UNIVERSITY OF SOUTHAMPTON

FACULTY OF HUMANITIES, ARTS & SOCIAL SCIENCES

School of Humanities

Mediating Archaeology: The Relationship between Archaeology, the Media and the Public in Britain (1996-2002)

Karol Kulik

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ABSTRACT

FACULTY OF HUMANITIES, ARTS & SOCIAL SCIENCES
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MEDIATING ARCHAEOLOGY: THE RELATIONSHIP BETWEEN ARCHAEOLOGY, THE MEDIA AND THE PUBLIC IN BRITAIN (1996-2002)

By Karol Kulik

This thesis is an inter-disciplinary study of how archaeologists, the mass media and the public interrelate in the process of archaeological communication. The study takes a critical look at the relationship between these three communities in Britain, and at the representation of archaeology in British national newspapers and television documentaries, during a dynamic seven-year period (1996-2002).

Understanding the nature of this current relationship requires foundational work on the historical, contemporary and theoretical contexts that shape archaeological mediation. This thesis begins with an historical account of archaeological communication and a discussion of recent trends that together explain the current timeliness of the subject. It then goes on to explore the relationship from each partner's perspective in order to establish the defining features of the relationship and how the perceptions that they have of each other and the values they place on the relationship affect their approaches to archaeological communication. Through a critique of existing models of how communication works and an introduction of new models, an analysis is put forward that demonstrates how the public communication of archaeology functions as a process of mediation and how mediators play different roles in the process. The results of this analysis suggest that the sources and especially the means involved in releasing archaeological information have a significant impact on archaeology's public communication, a proposition that is then tested in detailed press and television case studies.

This thesis argues for, and makes a contribution to, a fundamental re-conceptualisation of the relationship between archaeologists, the media and the public and the establishing of more evidence-based research in the field.

CONTENTS

List of Illustrations		i
Declaration of Authorship		iv
Acknowledgements		v
Abbreviations Used		vi
Introduction	**Mediating Archaeology**	**1**
	Focus	2
	From 'Misrepresenting' to 'Mediating' Archaeology	5
	Definitions	9
	Aims	13
	Objectives	14
Chapter One	**Timely Subjects**	**22**
	Five Phases of Archaeological Communication	22
	Why Now?	34
	Why at All?	39
	Why So Little Research?	46
Chapter Two	**A Symbiotic Relationship? The Archaeologist's Perspective**	**56**
	Archaeologists and their Publics	56
	Archaeologists and Communication	68
	Reluctant Communicators	78
	Archaeologists and the Media	91
	'A Reticent Relationship Framed by Incipient Anxieties'	106
Chapter Three	**A Symbiotic Relationship? The Public Perspective**	**111**
	The Public, the Press and Television	112
	The Public and Archaeology	117
Chapter Four	**A Symbiotic Relationship? The Media Perspective**	**140**
	Current Trends	140
	The Mass Media as Mediators	154
	Media Perceptions about the Public, Scientists & Archaeologists	171
	Why the Media Is Fascinated by Archaeology	175
	Conclusion	195

Chapter Five **The Process of Archaeological Mediation** **202**
Maps of Communication; Maps of Scientific Communication 203
Maps of Archaeological Mediation 212

Chapter Six **Same Story, Different Spin I: Press Case Studies** **234**
Introducing the Case Studies 235
The Discoveries and their Announcement 239
Content Analysis of Coverage 243
Form Analysis of Coverage 266
Conclusion 292

Chapter Seven **Same Story, Different Spin II: TV Case Study** **298**
TV Documentary as Science/Archaeology Mediator 299
Television and Underwater Archaeology 310
The Case Study 315
Aftermath and Conclusion 363

Conclusion **374**

References Cited 379

List of Illustrations

Figures

1.1	Public Opinion Surveys about Public Attitudes to Archaeology	48
2.1	Archaeologists on the Public Image of Archaeologists	64
2.2	Media 'Horror Stories'; Alternative Interpretations	87
4.1	Archaeology Articles in *The Daily Telegraph* by Month (10/'94-9/'00)	151
4.2	Archaeological Documentaries on BBC2, C4, BBC1 and ITV ('98-'02)	152
4.3	The Nelkin Frame	160
4.4	Breakdown of the 78 Archaeology Programmes Aired in 1999	179
4.5	Breakdown of the 139 Archaeology Programmes Aired in 2000	181
4.6	Breakdown of the 172 Archaeology Programmes Aired in 2001	182
4.7	Breakdown of the 201 Archaeology Programmes Aired in 2002	184
4.8	Breakdown of the Geographic Areas Covered in 1999-2002	186
4.9	Breakdown of the Time Periods Covered in 1999-2002	188
4.10	Breakdown of the TV Formats Used in 1999-2002	190
4.11	Breakdown of the Archaeological Subjects Covered in 1999-2002	192
5.1	Maps of the Communication Process	204
5.2	Science Communication Models	206
5.3	Recent Science Communication Models	209
5.4	Archaeologists' Communication Pathways	214
5.5	Traditional Pathways	220
5.6	Current Preferred Pathways	224
5.7	Roles of Archaeological Mediators	228
6.1	'The Oldest Boat in the World'	236
6.2	Stanton Drew Woodhenge	236
6.3	Schematic Version of OBW Coverage (7 May 1997)	267
6.4	Schematic Version of SD Coverage (11 November 1997)	268
6.5	Headline Comparison of OBW and SD	275
6.6	Actual Headlines of OBW Coverage	278
6.7	Actual Headlines of SD Coverage	279
6.8	Maps in OBW and SD Coverage	282

6.9	Photographs in SD Coverage	284
6.10	The Only OBW Illustration (*Daily Mail*)	287
6.11	Graphics in the SD Coverage	289
6.12	Presentational Layout (*Daily Express*)	291
7.1	Aerial Photograph of the Qaitbay Fort	317
7.2	Map of Ptolemaic Alexandria	317
7.3	Representations of the Pharos	320
7.4	Imaginative Representations of the Pharos	321
7.5	Thiersch's Reconstruction of the Pharos	322
7.6	Site Explorations of the 1960s	326
7.7	Surveying the Site	334
7.8	The Site Map: Retrieving the Survey Data	335
7.9	Artefacts Found on the Alexandria Seabed	337
7.10	The Lifting Process	338
7.11	Some of the Pieces of the 'Colossal' Statues	339
7.12	The Largest and Smallest Remnants of the Pharos	341
7.13	The First Object Lifted Ashore on 4 October 1995	344
7.14	The Male Torso on its Journey through Alexandria	345
7.15	The Images That Went Round the World	346
7.16	The Raising of the Ptolemy Colossus Head in the Presence of French President Jacques Chirac on 8 April 1996 (*France Soir*)	348
7.17	The Ptolemy Colossus, Standing Guard at the Pharos (3rd c. BC) and at Le Petit Palais, Paris (1998)	351
7.18	The 3-D Computer Reconstruction of the Lighthouse of Alexandria	360
7.19	Attempts to Discredit Empereur's Pharos Search and Imitate its Iconography (*The Sunday Times* and *Daily Record*)	366
7.20	The Conflation of the Work of Empereur and Goddio	367

Tables

3.1	Profiles of British National Newspaper Readers, TV Viewers and Museum-goers	114
3.2	Summary Profiles of UK Press, TV and Museum Audiences, and of various UK 'Archaeological Publics'	119
3.3	Ways the Public Engage with Archaeology: Summary of 3 Surveys	122
3.4	Summary of Table 3.3	122
3.5	Audience Figures for Top 50 Archaeological Documentaries (1998-2002)	127
3.6	Comparing Archaeological Periods, Locations and Subjects of the Top 50 Programmes in Table 3.5 with the Overall Coverage in Figures 4.8, 4.9 and 4.11	128
3.7	Public Response to the Value of the Past, Heritage and Archaeological Objects and Sites	131
4.1	Audience Share: UK Terrestrial Television	146
6.1	Breakdown of Coverage of Case Studies by Newspaper Group and by Story	244
6.2	Type of Journalist Covering the Stories	263
6.3	Comparison of Coverage in Terms of Form Criteria	270
6.4	Size Comparison of the OBW and SD Coverage	272

DECLARATION OF AUTHORSHIP

I, Karol Kulik, declare that the thesis entitled *Mediating Archaeology: The Relationship between Archaeology, the Media and the Public in Britain (1996-2002)* and the work presented in it are my own. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;

- no part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution;

- where I have consulted the published work of others, this is always clearly attributed;

- where I have quoted from the work of others, the source is always given. With the exception of such quotations, this thesis is entirely my own work.

- I have acknowledged all main sources of help;

- none of this thesis is based on work done jointly with others; and

- none of this work has been published before submission.

