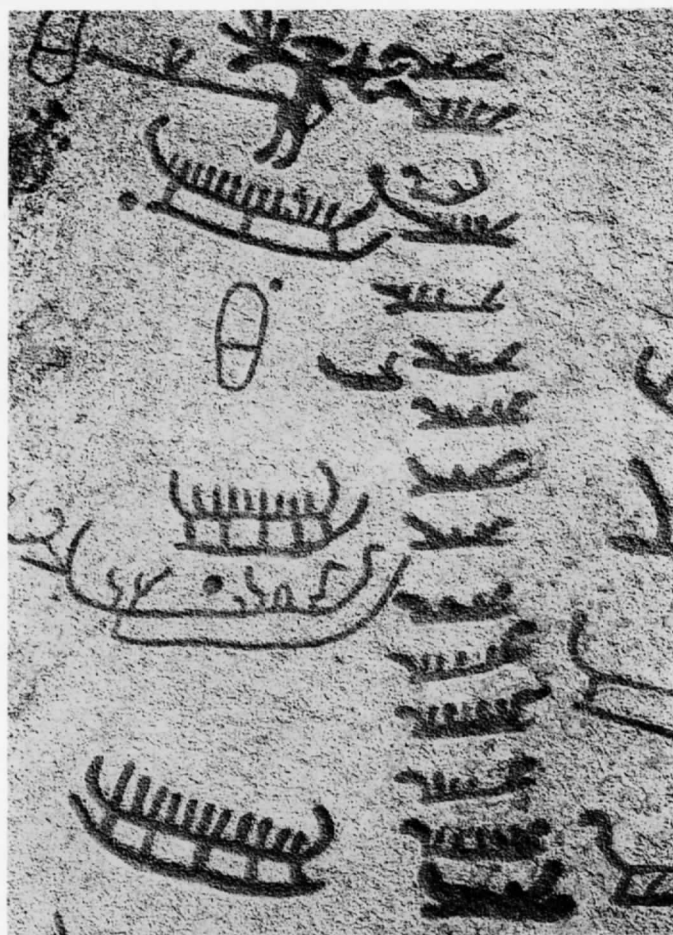
Ideas of the *auteur*, of the body of work and 'consistency' of style, are being further undermined as radical questions of authenticity, which are endemic to the new media, are raised: photographic naturalism need not start with any particular reality at all, but can work with sampled bits and pieces from any source, processed into naturalism upon a desktop. As photography is realized as photowork, the oppositions of fake and authentic, original and reproduction (upon which the conventional fine arts still rely), are challenged, with emphasis placed less on the product than on the *process* of making. And this, as I have sketched above, may be seen as heterogeneous association, the working of discourse.

The new digital technologies hold great potential because they are particularly suited to collage and montage, which are central, I have argued, to photowork. Accepting the distinction between naturalism and realism, accepting that photographs have never been innocent analogues of reality, means that we should embrace the new technologies as a major addition to discursive technique. And what is to stop a digital photowork being more *realistic* than a straight, *naturalistic* photograph of the same subject, if it 'works' better, establishing richer syntactic and paradigmatic networks?

### HYPERMEDIA

But the imperative remains, in spite of any emphasis on photowork and discourses of archaeology, to record and make inventories. Here too new storage technologies, recording and retrieval systems are already having effect. Multimedia databases are now cheap and efficient. Videos, still