Signed: 

Date: 18 January 2005

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Abbreviations Used

ABC: Audit Bureau of Circulation
APPAG: All-Party Parliamentary Archaeology Group
BARB: Broadcast Audience Research Bureau
BBC: British Broadcasting Corporation
C4: Channel 4
CA: *Current Archaeology*
CBA: Council of British Archaeology
CGI: Computer-generated imaging
DCMS: Department of Culture, Media and Sport
ESRC: Economic and Social Research Council
FT: *The Financial Times*
IFA: Institute of Field Archaeologists
ITV: Independent Television Network
MUP: Media Understanding of Public
MUS: Media Understanding of Science
OBW: The Oldest Boat in the World
PPG16: Planning Policy Guidance note number 16
PUM: Public Understanding of Media
PUS: Public Understanding of Science
SD: Stanton Drew Woodhenge
SUM: Science Understanding of Media
SUP: Science Understanding of Public

INTRODUCTION

MEDIATING ARCHAEOLOGY

This dissertation takes a critical look at how archaeologists, the mass media and the public in Britain interrelate in the process of mediating archaeological information. Over the past six years, my research gradually evolved into a study of four central issues: how the perceptions and values that each of the three partners bring to their relationship influence their approaches to archaeological communication; how the public communication of archaeology functions as a process of mediation; the different roles that mediators play in this process; and how the source and format (the 'who' and 'how') of information release affects the quantity and quality of the media coverage received. As the parameters of the topic became more focused, it became clear that addressing these issues would require some foundational work on the historical, contemporary and theoretical contexts which have helped to define archaeological communication.

This dissertation therefore begins with an examination of the history and timeliness of the subject and the current state of the relationship between archaeologists, the media and the public in Britain as seen from each of their perspectives. It then explores the structural framework of communication based on new theoretical models that I have developed. This groundwork suggests that fundamental changes in the relationship and thus in the sources and means involved in releasing information are affecting the way archaeology is communicated through the mass media today. This proposition is then tested against the evidence in detailed case studies which demonstrate the impact that these changes are having on the process of archaeological mediation and on the media's representation and the public's consumption of archaeology.

This field of research presents a particular challenge due to its cross-disciplinary nature. To achieve a meaningful analysis one needs to be able to draw on the specialist knowledge and skills of professions as different as archaeology and the media and of archaeological fields as relatively new as 'archaeological representation' and 'public archaeology'. As Hargreaves and Ferguson (2000: 31) recommended in a recent report, the currently strained relationship between scientists and the media in Britain could be improved by "a concerted effort at

pan-disciplinary insight" undertaken by "skilled translators" able to bridge disciplinary boundaries. My background as a media historian, educator and professional (turned archaeological scholar) has encouraged me to take up this challenge. That I come to it with more knowledge of media practice than many archaeologists has proven to be a useful standpoint.

The following introduction explains the focus of the dissertation and how this particular focus and the appropriate methodologies for examining it were arrived at. A section on how certain terms are defined within my work is followed by the general aims and specific objectives of the dissertation's constituent chapters. The reasons why this subject is important to study, and the contextualisation of my research within current debates and existing research and literature, are so germane to the dissertation that they are dealt with *in extenso* in Chapter One.

Focus

Although other periods, media and national perspectives are referred to when relevant, my analysis of archaeological mediation and the nature of the archaeologist-media-public relationship is primarily focused on Britain during the seven-year period from 1996 through 2002, and the media under scrutiny are the British national press and television documentaries. It would be useful to start by explaining why these focal points were chosen.

Why Britain? Why 1996-2002?

Both the geographic focus and timeframe are significant for several interconnected reasons. The first relates to *millennialism*, the spirit that was to pervade media and public discourse in Britain as elsewhere in the years under discussion. The millennialist urge to take stock of the human condition at this symbolic juncture was likely to create a climate in which retrospection in general and subjects like history and archaeology in particular would flourish. The second reason relates to structural changes in the archaeological and media professions in Britain brought about by another key word: *commercialisation*. In the later 1990s, both archaeologists and media professionals were coming to terms with the impact on their work of the government-led drive towards commercialisation of

the 1980s and a concomitant decline in the public service ethos (Goodwin 1999: 133-134; Baker and Morris 2001: 610). As commercial imperatives transformed their practice, increasing the scope, amount and competitiveness of their work, they also forced both groups to ask fundamental questions about their place in and value to society as a whole. Furthermore, the two professions were simultaneously facing a new media landscape, and so a third reason emerges, that of the effects of *globalisation* on those who produce, use and consume the media. Together, the *Zeitgeist* and the impact of a new working environment make this a crucial transitional period for archaeology and the media and thus an important standpoint from which to survey and contextualise their relationship to each other and to the British public.

How archaeology, the media and the public would fare in this new environment leads to a fourth reason why these seven years in Britain are so significant: the increased *valorisation* of the relationship by the three parties involved. From the point of view of archaeologists, as Jameson (1997: 11) writes, "It is likely that the waning years of the 20th century will be identified in the history of archaeology as a time when the profession, as a whole, came to the realization that it could no longer afford to be detached from the mechanisms and programs that attempt to communicate archaeological information to the lay public." Jameson's assessment is one of many indicators (discussed in more detail in Chapters One and Two) that the later 1990s have seen a sea change in the value archaeologists have placed on public communication. Yet, both here and elsewhere (for instance, Ucko's statement [1994: xii, my emphasis] that "modern archaeology must recognize and confront its *new* role, which is to address the wider community"), the implication is that this is a recent phenomenon. The historical analysis offered here will challenge this perception, while explaining why it is so prevalent.

From the point of view of the media and the public, it was during the last half of the 1990s, and directly or indirectly linked to previous reasons, that Britain would witness a substantial and sustained growth in public and mass media interest in archaeology. The level of this interest was easily comparable, if not superior, to the so-called "golden age" of archaeology and the media in Britain in the 1950s (Jordan 1981: 209). Moreover, unlike the 1950s (primarily a television phenomenon) or, for instance, the 1920s (following the Tutankhamun discovery), the high visibility of archaeology in Britain in the later 1990s was not attributable

to one event, nor was it specific to one subject, period or medium. In fact, this period would be most notable for the sheer breadth of archaeological fields and periods deemed to be of public interest by a wide cross-section of the British media, especially the press and television. Indeed, one could say that, for the purposes of studying the public communication of archaeology, this particular geographic and time focus provides both a critical mass and a rich seam of artefactual evidence surfacing at a poignant time.

Why the national press and television documentaries?

Archaeology is presented to the public in a variety of formats through a number of media that involve different intermediaries and time-scales of attention, occur in different venues and contexts, and have, perhaps most importantly, different practices, codes, constraints and objectives. Museum exhibitions, site displays, educational courses, lectures and archaeological tours, websites and video games, feature films, books and magazines, the press, radio and television programmes, and even advertising are all ways that messages about archaeology, intentionally or unintentionally, reach the wider public. They are not, however, all equally relevant to this study. Given this dissertation's central concerns with the process of archaeological mediation and the mediators, sources and means involved in it, the media most relevant are those that are regularly engaged in the *intentional* transmission of archaeological *information*, that involve archaeologists themselves in the transaction as identifiable *sources* of this information, and that provide evidence of the *means* used to resource this information. In addition, they need to be media that produce sufficient quantities of material to reward quantitative assessment as well as close empirical and comparative analysis, and that respond with sufficient immediacy so that changes in the communication process can be recognised. Given these parameters, it seemed clear to me that the press and factual television would provide the most appropriate database.

The degree to which the British public today rely on the press and television as sources for archaeological information has not been comprehensively surveyed (see Chapters One and Three). There is some survey evidence from the mid-1980s (Merriman 1991: 119-120) that television is the public's second favourite means (after site visits) for engaging with archaeology and that for those who rarely or

never visit museums television is their number one source. Surveys in the US and Canada (Neikirk 2000; Pokotylo and Guppy 1999: 405) have shown that North Americans rely less on the press (24% and 11% respectively) than on television (56% and 54.5% respectively) as archaeological information sources. Given newspaper readership in Britain (discussed in Chapter Three), it is likely, though not yet demonstrable, that similar, if not higher statistics to those found in North America might apply to the British public's reliance on the press.

Finally, the choice of national rather than local newspaper coverage relates to the need to examine comparable artefacts aimed at the widest public and to the particular British context in which the number of national papers represents a more than adequate collection. That television documentaries, rather than news broadcasts, have been chosen is due to the quantity and 'trackability' of material and to the larger analytical canvas which their greater length and depth offer. It should also be noted here that the specific cases of press and television coverage chosen for analysis in Chapters Six and Seven are ones that reflect back on and further illuminate many of the themes raised in earlier chapters.

From 'Misrepresenting' to 'Mediating' Archaeology

Although the above has outlined where my research journey ended, this is far from where it began. Having spent 30 years in film and television, it is not surprising that my interest in archaeology would lead me to study archaeology and the media. When I started in late 1997, I was intrigued by the amount of archaeological coverage that was appearing in the press and on television, but dismayed by the growing number of pseudo-archaeological books crowding the best-seller lists. I was drawn to the problem of 'the gap' between what was being publicly consumed about archaeology from the media and what archaeology 'really is'. At that stage I assumed that my research would address the media's *misrepresentation* of archaeology.