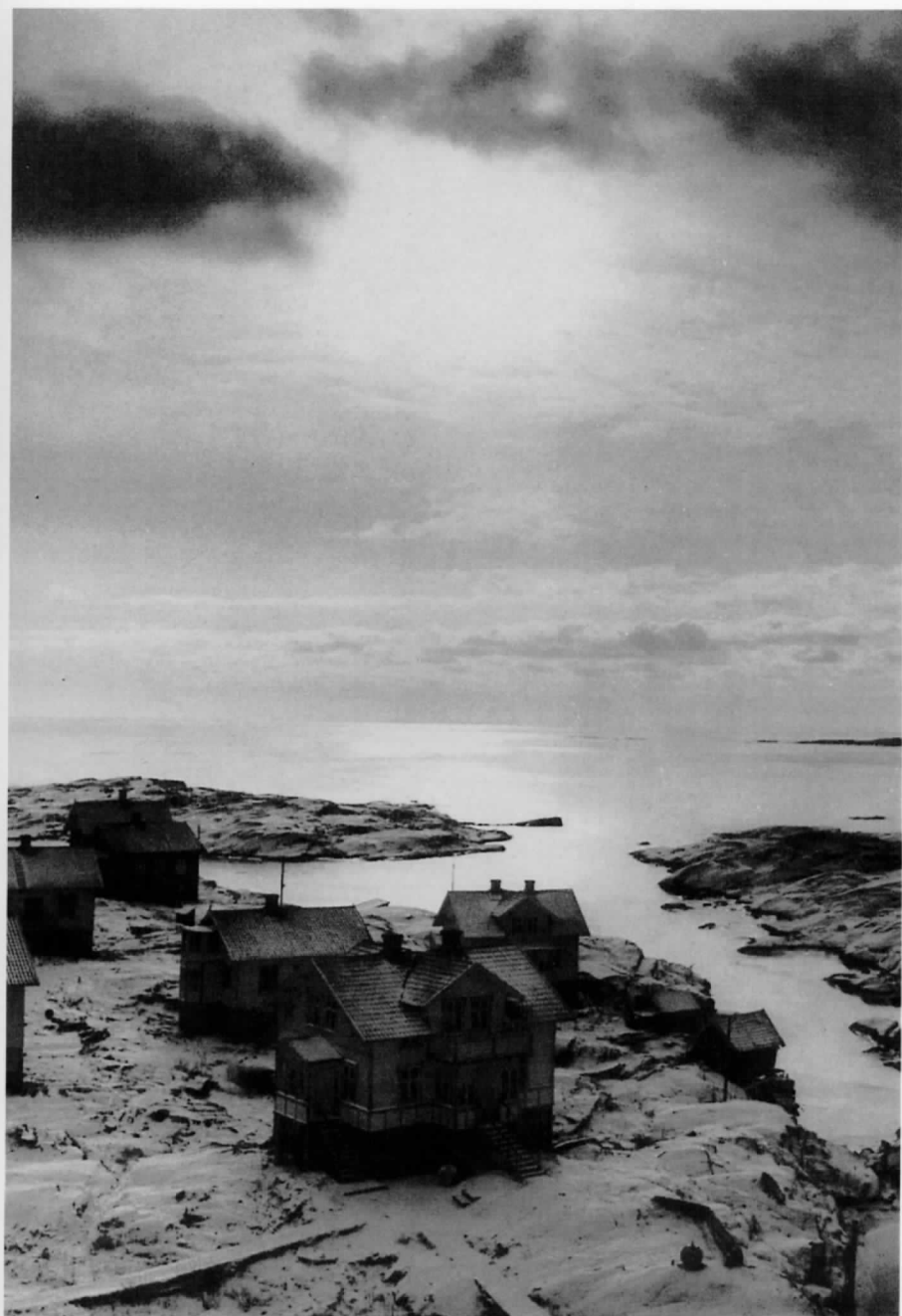
**Figure 5.10** Archaeologies of the ineffable: Sweden, rock carvings and possible lifeworlds. A current research project at the University of Wales, Lampeter, is to combine imagery, soundscapes, reconstructed landscapes, anthropological archaeology, excavation results, and iconographic interpretation in explorations of Bronze Age Bohuslän. Visualization is used as a research tool, and the following images give some idea of the fields being explored. Two of the 'photographs' are computer generated.















**Figure 5.11** Ethnographies and *mise-en-scène*. Excavations on Egine, Greece, 1978 and at the Black Gate, Newcastle-upon-Tyne, England, 1981. The process of mounting projects and reconstructing pasts is archaeology. The standard excavation photograph of site cleaned of debris and people in order to display important features and surveyors' measure, the past as structured in the *mise-en-scène*, omits what makes the past possible now. And stories of forensic work fascinate: a meeting of contemporary interest with the traces of lost lifeworlds. A task is the construction of archaeological ethnographies.

images, text, sound, and graphics can all be combined within the same coordinated recording system. This has been much taken up in archaeology already as an extension of conventional methods.

The boundaries between text, number, sound, images, and graphics are breaking down: they can be combined in digital montage and collage. Pathways through a multimedia database need not be linear: multimedia may be *hypermedia*, where the user defines their own route through the stored information. The potential for creating rich and innovative networks of information and experience relevant to the interests of the user is tremendous. Illustration (the juxtaposition of image and word) is taking on new dimensions.<sup>20</sup>

## EXPERIENCE AND THE PHOTOGRAPH

Documenting archaeology has much to do with inventory and databasing, but need not, and arguably should not, end with conventional categories of data. I have made the case elsewhere for ethnographies of archaeological fieldwork that document the life of archaeological projects, just as an ethnographer documents communities (Shanks 1992). Such ethnography would build on the realization that archaeology is not just about the past, but is as much about the people, ideas, and networks which allow the past to be recovered – experience and discourse. There are enormous traditions of documentary photography upon which to draw, and which have hardly been tapped in archaeology.<sup>21</sup> Let it be called a sociology of the discipline if necessary, but let it also be remembered that it is the detective work and experience of doing archaeology which interests so many people, as much as the things found.<sup>22</sup>

### VARIETIES OF EXPERIENCE: TOWARDS EMBODIMENT

A range of experiences may be involved in photographs. Photowork may involve estrangement, with the photograph standing for the absence of what is photographed. It may involve making an inventory of inanimate possessions, a fetishism of sorts. An impulse may be to save and celebrate the past, collecting souvenirs. We should be wary here of an ideology that detaches objects from the social relations which give them meaning and bring them to life. The actuality of the archaeological past can easily be denied when the lived experience of the remains of the past is processed according to received categories, genre visions, or with the past locked into its own time and detached from present interest. Photowork may attempt to invoke magical experiences of the past in a re-enchantment of lost times that denies this inventory of meaningless souvenirs. In the texture of their detail photographs provide a partially involuntary record; there is always in every photograph some escape from intentionality and processed experience. That the materiality of the world is ineffable is presented. Finally, temporality, often a melancholy of the past in the present, is invoked throughout photowork.

The fascination of photowork is that it attests to so much sensory experience. Criticism may be made of ocularcentrism (e.g. Taylor 1994, section 3, and Jay 1994), that we are too focused upon sight and have to have other senses and sentiments educated, but realizing the ineffable richness of the empirical is a valuable antidote to one-dimensional or deterministic explanations.

### VISUALIZATION AS A RESEARCH TOOL AND ARCHAEOLOGIES OF THE INEFFABLE

The visual is not merely illustrative. Aerial photographs are primary source material for archaeologists. Photographs and drawings of artifacts

in a catalogue are there to provide information which cannot be encapsulated in verbal description. Some sociology of science has recognized the vital importance of imagery in scientific research (Lynch and Woolgar 1990). Mention may be made here of descriptive statistics displayed graphically, and of the great potential for summarizing and exploring spatial information offered by Geographical Information Systems.

But consider also the argument that any adequate account of settlement and environment, artifacts, architectures, and space, must consider how these are constituted in social practice, with practice considered multi-dimensionally as embodied, that is rooted in people's senses and sensibility as well as reasoning.<sup>23</sup> Here is to be stressed the importance of the concept of *lifeworld* – environments as lived and constituted in terms of five senses, not just a principle of discursive rationality usually taken to be the basis of understanding.<sup>24</sup>

As a means of exploring such embodiment, the sensory richness of photographs can be a research tool. The challenge for phenomenological archaeologies committed to reconstructing past lifeworlds is to explore sensory as well as conceptual worlds; to be archaeologies of the ineffable, attending to all senses. Photowork can be a means to this end, notwithstanding the valid criticism of ocularcentrism. Increasingly sophisticated and accessible computer rendering software now means that photo-realistic images can be produced of a designed object or environment.

### THE POTENTIAL OF PHOTOGRAPHY

The main direction of this chapter has been towards realizing the character of photowork, and away from complacent assumptions of photographic verisimilitude. We would do well to be mindful of what photowork is and is not. Photographs do not provide understanding and are far from innocent analogues. They are made. The key concept here is discourse, a critical attention to the working of which is an essential part of any self-reflective discipline. I suggest that archaeologists should take up the obligation to attend to technique and method, but in a way which recognizes humanistic *possibility*, rather than closing down options with formal rules and procedures. This possibility is inherent in the nervousness and instability of quotation and collage I mentioned above.