I began by testing my assumptions about the growth in archaeological coverage in the media and about 'misrepresentation' by conducting an empirical survey of the evidence. Starting with the factual media, I began to track and collect British press articles and television programmes about archaeology. I produced case studies of some of these media artefacts, employing the close textual analysis of

my media studies background, that is, examining both content and form, verbal and visual language, as constituent elements in how meaning is constructed. This led me to two initial conclusions: that archaeological coverage *was* on the increase and that the subject was, it seemed, being represented seriously and fairly by the majority of the British quality and tabloid press and by BBC2 and Channel Four. Turning to the fiction media, the 40 feature films with archaeological themes, settings or characters which I viewed did seem locked in a time warp inhabited mainly by *Indiana Jones*, *The Mummy* and their clones. Yet many of the 60-odd archaeological novels and short stories that I read afforded ample proof of how fiction could be used to present a rounded picture of the profession and could, moreover, deal with many of the otherwise incommunicable psychological dimensions and dilemmas of being an archaeologist. This research led me to question why 'the gap' was perceived by archaeologists as such a contentious issue and to doubt whether it was, in fact, the most urgent of problems facing archaeology and the media. I began to wonder whether media misrepresentation—what Day (1997: 39) calls the "real-reel" issue—might be a curious amalgam of a straw man (put up because it was so easy to tear down) and a red herring (thrown in to draw attention away from more serious concerns), and to ask myself what these more serious concerns might be.

At the same time, I was reading everything I could find about archaeology and the media. As anyone studying this subject knows, there is, in fact, little literature devoted exclusively to the subject (see Chapter One). Yet from reading histories of archaeology and the personal accounts of archaeologists and media practitioners, a history of archaeological communication began to take shape. It became clear that this kind of perspective was essential to understanding archaeology and the media today (see Chapter One).

By this time, I realised that understanding the current state of archaeological communication was, in fact, my goal and that this meant I would have to approach the subject using other 'lenses'. My (and others') fixation on 'misrepresentation' seemed to derive from an out-dated perception of representation as "reflection" rather than as "construction" (Hall 1997: 24-25). I now saw the 'more serious concerns' in the public communication of archaeology as being less defined as a matter of individual archaeological messages and their (in)accuracy, less about *what* messages should be communicated—the concerns of

many archaeologists dealing with the subject (e.g. Hinchliffe 1999: 26; A. Lawson 1999: 31; McManamon 2000: 13-14)—and more about *how*: how the process of archaeological communication functions (and malfunctions) and how changes in the profession, the media and the public have affected it. It was at this point that I decided to focus on factual representation (the press and TV documentaries), as this would provide the necessary database of material, for reasons given above, to investigate the communication process.

As I saw it, dealing with this new focus would require both a macro-analysis of the structure of archaeological communication, the attitudes which the three partners in the process bring to it and the powers they have over it, and a micro-analysis of the media artefacts produced by this process. While the semiotic approach of media studies would be useful in the latter endeavour, it was inadequate for dealing with the former. This is because it tended to be ahistorical (Hall 1997: 42) and to concentrate on one phase in the process (e.g. the text, audience reception) rather than on the process as a whole (*ibid*; Fenton *et al.* 1998: vii-viii; Silverstone 1999: 37). However, the strand of media theory based on Michel Foucault's work on discourse did provide an appropriate theoretical basis as it was historically specific and dealt more with practice, with relations of power and how power circulates (Turner 1996: 31, 120-121; Hall 1997: 42-51). Although a number of texts (e.g. Corner 1986, Turner 1996, Hall 1997, and Mosley 2000) encouraged me to think structurally about communication, media and cultural studies rarely dealt sufficiently with the factual media's production and coverage of *scientific* subjects or, for instance, with the economic and attitudinal factors that were, it seemed to me, so crucial to archaeological communication. A breakthrough came in 1999 when I turned to research undertaken on the relationship between science and the media.

Bucchi's (1998) work on the traditional and deviational pathways through which science is communicated to the public prompted me to examine models of science communication (i.e. Price 1996: 38-44, Hargreaves and Ferguson 2000: Chapter Two). I then started to construct my own models, for the existing ones did not illuminate the questions I was now posing. What are the communication pathways open to archaeologists? Which of these are 'traditional' and which 'deviational'? How have they changed over time and what caused these changes? And what roles do archaeologists, employers, journalists, editors, producers and

the public play in each pathway? An analysis of these models (in Chapter Five) would become a key component in making sense of the way archaeologists, the media and the public approach and mediate archaeology (as discussed in Chapters Two to Four) and in highlighting the importance of source and means in archaeological communication that would be tested in the case studies in Chapters Six and Seven.

The theoretician who became most influential to my work at this stage was Roger Silverstone (1985, 1986, 1999). It was, above all, his emphasis on seeing science communication (and communication in general) as a *process of mediation* in which all parties in the process are engaged which most transformed my thinking. His book on the production of a TV science documentary (1985), those of Nelkin (1995), Fenton *et al.* (1998) and especially Hargreaves and Ferguson (2000) on how the press covers scientific subjects, and books on press and TV practice like Tuchman (1978), Gans (1980), Eldridge (1995a), Tunstall (1996) and Reah (1998) gave me the models and approaches I needed to undertake a macro-analysis of the present state of archaeological mediation. They justified my focus on the "encoding process" (i.e. "how media items come to contain the messages that might be gleaned through a textual analysis"), a focus that has been "largely neglected" in media studies' emphasis on 'decoding' and audience reception (Fenton *et al.* 1998: 8). They helped me to see that archaeologists' current concerns about public communication are part of the wider debate over the 'public understanding of science', or PUS, and encouraged me to utilise my media experience in undertaking this pan-disciplinary work. Furthermore, they validated my decisions to take a sociological look at the perceptions about archaeological communication held by the public, the media and archaeologists, to foreground the practice of science journalism and TV documentary production of archaeological subjects, and to ground my work in evidence, analysed both quantitatively and qualitatively.

My growing collection of media artefacts now provided me not only with case studies through which I could test some of my conclusions about archaeological mediation, but with the evidence from which I could undertake a content and form analysis of TV archaeology over a four-year period (in Chapter Four). Although often disparaged in media studies for "merely dealing with the surface phenomenon" (Eldridge 1995a: 375) and seen as less important than audience

reception as a field of study, content analyses are valuable tools. It is only by first mapping the dominant trends in archaeological coverage that one can design or make sense of audience reception research, an area which I do not go into here, but which is in sore need of attention in media-archaeology studies.

This brief overview of my journey from 'misrepresenting' to 'mediating' archaeology has underlined the number of theoretical and methodological approaches available to researchers in this field and explained my decision to examine archaeological mediation with both telescopic and microscopic lenses. It is this combination of macro- and micro-analysis of archaeological communication and of the relationship between archaeologists, the public and the media, using a variety of focal ranges and methods, from the historical and empirical to the sociological and structural, that constitute this dissertation's critical agenda.

Definitions

It is important to define how certain terms are used in this dissertation and offer some reflections on them. These terms may appear to be unambiguous; yet, I would argue, the fact that they are often taken at face value has contributed to many of the problems that have arisen in archaeological communication. These terms are mediation, archaeologist and archaeology, public, media, control and employers.

This dissertation is called 'Mediating Archaeology' because mediation is a better word for describing the process under examination here than 'communication'. This is because mediation encompasses a number of ideational processes that precede and succeed the act of communication. It permits us, for instance, to think of an archaeologist's attempts to order his or her thoughts together, to decide whether or not to communicate, to decide what and how much information to reveal, to choose the timing, the means of releasing information, and the public to be addressed, and to select the discourse in which to frame the information, as all part of the process. As we shall see, many of these choices are governed by codes and practices formally or informally instituted by the profession, archaeologists' employers or the media, but this does not diminish the individual's role as an agent of mediation. I would suggest that archaeologists' (and scientists') tendency to blame the media or the public for misunderstandings that arise in

communication may stem from their difficulties in seeing mediation as a "continuum" (Finn 2001: 262) and in acknowledging their own roles as mediators.