The task must surely be to work *with* the medium, and I suggest four main areas for focus.

- The temporality of photowork and its relations with the temporality of archaeological discourse and its objects: I have discussed the analogies between photography and the collections of memory and emphasized the concept of actuality.

- Quotation: here I propose thinking laterally about montage and collage in archaeological texts, devices in the contextualizing practice that is interpretation. The invitation is to experiment with associations that attest to the actuality of the past.
- Embodiment and archaeologies of the ineffable: photographs can introduce the heterogeneous and ineffable into discourse, that richness and detail in every photograph which lies outside the categories and schemes of discourse. I use the term embodiment to introduce bodily sensitivity as a means of suspending our conventional categorizations and a means of achieving a more textured understanding of past social realities. Photographs can help us attend to materiality by saying 'look at what has been omitted', rather than 'look, believe this text'. An imperative here is to keep open things which are passed over in an instant.
- Ethnographies of the discipline: photowork can be part of explaining and documenting archaeological projects.

### A RADICAL IMAGING/WRITING

Photowork produced under these headings undoubtedly undermines the present where it feels most secure, in the allegedly once-and-for-all-time recorded past. I extend an invitation to conceive of the dialectical text and image as tangential to the past – a vector (from the present) touching the past at the point of sense and then moving off to explore its own course,<sup>25</sup> partaking of actuality, the temporality of memory. Such texts are part of contextual, interpretive method, lending contexts of all sorts to images, words, and artifacts. Good photography can and does already contribute to such a humanistic discipline which is dialectical because it denies the dualisms of past and present, objective and subjective, real and fictive, with all their pernicious variations. We may work instead upon the continuities which run through our encounters with the remains of the dead.

### NOTES

1. For critique and archaeology and for bibliography see Leone and Preucel 1992, Leone and Shackel 1987, Shanks and Tilley 1987, Shanks and Tilley 1992.
2. Hodder et al. 1994. For a wider view of interpretive humanities see Denzin and Lincoln 1994.
3. See John Berger's fascinating discussion of the snapshot and temporality (Berger and Mohr 1982) and its support for elements of my argument later in this chapter.
4. The literature is quite considerable. For introductions and bibliographies see Bijker, Hughes, and Pinch 1987, Bijker and Law 1992, Mackenzie and Wajcman 1985.

5. The journal *Techniques et Culture* is a good place to begin exploring French approaches to the archaeology and anthropology of techniques. See also Anon 1990, Lemonnier 1993.
6. Standard works on the history of photography which are useful here include Freund 1980, Jeffery 1981, Lemangny and Rouille 1983, Newhall 1982, Tagg 1988a.
7. See for example, the work of Lewis Hine, Paul Strand, and photographers of the Farm Security Administration of the United States in the 1930s (Rothstein 1986). The history of photography is full of examples of critical photography, as defined in the introduction to this chapter.
8. Berger and Mohr 1982:117–22. For connections and *rhizomatics* see Campbell 1994, Shanks 1992.
9. See the discussion of this point by Sontag 1978:145. I owe a great deal to this insightful book *On Photography*.
10. On perspectivalism as a scopic regime see Jay 1988.
11. Tagg 1988b:99–100. On art photography, modernism, and photography see the work of David Hockney (Hockney 1984, Joyce 1988).
12. On gender, power and the 'gaze' see also Lutz and Collins 1994 and Mulvey 1989.
13. Many issues are raised, for example in the work of Baudrillard (Baudrillard 1988 as an introduction). The debates are too wide-ranging to cite here, but in the context of art and photowork consider Foster 1985.
14. Again there is too much to cite; for introductions to the issues see Holtorf forthcoming, Latour 1987, Lawson and Appignanesi 1989, Schwandt 1994, Shanks 1995.
15. On the rhetoric of archaeological discourse see Shanks 1994.
16. See Berger and Mohr 1982 on such heterogeneous association. Consider also photomontage (Ades 1986).
17. Barthes (1982) introduced the terms *studium* and *punctum* to refer to this effect: studium as the subject matter and structure learned through discourse, punctum as that which punctures the apparently homogeneous surface.
18. Actuality is a concept to be found prominently in the work of Walter Benjamin (Eagleton 1981; Wohlfrath 1993). On such temporality and archaeology see Shanks 1992; Shanks and Tilley 1987, Chapter 5; for related arguments about archaeology and temporality see Lowenthal 1985, Olivier 1994, Schnapp 1993.
19. Michel Foucault answered the question of why he wanted to write the history of the birth of the prison (Foucault 1979:31): 'simply because I am interested in the past? No, if one means by that writing a history of the past in terms of the present. Yes, if one means writing the history of the present.'
20. Much of the literature is ephemeral; a recent book is Cotton and Oliver 1993.
21. See above, note 7. For a critical and subjective documentary consider Braden 1983.
22. Visual anthropology: this mention of ethnographies of the discipline of archaeology brings me to a vital reminder. Interpretive anthropology is associated with critical introspection of the practices of ethnography, the encounter with the anthropological 'other', and its representation. In the