Furthermore, seeing archaeological communication as a series of acts of mediation, in which the actors interpret the information according to their own conceptual maps, emphasises the contingent nature of the process. For a healthy communication relationship, each actor needs to understand his or her own roles in the process as well as the motivations, limitations and practices of the other actors. As Hargreaves and Ferguson (2000: 18, 46) suggest, it is only when PUS is joined with PUM (public understanding of media), SUM and SUP (scientists' understanding of media and public), and, I would add, MUS and MUP (media professional's understanding of science and public)—only then can *trust* be established between archaeologists, the media and the public. And trust is the goal, the "necessary precondition", as Silverstone calls it (1999: 18), for all mediation. 'Mediation' is ultimately the most appropriate word because it clarifies the agenda, which Silverstone (*ibid*) defines in these terms:

> We need to understand this process of mediation, to understand how meanings emerge, where and with what consequences. We need to be able to identify those moments where the process appears to break down. Where it is distorted by technology or intention. We need to understand its politics; its vulnerability to the exercise of power; its dependence on the work of institutions as well as individuals; and its own power to persuade and to claim attention and response.

This statement of the tasks that media studies should be addressing encapsulates what is needed in the study of archaeology and the media.

How archaeology / archaeologist, the public and the media are defined here can best be introduced by a mantra paraphrased from Hargreaves and Ferguson (2000: 2): 'There is no one archaeology or archaeologist; there is no one public; and there is no one media.' Although there are a number of stereotypes that the media, the public and even archaeologists would recognise (see Flannery 1976, Thomas 1976, Bray 1981, Russell 2002a, and Membury 2002), there is no 'one' paradigmatic archaeologist or archaeological endeavour which represents the variety of people and types of work that constitute the profession. When referring to the profession and its practitioners, I have thus used a broad definition: one that includes all fields of the discipline and all those who consider themselves as inside the profession as well as others, for instance, underwater divers working on archaeological projects, who might not define themselves as archaeologists. I have

also not restricted my discussions solely to British archaeological subjects or to British archaeologists, for a less insular approach offers valuable lessons and much-needed perspective to the analysis.

With regard to the definition of archaeology's 'public', this dissertation recognises that there are at least nine different archaeological publics (see Chapters Two and Three). Although these groups are identified, I am primarily concerned here with the relationship between archaeologists, the media and what I call the 'core' public, which I define in its largest sense as the 3-5 million people in Britain who choose to watch archaeological programmes on television. It is this sector of the British population who receive and mediate archaeology in their own way on a regular basis and thus for whom 'mediating archaeology' matters.

As previously mentioned, there are a host of different media through which these various publics engage with archaeology, but the national press and television documentaries are the ones most central here. Science or specialist journals (often wrongly seen by scientists as not part of the media [Hargreaves and Ferguson 2000: 14]) play an important role in the structure of archaeological communication and thus are key to the discussions in Chapters Four and Five. By placing the other media outside the frame of this project, except in the occasional reference, I am however mindful that all media are inextricably linked in the process of 'constructing' archaeology. 'Mediating archaeology' will only be truly understood when the interactions of all media representations can be brought together. As with the above caveat about insularity, my selection of media examples also strays beyond the geographical limits of Britain in order to achieve the benefits of a more international perspective.

In examining the power relationship between the partners in archaeological mediation, the issue of 'control' inevitably arises. One needs, however, to avoid defensive or mechanistic definitions of what one means by 'control', for these tend to lead to the 'blame game'. In this game, the 'sources' of information and media professionals square up to and blame each other in an attempt to find one culprit responsible for misunderstandings or misrepresentations. Traditionally, it has been media professionals who have been seen as 'in control' (Eldridge 1995b: 6-9; Bucchi 1998: 4; Gripsrud 1999: 40), or at least viewed as "having the upper hand" (Fenton *et al.* 1998: 10). However, there has been a growing recognition of the control which sources do have over communication (Gans 1980: 116; Bucchi 1998:

42, 146). For instance, at a science-media debate in 2000, one scientist said that "most of the problems in science communication should be laid at the door of scientists" (Hargreaves 2000: 14). These opposing positions are, paradoxically, equally justifiable, for both parties have degrees of control at various points in the mediation process. There are, after all, at least two contests going on here. One is the daily 'tug of war' between sources and journalists in which "sources attempt to 'manage' the news, putting the best light on themselves, [while] journalists concurrently 'manage' the sources in order to extract the information they want" (Gans 1980: 117). The other is the wider battle between these two as they "negotiate the public meaning" of the discipline in question (Nelkin 1995: 170). Recognising that these power struggles exist and are healthy, not detrimental, to the public communication of archaeology moves one beyond the defensive stances that ultimately only serve to prop up prejudices.

Therefore, in this dissertation, 'control' is defined differently. It means, on the one hand, 'origination', for the focus here is on those sources who originate or initiate archaeological messages. Excluded from the analysis, for example, are cases where archaeologists are asked to respond, as experts, arbiters or advocates, to someone else's archaeological news. On the other hand, 'control' means 'mediation'. Thus asking who controls archaeological messages is, in fact, asking where in the process of archaeological communication are mediators and mediating mechanisms encountered and in what ways do they contribute to the construction of the public's archaeological knowledge.

Finally, by proposing that archaeologists' employers are increasingly taking over responsibility for originating archaeological messages today, I do not mean to reinforce the blame game by adding a new culprit to the list of those to be chastised for mismanaging archaeological communication. They are not, in any case, 'new' in the sense that employers—which in my terminology includes all government bodies, quangos, institutions, universities, commercial companies, sponsors, patrons and media producers who employ, fund or contract work from archaeologists—have had a long history of intervening in the communication of archaeology. Understanding this and the role that they currently play in the public communication of archaeology is one of the major themes of this dissertation.

Aims

Five aims guided me during the gestation of my research and are evident in this dissertation. The first is to make a contribution towards a re-conceptualisation of the relationship between archaeologists, media professionals and the public. That a new way of thinking about archaeological communication is now needed echoes similar calls within science communication (Hargreaves and Ferguson 2000: 62, 64). A second, related goal is to reposition the media and the public as archaeologists' *collaborators* in the process of mediating archaeology, rather than as mere *conduits* or *recipients* of archaeologists' messages. For instance, in books and articles about the public communication of archaeology (e.g. Beavis and Hunt 1999 or Jameson 1997), archaeologists often marginalise or ignore the mass media and tend to treat media professionals and the public, implicitly if not explicitly, as if they were outside the process. This dissertation challenges this notion by re-inscribing the media and the public as partners in the communication equation.

The third goal is to shift the debates about archaeology and the media beyond the constraints imposed by mindsets obsessed by media 'misrepresentation'. Only by doing this, I argue, is it possible to move the debate forward and achieve a more constructive understanding of the process of archaeological mediation, one which acknowledges that archaeology and the media are two distinct disciplines which, to function effectively, need to be allowed to pursue their goals in their own terms. This dissertation suggests several ways of encouraging this shift: by redefining the archaeologist-media-public relationship, by placing it in its historical context, by offering it a theoretical framework and by examining archaeological 'representation' in case studies.

A fourth aim relates directly to the case studies. It is hoped that the analyses presented here will help to promote the study of *all* types of media representations as *artefacts* worthy of the same scrutiny that archaeologists normally afford their own artefacts. These studies offer a methodological template for media artefact analysis, but, more than this, they confront certain preconceptions about which medium provides the 'best' coverage, what 'best' coverage means in the first place, and how form and content affect our judgements. Finally, a fifth aim, more a moral purpose, lies behind my work, namely to advance our understanding of a complex process in order to transform the anxiety-ridden relationship between

archaeologists and media professionals and to improve archaeological communication itself.

Objectives

While these general aims have informed my work, it was the search for answers to major questions that determined my specific objectives, namely: What are the defining features of the current relationship between archaeologists, the public and the media and how are they likely to affect archaeological mediation? How does archaeological communication function as a process of mediation and what roles do different mediators play in the process? And how do the sources of information and the means they use to release information to the public through the media affect the outcome and the public communication of archaeology?

The defining features of the archaeologist-public-media relationship today

To understand the current relationship between the partners in archaeological mediation it is essential to examine first both the historical and contemporary context in which the relationship is situated. In order to provide an historical perspective, a number of questions need to be addressed. Is the relationship today in a vigourous state? Is its current state unique, and if not, in what ways is it similar or different from previous periods? In other words, how has archaeological communication changed over time and to what extent have these changes been due to the impact of developments in the profession, the media or the public?

I therefore begin Chapter One by tracing the history of how archaeological communication has evolved in Britain since the sixteenth century, pointing out how this evolution was associated with changes in the profession itself, in the media and in the public. My research led me to propose a new way of viewing this history as a chronology divided into five phases. The explanation and substantiation of these phases demonstrate four key points:

1. That the relationship between archaeologists, the public and the media has not always evolved in an upward curve from less to more public communication;
2. That the vicissitudes in its trajectory are partly, if not largely due to the degree of economic dependence between the three partners in different phases;

3. That the current phase (from 1990 to the present) is a period in which archaeological communication has flourished, but
4. That the current phase is not in every respect uniquely different from earlier phases and that its perceived uniqueness is due to the devaluation of public communication during the immediately preceding phase.

This historical account underlines the high value that is currently being placed on the relationship by all three partners and leads naturally to a closer examination of the contemporary context surrounding archaeological communication.

The rest of Chapter One is thus devoted to looking at how and why the public communication of archaeology is being prioritised in Britain today, and why it and the relationship between archaeologists, the public and the media are 'timely subjects'. It also explores, putting timeliness aside, why these subjects deserve serious study in any case, and it surveys existing research and literature in the field, suggesting reasons why this research is inherently difficult. The chapter concludes that there has been a paucity of research to date and that this has hindered critical understanding of these subjects at a crucial time. It also points out, however, that the tools and mental space needed to create a substantial body of knowledge in the field do now exist. This chapter therefore demonstrates where this dissertation fits within current debates and research both inside and outside the profession.

Having provided this background to the question of what defines the nature of the archaeologist-public-media relationship today, I then examine the relationship from each of the partner's perspectives. Framed around the question of whether the relationship is a 'symbiotic' one, the next three chapters continue the contemporary analysis by looking at how archaeologists, the public and media professionals currently perceive and value their relationship to each other and how these perceptions are likely to affect their attitudes and receptivity to archaeological mediation. The overall objective here is to highlight what is at stake for each partner in the equation and thus foreground the conceptual context in which the issue of archaeological mediation is situated.

Chapter Two centres on the archaeologist's perspective. It begins with an overview of archaeologists' various 'publics' and introduces the concept of archaeologists as 'first mediators'. The chapter then discusses archaeologists' perceptions about the general public and the media and how they think this public

and the media perceive them and their work. This section looks at the roles the public have played in archaeology's development, correlating archaeologists' changing attitudes towards public communication with the degree of the discipline's dependence on (and thus distance from or proximity to) the public and pointing out the impact that the current shift towards developer-led archaeology has had on communication. The chapter then addresses in depth the issues of what motivates as well as what inhibits archaeologists to communicate to the wider public, how communication is governed by 'rules', how archaeologists define the media, and how they weigh up the costs and benefits of different media of communication. It concludes that while archaeologists acknowledge their obligations to communicate with the wider public and have a variety of reasons for communicating, their preconceptions predispose them to fear the outcome of public communication through the mass media, thus making them reluctant to incorporate them in their communication strategies.

Chapter Three continues the analysis by looking at the relationship from the public's perspective. After a reminder of why the public need to be seen as mediators, it examines the British public's consumption of and relationship to the press and television. It notes that the recent trend of increased public access to and choice of information sources has led to an unstable pattern of consumption. It identifies the basic needs that these media satisfy, concluding that many of their attributes are similar to those offered to the public by archaeology. This leads to a discussion of the public's consumption of archaeology. Here I offer a profile of the different archaeological 'publics', suggesting that there is socio-economic congruency between the 'core' public and archaeologists themselves. I then analyse how the wider public engage with and learn about archaeology, the level at which they care about and understand the subject and what they 'want' from the archaeology presented to them. The chapter ends with an exploration of why the public currently value and are fascinated by archaeology, putting forward reasons that go beyond those normally surveyed, reasons that are perennial and deep-seated and that involve the concept of 'personal enrichment'. The chapter thus concludes that during the period under discussion the public came to depend on archaeology as a subject that could satisfy a number of important needs.

Chapter Four turns to the media's perspective on archaeology and the public. It opens with a discussion of how the British press and television have responded to

new developments that have significantly altered the country's media landscape, like information overload, deregulation, increased competition and greater volatility in the public's media consumption. I point out, for instance, that terrestrial television has adjusted to this new environment by re-branding its image and by making history, science and archaeology programming the 'face' of its factual programming, a prominence also due to changes in fashion and TV executives. The chapter then examines how the media function as mediators of information, focusing on science journalism as a prelude to the analyses in Chapters Five and Six. Under discussion are: what constitutes news, how journalists mediate scientific information, their relationships to sources, specialist versus generalist reporting, and the rise of 'herd' (as opposed to 'enterprise') journalism (that is, the simultaneous release across the news media of usually pre-digested news that tends to produce homogenous coverage). This section emphasises the power that news sources, both human informants and the material means used to disseminate information, have over coverage, concluding that the responsibility for constructing archaeological 'meaning', even through the mass media, is not the sole preserve of media practitioners.

The second half of Chapter Four looks at the media's perception of the public, scientists and archaeologists (complementing the analyses presented in Chapters Two and Three) and at why the media are fascinated by archaeology. To tackle the latter, I present a critique of archaeological documentaries on Britain's four main terrestrial channels between 1999 and 2002 in order to ascertain *which* archaeology television was exploiting (in subjects, time periods and geography) and *which* formats of presentation were being employed. This content and form analysis proves that television offered the British public a 'process-oriented', reasonably broad and un-sensationalised picture of archaeology during these years. I go on to propose a number of special attributes that archaeology possesses and that help to explain why the media has been so attracted to the subject. Returning to the umbrella question posed in Chapters Two to Four, I argue that at least during this survey period the relationship was indeed symbiotic, each partner benefiting in numerous ways from their partnership, but that it is not always or necessarily a symbiotic relationship. These three chapters have brought into sharper focus the current dynamics of the relationship. They have also, however, raised issues about the way that the process of archaeological mediation

functions and the exact roles that different mediators play in it. To deal with these issues, one needs to undertake a more structural analysis of the process as a whole.

Archaeological communication as a process of mediation

The main objective of Chapter Five is to address the following series of questions: How has the process of communication and especially science communication been traditionally analysed, what are the strengths and weaknesses of existing theoretical models, and do they suffice as explanations of archaeological mediation? If we are to understand archaeological mediation, do we not need to look at the ways that archaeologists can communicate, at the choices they make and at how the media interact in bringing archaeological information to the public? Which are the preferred routes or pathways of communicating, which are less professionally acceptable, and why? Have the preferred routes changed over time, and if so, how do these changes affect the public communication of archaeology? And, how many mediators are implicated in these pathways and are the roles they play in mediation different?

In this chapter, a brief summary and critique of current thinking on communication (especially of scientific information) is advanced as a preface to my own structural analysis of archaeological mediation. This analysis focuses on the archaeologist as controller or source of his/her own messages (what I term 'first mediator') and offers two models of mediation. These illustrate the different communication pathways open to archaeologists wanting to communicate with their various publics, the professional codes and practices and the different 'means of delivery' implicated in these pathways, the number of 'second mediators' (e.g. journalists, editors, peer reviewers, programme-makers, and broadcasters) that will be encountered in each pathway, and the different roles these second mediators play in the process. These models prompt discussions on why certain pathways are professionally sanctioned (and others not) and, in particular, on the benefits and drawbacks of the 'peer review' system. They also demonstrate how the media interact with each other, how the degree of mediation varies depending on which path is followed and, most importantly, how archaeologists' employers today play more roles than any other 'second mediator'. With these frameworks in

place, one can then turn to a final question: does it matter whether archaeologists or their employers 'control' the flow of archaeological information?

Do the source and means of information release affect the outcome?

The previous chapters have set the scene for the case studies of press and television coverage of archaeology undertaken in Chapters Six and Seven. These case studies allow us to examine through concrete evidence the way archaeology is being represented in these media and, more particularly, to gauge the effect of source and means on the media coverage received. The overall objective of these studies is to answer several key questions, namely: Does shifting the initiation of message release from archaeologists to employers, as identified in earlier chapters, ensure more consistency (or less unpredictability) in the informational *content* and presentational *form* of archaeological coverage? How does it affect the work of the various 'second mediators'? Are the issues of who (source) and how (delivery method) of equal importance? Are the traditional views about how scientific subjects are treated in the tabloid versus quality newspapers and on British versus American television sustainable? And in which ways and on whose terms do we assess 'outcome'? In other words, are the pathways, means and models being used today ultimately in the best interests of the media, the public and the archaeological profession?

In selecting these case studies, I was aware that the timeframe of this dissertation, by its very richness, offers a plethora of choices. In order to make fair comparisons, it seemed essential to create a level playing-field where production time and access to information would not prejudice the results. Therefore I focused on how the *same* archaeological news or stories were handled by different newspapers and television broadcasters, what I came to call 'same story, different spin'. In the press case studies, the stories needed to have received sufficient coverage to enable meaningful comparisons and to have been released by different sources using different means. Two announcements of British archaeological finds were eventually chosen: the discovery and dating of shaped timbers found in the waters of the Solent, off Hampshire, which was announced by the divers involved through a press release, and the finding of evidence of a woodhenge at Stanton Drew in Somerset, which was announced by English Heritage at a press

conference. In the case of television, the fact that three documentaries on the same underwater excavation had shared a similar production history and yet resulted in three different programmes seemed promising. That they also provided a unique opportunity to examine a case where the media itself (here a television producer) took charge of all the public mediation of the project was the deciding factor in their favour.