debates of visual anthropology around ethnographic film, for example, can be found insights complementing those made in this chapter, about issues of authority in the relationship between anthropologist and object of interest, viewpoint and perspective in representation, as well as linearity, narrative, and time. The characters of observation, scopic, and haptic fields have been thoroughly covered. And the subject of collage and montage in film, representation, and ethnographic collecting has not gone unnoticed, particularly connections with surrealism. See Clifford 1988, Clifford and Marcus 1986, Edwards 1992, Marcus and Fisher 1986, Taylor 1994.

23. This is one of the main arguments of postprocessual or interpretive social archaeologies.
24. Although located in the reproduced image, consider the photo essays of John Berger and others (Berger et al. 1972, Berger and Mohr 1982). See also Stoller 1989.
25. Consider Paul Ricoeur's analogous argument about sense and reference in texts. An introduction for archaeologists is Moore 1990.

## REFERENCES

- Anon 1990. 'Technology in the humanities: a commentary.' *Archaeological Review from Cambridge* 9(1).
- Anon 1991. 'Digital Dialogues.' *Ten-8* 2:2.
- Ades, D. 1986. *Photomontage*. Second edition. London: Thames and Hudson.
- Barthes, R. 1977. 'Rhetoric of the image.' In *Image-Music-Text*. London: Fontana.
- Barthes, R. 1982. *Camera Lucida*. Translated by R. Howard. London: Jonathan Cape.
- Baudrillard, J. 1988. *Selected Writings*. Translated by M. Poster and J. Mourrain and others. Cambridge: Blackwell Polity.
- Bauman, Z. 1993. 'Walter Benjamin the intellectual.' *New Formations* 20:47-57.
- Benjamin, W. 1970. 'The work of art in the age of mechanical reproduction.' In *Illuminations*. London: Jonathan Cape.
- Berger, J., Blomberg, S., Fox, C., Dibb, M., and Hollis, R. 1972. *Ways of Seeing*. London: BBC and Harmondsworth: Penguin.
- Berger, J. and Mohr, J. 1982. *Another Way of Telling*. London: Writers and Readers.
- Bijker, W., Hughes, T., and Pinch, T. (eds) 1987. *The Social Construction of Technological Systems*. Cambridge, MA: MIT Press.
- Bijker, W. and Law, J. (eds) 1992. *Shaping Technology/Building Society*. Cambridge, MA: MIT Press.
- Braden, S. 1983. *Committing Photography*. London: Pluto Press.
- Burgin, V. 1982. 'Photography, phantasy, function.' In *Thinking Photography*. London: Macmillan.
- Campbell, L. 1994. 'Traces of archaeology.' In Ian Mackenzie (ed.), *Archaeological Theory: Process or Posture?* Avebury: Aldershot and Brookfield.
- Clifford, J. 1988. *The Predicament of Culture: Twentieth Century Ethnography, Literature and Art*. Cambridge, MA: Harvard University Press.
- Clifford, J. and Marcus, G. (eds) 1986. *Writing Culture: the Poetics and Politics of Ethnography*. Berkeley, CA: University of California Press.