The two press case studies are presented in Chapter Six. The different sources and means of delivery permit a comparison of how these factors influenced the coverage. My in-depth analysis of both the content and form of the resulting articles leads me to conclude that the employer-generated announcement did achieve greater consistency in *content* than the finder-generated one . However, it is also clear that the means of delivery played as important a role as source in guaranteeing homogeneity of informational content and that, despite attempts to encourage formal consistency, journalists and editors were still able to adapt the *form* of the coverage. These case studies moreover prove that the British press make significant investments in bringing archaeological news to their readers, offering them a choice of ways for consuming the news, and that preconceptions about whether broadsheet or tabloid newspapers present their readers with the more 'serious' archaeological coverage need to be challenged. The studies do, however, reinforce an earlier point: that homogeneous coverage achieved at the expense of proper journalistic scrutiny may be detrimental to the public communication of archaeology.

Chapter Seven's focus on three television documentaries about an underwater archaeological project invites, by way of introduction, a discussion about how television documentary producers mediate scientific subjects and a summary of British television's relationship with underwater archaeology. With this context in place, I turn to the case study, which further confronts the issue of employers taking charge of archaeological mediation and how this affects the outcome. This case study examines how French television producer Stéphane Millière financed and controlled all media access to Jean-Yves Empereur's 1995 underwater survey in search of the remains of the Lighthouse of Alexandria. The international co-production that Millière set up between French, British and American broadcasters (France 2, BBC and WGBH/Nova) resulted in three documentaries about the project derived from the same footage. The comparison of these

documentaries emphasises how the broadcasters were able to adapt the same material into programmes that suited their particular audiences and how the content remained largely intact even though the form was altered. These formal differences provide insights into how broadcasters use different frames to make their archaeological programmes accessible to their audiences.

In addition, the account of Millière's exclusive control of media access to the project offers valuable lessons about the strengths and weaknesses of this way of 'mediating archaeology' for archaeologists, the media and the public. An initial conclusion—that this might be a model both archaeologists and media producers would find ideal—needs to be tempered. This close partnership between mediator and archaeologist, and this extreme form of media 'stage-management', resulted in an uncritical account of the project that left the archaeologists open to having their work later confused and ridiculed in the media. One has to wonder, as in the press case studies, whether so much control is counterproductive to the kind of rigorous and open enquiry that the subject, the professions and the public deserve in this 'democratic' age.

In the Conclusion, I reflect on the implications of several points raised in the dissertation. Are we at the end of the era of high synergy between archaeologists, the public and the media? What prospects are there for the future? What will be the impact of more employer-led archaeological communication? Will archaeologists continue to privilege the means of communication that provide a greater measure of personal control? Or will they overcome their fears about the mass media, contest the control of their employers and take advantage of the current climate of receptivity to archaeology before the climate changes? There is no reason why this last challenge cannot be met, for archaeologists are trained to interpret other cultures, cultural processes and artefacts. This surely equips them for the job of understanding and working with the mass media. They just have to see the mass media, the mediation process and media artefacts in this way.

CHAPTER ONE

TIMELY SUBJECTS

This chapter examines why the public communication of archaeology and the relationship between archaeologists, the public and the media have become in recent years timely subjects for research, study and debate. To understand this timeliness, it is necessary to place these subjects in an historical perspective, and I therefore begin by tracing the development of archaeological communication in a chronological framework divided into five phases. This chronology charts the fluctuations in the interdependency between the three partners, showing that their relationship has not always evolved in an upward direction. This is followed by a discussion of some of the factors within and outside the profession that have contributed to the current prioritisation of public communication. Putting aside the issue of timeliness, I then explore five reasons why these subjects are inherently worthy of study. These reasons highlight a central paradox that while media representations of archaeology are integral elements in the construction of archaeology's professional and public image they have been only meagrely researched or understood. This point is underlined in the final section of the chapter in which I survey the existing research and literature on the subjects, discuss some of the difficulties in researching this field and suggest deeper reasons that may have hindered such cross-disciplinary research. This chapter therefore provides background and foreground to the issues central to this dissertation.

Five Phases of Archaeological Communication

The origins of the public communication of archaeology in Britain are rooted in how antiquaries disseminated information from the 16th century onwards, and British archaeologists' relationships with the mass media go back more than 150 years. Yet only recently have these subjects begun to claim the serious attention not just of a handful of committed popularisers, but of the archaeological profession as a whole, as exemplified in *Antiquity*'s lengthy editorial devoted to archaeology and the media in September 2001 (Stoddart and Malone 2001). This has led to an impression that the need to communicate with one's public is a new

phenomenon, witnessed in statements like Ucko's (1994: xii), as already quoted, that imply that addressing the wider public is a "new role" for archaeologists. It appears new, I would suggest, for three reasons. First, the discipline has been emerging over the past decade out of a generational phase in which professionalisation of the field and the development of new theoretical approaches and discourses were prioritised over external communication. Second, changes in archaeological funding over the last 15 years have seen commercial companies overtake the State as archaeology's main paymasters, and this has re-established a more direct link between the profession and publicity, forcing archaeologists to be more attentive to public interest and communication than had been the case in the previous generation. Even State funders, like English Heritage and the Heritage Lottery Fund, have increased pressures on archaeologists to communicate their work to the public, often making this a condition in their grants. And third, it appears new because of archaeologists' amnesia about the history of archaeological communication. If one is to understand the current relevancy of these subjects, one needs to address this amnesia by looking back at how the communication relationship between archaeologists, the media and the public has evolved. The framework that I have developed divides the history of archaeological communication into five 'ages'.

The Age of Antiquarian Communication: 16th century-1830s

During this first phase, archaeology was a private endeavour, an amateur hobby rather than a profession, pursued by (mostly) men with private incomes or in professions like the Church or teaching who had the education, interest, time and means to indulge their curiosity and passion for knowledge about the antiquities of the past. Well-travelled and versed in the Classics and/or theology, antiquaries sought to make their contribution to historical understanding by discovering, describing and interpreting inscriptions, monuments, sites and artefacts, and, latterly, by (crudely) excavating sites, retrieving objects and establishing personal collections. Eccentric and with a tendency to communicate in arcane discourse, antiquaries found themselves often ridiculed (Daniel 1967: 224; Wheeler 1954: 6; Bray 1981: 227-229; Piggott 1989: 14-18). They sought refuge in, and measured their success by the judgements of, brother antiquaries, with whom they formed

societies, like the Society of Antiquaries (1718) and the Society of Dilettanti (1733). Many antiquaries ably represent the breed (e.g. William Camden, John Aubrey and William Stukeley), as does, in a lighter vein, Jonathan Oldbuck, the hero of *The Antiquary* (1816), the novel by Sir Walter Scott, himself an antiquary.

From the point of view of archaeological communication, what was important about antiquaries was their Enlightenment-inspired commitment to communicating their ideas. They did this through the media deemed most relevant: lectures at their societies; letters and articles in select journals, like the *Gentleman's Magazine* (from 1731); and limited-edition books that were usually privately published (financed either by themselves, their societies or advance subscriptions). As these choices indicate, for antiquaries, their 'public' was primarily their peers.[1] From the 1830s, there was an early movement to diffuse knowledge to 'the masses' through publications like the 'penny periodicals', and it was through these that archaeological information—rather than 'news'—was for the first time offered to a wider readership (Phillips 2004).[2] Yet antiquaries' basic insularity and society's focus in the late 18th and early 19th centuries on the present, rather than the past—such as its concerns with the effects of industrial growth and revolutions in Europe and America (Lowenthal 1985: 393-395; Colley 2002: 313-314)—meant that there was little demand or inclination for antiquaries to communicate beyond these well-defined limits.[3] This circumscribed notion of archaeological communication was to change dramatically in the next phase.

The Age of Print Communication: 1840s-1920s

It was in this age that archaeology began to engage the attention of a wider public through popular books, magazines and newspapers. Although the 1840s are usually singled out as a turning point in archaeological history because they witnessed "the foundation of the first of the county societies" (Clarke 1981: 115; see also Wheeler 1954: 5), they were also a turning point in archaeological communication. Most significantly, it was in this decade that weeklies like the *Illustrated London News* and *Punch*, both of which generously covered archaeology, were founded (Bacon 1976; Bray 1981: 221; Daniel 1986: 232; Moser 1998: 154-156)[4] and that publishers like John Murray began to encourage a broader readership by publishing abridged and therefore cheaper editions of archaeological books

(Daniel 1964: 154-155). In 1848-49, for instance, Austen Henry Layard's abridged account of his excavations at Nineveh became a bestseller, selling, Layard claimed, as well as a popular cookery book (*ibid*).

During this phase, which lasted until the early 1920s, antiquaries slowly transformed into 'archaeologists' with a growing interest in developing a more scientific approach to their work,[5] but without a recognisable profession or career structure to support them. As Wheeler (1955: 9) reminds us, "During the years before the First World War archaeology was still an unorganised discipline, its techniques were largely un-evolved. Systematic training did not...exist, and archaeological posts were in any case nearly non-existent." Not surprisingly, these first archaeologists still largely conformed to the antiquarian mould in terms of gender, class and financial independence.[6] Heinrich Schliemann and General A.H. Pitt-Rivers can be seen as the epitomes of this transitional age, but they interest us here because of their commitment to communication. Through their prolific writings, lectures, press articles and site or museum exhibitions, they were to define what the public communication of archaeology would mean for their own and succeeding generations (see Deuel 1978 and Thompson 1977).

In the public arena, the past was seen by many Victorians as a "potentially stabilizing influence" at a time of widespread social upheavals (Cunliffe 1981: 192). Furthermore, anxieties about the effects of unfettered development led to initiatives and legislation to protect and preserve the country's archaeological and historical heritage, like the Ancient Monuments Act (1882), the National Trust (1895) and the Royal Commission on the Historic Monuments of England (1907/8) (see Hunter 1981: 24-30). On a more personal level, it was also during this era that the leisure activity of visiting archaeological sites and excavations, what I call, after Wheeler (1954: 8), 'picnic archaeology', became a favourite pastime of well-off Victorian families.[7] A wider public, still largely confined to the upper or upper middle classes (Hudson 1981: 47, cited in Merriman 1991: 102), were becoming sensitised to archaeology's attractions at a time when the 'modernist' elite were rejecting them,[8] but also when, due to educational reforms, public literacy was on the increase (as was the public's disposable incomes and leisure time) and the size and composition of the lower middle classes was changing (LeMahieu 1988: 8-10). Mass circulation journals and daily newspapers were established to address this expanding readership, and competed with each other for different segments of it

(e.g. women, white collar workers, etc.). Only four years after its launch in 1896, the *Daily Mail* would lead the field with a circulation of one million (Price 1996: 325).

These new outlets and audiences provided archaeologists with a platform for disseminating the exciting discoveries that were being made during these years. The *Illustrated London News* and the national press became archaeologists' closest allies. They published archaeologists' own articles and communiqués from the field and sent out correspondents and illustrators to cover the more auspicious sites (Daniel 1964: 154; Moser 1998: 154). Moreover, from at least as early as 1873, when *The Daily Telegraph* funded G.A. Smith's expedition to Nineveh in search of the missing tablets of the Epic of Gilgamesh (Ceram 1986[1951]: 313; Anon. 2000), newspapers began to sponsor archaeological work, usually in exchange for exclusive coverage.[9] This partnership with the press continues to the present day, but it was to diminish in value during the 20th century with the emergence of new media partners competing for an even larger audience.

The Age of Mass Communication: 1920s-1950s

It is this enlargement of media and public that characterises archaeological communication's third phase, which was framed by two key public archaeology events and two remarkable archaeologists. Marking the start of this age, Howard Carter's discovery of Tutankhamun's tomb in 1922—the single most significant media event in the discipline's history—produced worldwide newsreel and press coverage that ensured that archaeology, "almost overnight, acquired a new market-value" (Wheeler 1955: 76). A second discovery, that of the remains of the Mithraeum uncovered during building work in London in 1954, caught the imagination of the post-war British public, 35,000 of whom daily visited the site (Barrett 1995: 5), and "demonstrated conclusively that archaeology had a role to play in the cultural life of the country and would no longer be the preserve of the professional" (Wainwright 2000: 910). That same year (and the next) archaeologists Mortimer Wheeler and, then, Glyn Daniel were named 'TV Personality of the Year' due to their contributions to the BBC's first two archaeological TV series, *Animal, Vegetable, Mineral?* (1952-58) and *Buried Treasure* (1954-59). These two proselytisers of what Daniel called the *'haute vulgarisation'* of

archaeology (Howard 1992: 8), published prolifically, acted as editors or advisers for archaeological magazines and book series, and double-handedly dragged their colleagues and the profession into the homes of the British public via radio and television. It is hard to imagine how 20th century archaeological communication would have developed without these men and events.

This phase witnessed the appearance of the first full generation of academically-trained archaeologists, coming from a broader socio-economic constituency (Jordan 1981: 209), and the initial establishment of many of the profession's organisations, boundaries and practices. Over these four decades, there was also a changeover in how British archaeology was funded, from personal resources, small institutional subsidies and direct donations from the public before the war,[10] to State funding by the Office, later Ministry, of Works during and after the war. This shift began a sea change in archaeologists' relationship with the public (from direct economic dependence to indirect accountability) that would affect their attitudes and commitments to public communication. The post-war re-development of Britain's bomb-scarred cities created a climate, reminiscent of today, where rescue digs would dominate field work, where, as Wheeler (1966: 93) put it, "Chance and salvage govern our labours," and where "archaeologists were paid to dig, but not to publish the results" (Pitts 2001a: 52). As late as 1955, it was still the case that the profession had few jobs to offer (Crawford 1955: 173), and that career advice to young archaeologists was "to inherit or obtain a private income" (Wainwright 2000: 910). Despite the lead offered by Wheeler and Daniel, that their legacies were not exploited to the full in the next phase can be seen partly as a result of archaeologists' growing need to address and resolve the profession's shortcomings.

During the pre-war years, the print media remained the prime outlet for archaeological communication, with a continuation of the pattern of popular book successes and newspaper competition for archaeological exclusives established in the previous phase.[11] A broader readership for archaeological magazines was encouraged when O.G.S. Crawford founded *Antiquity* in 1927, a journal that was more independent than the specialist journals of societies and institutions and that aimed at being "more than provincial or professional" (Crawford 1955: 311). The print media would, however, soon have to compete with newsreels, radio and television as important sources of archaeological news and information for the

British masses. From my research, for instance, British Movietone News alone produced 21 features on archaeology in the 1930s and 1950s, including items on Wheeler's excavations and the Mithraeum discovery. BBC radio, whose licence-holders tripled to nine million during the Thirties (LeMahieu 1988: 229), was imbued with the educational ethos of John Reith, its first Director General. This led to 'Talks' programmes becoming a major component in its schedule and to archaeology joining other scholarly disciplines as suitable subjects for radio programmes, most notably the series called 'The Archaeologist'.[12]

The 1950s saw an expansion in book publishing with the launch of several long-running generalist series on archaeology like Thames and Hudson's Ancient Peoples and Places (Peters 1981: 196-197), but it was the advent of television that was to have the most effect on public communication. The 'quiz-show' format of *Animal, Vegetable, Mineral?*, in which a studio panel of archaeologists had to identify and discuss artefacts, and the charisma and enthusiasm of the panellists, drew an audience, so its moderator Glyn Daniel claimed (1986: 256), of five million viewers. Its huge success led the BBC to produce *Buried Treasure,* a series on various archaeological topics that, despite cumbersome technology, pioneered most of the TV formats used since. By the end of this phase, it would come as no surprise that the BBC's then Director General, Sir Ian Jacob, would claim that "archaeology and show-jumping" were the two most popular things on British television (Daniel 1964: 150).

This age was therefore crucial in the history of archaeological communication for its high level of public and media interest in the subject, an interest which, for the first time, transcended class and educational boundaries. Democratisation of the profession, of its public,[13] and of the media[14] was synchronised to the benefit of all three partners. By the 1950s, British taxpayers had become the 'patrons' of archaeological work, and, as such, needed to be "cultivated and suitably rewarded" (Wheeler 1954: 192; Wheeler 1955: 104). At that time, Ceram (cited in Daniel 1964: 150) would write that "the British were, and are, fascinated by archaeological questions as are no other people in Europe." It was, as Daniel (*ibid*: 151) adds, the "agencies of mass communication" that had "widened the audience in quality and multiplied it enormously in size."

These thirty years were a schizophrenic time both for the discipline, as the profession became divided between, as Pitts (2001a: 50) writes, "diggers and thinkers" ("not just different cultures, but separate species"), and for archaeological communication, as the "thinkers" retreated from and the "diggers" pursued public and media attention. From the 1960s, the largely government-funded profession turned inward to focus on its infrastructures, to manage an expansion in academic education,[15] employment, technologies and specialisations, and to articulate and dispute archaeology's theoretical bases and vocabulary. The professionalisation of a maturing discipline inevitably shifted archaeologists' attentions to internal communication, increasingly framed in a more rarified discourse.[16] This shift was facilitated by academic pressure to 'publish or perish' and by a proliferation in specialist journals.[17] It was in this period, as will be discussed in Chapters Two, Four and Five, that the rules of 'proper' communication were codified. Seemingly only accountable to the public in an abstract way (through the public 'purse') and privileging internal over external communication, archaeologists were able to professionalise their discipline. They were also, however, defining themselves and their profession as irrelevant to the public and the mass media,[18] except when it came to mobilising public opinion over threats to Britain's archaeological heritage.