- Cotton, B. and Oliver, R. 1993. *Understanding Hypermedia*. London: Phaidon.
- Denzin, N.K. and Lincoln, Y.S. (eds) 1994. *Handbook of Qualitative Research*. London: Sage.
- Dorrell, P. 1989. *Photography in Archaeology and in Conservation*. Cambridge: Cambridge University Press.
- Eagleton, T. 1981. *Walter Benjamin: Or Towards a Revolutionary Criticism*. London: Verso.
- Edwards, E. (ed.) 1992. *Anthropology and Photography 1860–1920*. New Haven and London: Yale University Press and the Royal Anthropological Institute.
- Foster, H. 1985. *Recodings: Art, Spectacle, Cultural Politics*. Seattle: Bay Press.
- Foucault, M. 1979. *Discipline and Punish: the Birth of the Prison*. Translated by Alan Sheridan. New York: Vintage.
- Freund, G. 1980. *Photography and Society*. London: Fraser.
- Fyfe, G. and Law, J. (eds) 1988. *Picturing Power: Visual Depictions and Social Relations*. London: Routledge.
- Gilpin, W. 1782. *Observations on the River Wye and Several Parts of South Wales etc. Relative Chiefly to Picturesque Beauty Made in the Summer of the Year 1770*. London.
- Gilpin, W. 1792. *Three Essays: On Picturesque Travel; and On Sketching Landscape; To Which is Added a Poem, On Landscape Painting*. London.
- Haug, W.F. 1986. *Commodity Aesthetics: Ideology and Culture*. New York: International General.
- Hillis Miller, J. 1992. *Illustration*. Cambridge, MA: Harvard University Press.
- Hockney, D. 1984. *Camera works*. London: Thames and Hudson.
- Hodder, I. 1989. 'Writing site reports in context.' *Antiquity* 62: 268–74.
- Hodder, I., Shanks, M., Alexandri, A., Buchli, V., Carman, J., Last, J., and Lucas, G. (eds) 1994. *Interpreting Archaeology: Finding Meaning in the Past*. London: Routledge.
- Holtorf, C. forthcoming. 'Oral prehistory: radical constructivism in archaeology.' *Current Anthropology*.
- Jay, M. 1988. 'Scopic regimes of modernity.' In H. Foster (ed.), *Vision and Visuality*. Seattle, WA: Bay Press.
- Jay, M. 1994. 'The disenchantment of the eye: surrealism and the crisis of ocularcentrism.' In L. Taylor (ed.), *Visualizing Theory: Selected Essays from Visual Anthropology Review 1990–1994*. London: Routledge.
- Jeffery, I. 1981. *Photography: A Concise History*. London: Thames and Hudson.
- Joyce, P. 1988. *Hockney on Photography*. London: Jonathan Cape.
- Latour, B. 1987. *Science In Action: How to Follow Scientists and Engineers Through Society*. Milton Keynes: Open University Press.
- Latour, B. 1988. *The Pasteurization of France*. Translated by A. Sheridan and J. Law. Cambridge, MA: Harvard University Press.
- Latour, B. 1990. 'Drawing things together.' In S. Woolgar and M. Lynch (eds), *Representation in Scientific Practice*. Cambridge, MA: MIT Press.
- Lawson, H. and Appignanesi, L. (eds) 1989. *Dismantling Truth: Reality in the Postmodern World*. New York: St Martin's Press.
- Leitch, V. 1983. *Deconstructive Criticism*. London: Hutchinson.
- Lemangny, J.-C. and Rouille, A. (eds) 1983. *A History of Photography*. Cambridge: Cambridge University Press.
- Lemonnier, P. (ed.) 1993. *Technological Choices*. London: Routledge.

- Leone, M. and Preucel, R. 1992. 'Archaeology in a democratic society: a critical theory perspective.' In L. Wandsneider (ed.), *Quandries and Quests: Visions of Archeology's Future*. Carbondale, IL: University of Southern Illinois Press.
- Leone, M. and Shackel, P. 1987. 'Toward a critical archaeology.' *Current Anthropology* 28:283-302.
- Lowenthal, D. 1985. *The Past is a Foreign Country*. Cambridge: Cambridge University Press.
- Lutz, C. and Collins, J. 1994. 'The photograph as an intersection of gazes: the example of *National Geographic*.' In L. Taylor (ed.), *Visualizing Theory: Selected Essays from Visual Anthropology Review 1990-1994*. London: Routledge.
- Lynch, M. and Woolgar, S. (eds) 1990. *Representation in Scientific Practice*. Cambridge, MA: MIT Press.
- Mackenzie, D. and Wajcman, J. (eds) 1985. *The Social Shaping of Technology*. Milton Keynes: Open University Press.
- Marcus, G.E. and Fisher, M. (eds) 1986. *Anthropology as Culture Critique: An Experimental Moment in the Human Sciences*. Chicago: University of Chicago Press.
- Moore, H. 1990. 'Paul Ricoeur: action, meaning and text.' In C. Tilley (ed.), *Reading Material Culture: Structuralism, Hermeneutics and Poststructuralism*. Oxford: Blackwell.
- Mulvey, L. 1989. *Visual and Other Pleasures*. London: Macmillan.
- Newhall, B. 1982. *The History of Photography: From 1839 to the present*. London: Secker and Warburg.
- Olivier, L. 1994. 'Archaeology as mediation with the past.' Paper delivered at the *European Association of Archaeologists' Annual Meeting*, Ljubljana, Slovenia.
- Rosler, M. 1991. 'Image simulations, computer manipulations, some considerations.' *Ten-8* 2: 52-63.
- Rothstein, A. 1986. *Documentary Photography*. London: Focal Press.
- Schiffer, M. 1987. *Formation Processes of the Archaeological Record*. Albuquerque, NM: University of New Mexico Press.
- Schnapp, A. 1993. *La Conquête du Passé: aux Origines de l'Archéologie*. Paris: Carré.
- Schwandt, T. 1994. 'Constructivist, interpretivist approaches to human inquiry.' In N.K. Denzin and Y.S. Lincoln (eds), *Handbook of Qualitative Research*. London: Sage.
- Shanks, M. 1992. *Experiencing the Past: On the Character of Archaeology*. London: Routledge.
- Shanks, M. 1994. 'The archaeological imagination: creativity, rhetoric and archaeological futures.' In M. Kuna and N. Venclova (eds), *Whither Archaeology: Archaeology in the End of the Millennium: Papers Dedicated to Evzen Neustupny*. Prague: Institute of Archaeology.
- Shanks, M. 1995. 'The forms of history.' In I. Hodder, M. Shanks, A. Alexandri, V. Buchli, J. Carman, J. Last, and G. Lucas (eds), *Interpreting Archaeology: Finding Meaning in the Past*. London: Routledge.
- Shanks, M. forthcoming. 'Archaeological experiences and a critical romanticism.' In A. Siriiainen (ed.), *The Archaeologist and His/Her Reality: Proceedings of the 4th Nordic TAG Conference*. Helsinki: Institute of Archaeology.
- Shanks, M. and Tilley, C. 1987. *Social Theory and Archaeology*. Cambridge: Blackwell Polity.

- Shanks, M. and Tilley, C. 1992. *ReConstructing Archaeology: Theory and Practice*. Second edition. London: Routledge.
- Sontag, S. 1978. *On Photography*. London: Allen Lane.
- Stoller, P. 1989. *The Taste of Ethnographic Things: the Senses in Anthropology*. Philadelphia, PA: University of Pennsylvania Press.
- Tagg, J. 1988a. *The Burden of Representation*. London: Macmillan.
- Tagg, J. 1988b. 'A means of surveillance: the photograph as evidence in law.' In Tagg 1988a.
- Taylor, L. (ed.) 1994. *Visualizing Theory: Selected Essays from Visual Anthropology Review 1990-1994*. London: Routledge.
- Tilley, C. 1989. 'Discourse and power: the genre of the Cambridge inaugural lecture.' In D. Miller, M. Rowlands, and C. Tilley (eds), *Domination and Resistance*. London: Unwin Hyman.
- Tilley, C. 1990a. 'Michel Foucault: towards an archaeology of archaeology.' In C. Tilley (ed.), *Reading Material Culture: Structuralism, Hermeneutics and Poststructuralism*. Oxford: Blackwell.
- Tilley, C. 1990b. 'On modernity and archaeological discourse.' In I. Bapty and T. Yates (eds) *Archaeology After Structuralism*. London: Routledge.
- Williamson, J. 1978. *Decoding Advertisements: Ideology and Meaning in Advertising*. London: Marion Boyars.
- Wohlfrath, I. 1993. 'The measure of the possible, the weight of the real and the heat of the moment: Benjamin's actuality today.' *New Formations* 20:1-20.