Signs of concern about the profession's disregard of public communication arose in the 1970s (Thomas and Arnold 1974: 241, 246),[19] out of the public campaign (known as RESCUE) which archaeologists organised against the destruction of archaeological sites by uncontrolled land development (see Rahtz 1974 and Jones 1984). Despite the lessons learned by RESCUE archaeologists, and their success in increasing public awareness and government funding (Wainwright 2000: 914),[20] the issue of archaeological communication in general (that is, not just as it related to site preservation), and the media's role in it, only gathered momentum slowly. By the end of the 1980s—notwithstanding the pleas of some (Bray 1981: 221; Fowler 1981: 64; Hodder 1992 [1984]: 128; Prince and Schadla-Hall 1987) who recognised that professional neglect of one's public was, as one put it, a "near suicidal stance" (Stone 1989: 203)—archaeology had reaped the consequences. The mass media and the public, whose appetites for archaeology had been whetted in

the previous age, were finding their nourishment elsewhere, notably in 'fringe' archaeology and Indiana Jones.

This phase saw an increase in archaeological publishing (Peters 1981: 198), assisted by the launching of specialist book clubs, but it also witnessed a downturn in factual media coverage of archaeology, as the press and television accommodated to growth and new competitors. The last major expansion in national dailies came in this period with the arrival of the *Sun* (1969) and the *Independent* (1986). As competition from television and each other grew, all three sectors of the UK daily press (downmarket tabloids, upmarket broadsheets, and midmarket tabloids) increased in size and re-positioned themselves in the marketplace. The downmarket tabloids went more downmarket, the broadsheets more upmarket, while the midmarket papers, sharing the same audience with television, suffered the most in readership loss (Tunstall 1996: 10-11, 185). One of the consequences of this was that press coverage and sponsorship of archaeology moved upmarket, becoming the prime domain of the quality papers (Stone 1989: 201), the subject providing ideal material for their new magazine supplements.[21]

Similarly, in television, when the BBC expanded to two channels in 1964, it gave its new 'highbrow' channel, BBC2, rather than the more mainstream BBC1, responsibility for archaeological programming. On the initiative of David Attenborough and Paul Johnstone (both of whom had worked on *Animal, Vegetable, Mineral?* and the former having become BBC2 Controller), BBC2 launched *Chronicle* in the mid-Sixties (Daniel 1986: 251, 260-261). For 20 years, this would be the BBC's primary strand for archaeological documentaries with an audience that grew from 1m in 1973 to 2.5m in 1983 (Norman 1983: 27). The BBC's sponsorship and live coverage of Atkinson's excavation of Silbury Hill in 1968, like its coverage of Alcock's work at South Cadbury, produced, however, disappointing results and would make the corporation uneasy about such investments for over a decade (Cleere 2000: 90; F. Taylor 2001: 475; Pitts 2001a: 353). Having started broadcasting in the mid-50s, the commercial television network, ITV, did not transmit archaeological series until the mid-60s when Anglia Television, one of its regional suppliers, put Glyn Daniel on its board to oversee their production (see F. Taylor 2001: 472-474). Yet network executives had little confidence in these series, for they aired many of them in off-peak hours (*ibid*). In 1981-2, some confidence returned, both with the start-up of Channel 4,

whose brief to be alternative and to source programmes from independent producers promised to make it "an ideal home for archaeology" (*ibid*: 477) and with the BBC's hugely successful 16-hour live coverage of the raising of the Tudor warship, the Mary Rose (Norman 1983: 27). Nevertheless, it was clear that the "honeymoon period" was over (Stone 1989: 199), and that, in a more competitive climate, archaeology was struggling to find space on the mainstream media.

Yet the public had not abandoned archaeology. They queued to see exhibitions, like the British Museum's 'Treasures of Tutankhamun' in 1972 or York's Jorvik Centre (opened in 1984); they chose archaeology over economics, making it "the most popular subject" in 1960s adult education classes (Fowler 2001: 607); and they campaigned alongside actors when the remains of the Rose Theatre were threatened in 1989 (Wainwright 2000: 924-925; Blatherwick 2001). However, when asked to name an author of archaeology books, survey respondents in 1984 (Stone 1989: 200) "most frequently named" Erich von Däniken, whose best-selling books, like *Chariots of the Gods* (1969), were anathema to most archaeologists. Ignored by much of the archaeological community, estranged from TV archaeology as it moved off or to the margins of the populist channels and reduced to being consumers of the 'heritage industry' by government (see Champion 1996: 138), the mass public assuaged their archaeological hunger with alternative theorists and silver-screen heroes. By the mid-1980s, as Stone (1989: 201) writes, "only those sections of the population who enjoy academic-type documentaries, listen to Radio 4, or who read the heavier academic books or quality press are exposed, on a regular basis, to high quality...archaeological information." Archaeologists and media professionals were thus together responsible in these years for not feeding the wider public's appetite for archaeology.

The Age of Global Communication: 1990 to the present

Today we are in the fifth phase of archaeological communication, which began in 1990 with the government-led commercialisation of the archaeological and media professions. In archaeology, the profession was to become "client-driven and employer-dominated" (Ascherson 2002: 129) with the coming of PPG16, the government guideline that forced commercial developers to take account of and pay for the archaeological impact of their work.[22] This shifting of the burden of

funding from government (via, since 1984, English Heritage) to the private sector has caused "a fundamental re-shaping of the structure of the profession" with the appearance of 'contract archaeology' and competitive tendering (Wainwright 2000: 929). PPG16 would lead to an almost threefold increase in archaeological fieldwork and assessments between 1990 and 1996 (Darvill and Hunt 1999: 14), with excavations in one county, West Sussex, jumping from one in 1990 to 114 in 1998 (M. Taylor 2001). Archaeological funding from developers has been estimated as amounting to £30-68 million a year (Wainwright 2000: 929; Lambrick 2002a).[23] Yet, PPG16's success, as Baker (2002) points out, "has been compromised by poor coordination with research and communication," its results "not feeding back into the wider academic and popular consciousness." As he adds, this is not PPG16's fault, for its brief was limited to land management. The failure to make adequate provisions for the public dispersal of PPG16 results[24] has, however, increasingly left archaeological communication in the hands of the developer-employers, to be decided according to their publicity needs and capabilities. These changes have unsettled the profession, forcing archaeologists to ask fundamental questions about their place in and value to society, as they did at the Institute of Field Archaeologists' Annual Conference in 2001.[25] This has led to an increased valorisation of archaeological communication and to archaeologists' 'rediscovery' of the importance of public outreach (Stone 1997: 23; McAdam 1999: 50).

In the media, the deregulation of broadcasting and the expansion of outlets and markets has resulted in an even more competitive landscape and fragmented audience. Fewer Britons now read a daily newspaper (Tunstall 1996: 215), a trend accelerated by the accessibility of 24/7 news coverage on TV and the internet. Although the internet has revolutionised communication and information-sourcing, with archaeological websites providing sophisticated ways of engaging with the public, it has not yet overtaken the press and television as the public's primary news sources (Walker 2000). Since the mid-1990s, the press and television have embraced archaeological news and information, with TV coverage reaching levels that surpass those of the 1950s. BBC2 and Channel 4, in particular, have used archaeological programming to hold onto audiences in the face of competition from niche broadcasters like Discovery, National Geographic and the History Channel. The success of this programming has led to archaeology's return to or arrival on mainstream channels like BBC1, ITV and Five. Book publishing

has been reinvigorated by best-selling TV tie-ins and new popular archaeological series, and video games, films and the internet have been responsible for firing the archaeological imagination of a new generation.

Archaeologists and the media have together created an age in which archaeological communication would flourish, and the public have welcomed this. Increasing numbers have been cited at sites and museums, the Museum of London, for instance, clocking a 60% rise in visitors between 1997 and 2001 and attributing this to their 'Londinium' exhibition on Roman London (Swain 2001). At least up until the mid-1990s, student applications for university archaeology courses had "steadily increased", almost doubling between 1986 and 1995 (Andrews 1999: 92), a phenomenon often connected to the 'Indiana Jones effect' and latterly to TV's popular *Time Team* series (Hatley 1997: 14). The public became directly involved in several high-profile rescue campaigns, such as Seahenge in 1999 and the Newport ship in 2002, and showed their 'passive' engagement by watching archaeological documentaries on television in ever greater numbers. A new milestone was reached in 2003 when BBC1's drama documentary *Pompeii: The Last Day* attracted over 10 million viewers (source: BARB), that is, 40% of the total TV audience (Ferguson 2003), one-sixth of the UK population.

It is this fifth phase of synergy between archaeologists, the public, and the media that is the focus of this dissertation. Recounting the history of archaeological communication even in this brief form has hopefully dispelled any notions that the relationship between these three evolved in a straightforward path, that communicating with one's public is a 'new' role for archaeologists or that the present age of high synergy is unique. It has also underlined the dynamism and complexities of the relationship, a necessary antidote to facile accounts that judge the present in isolation or that privilege the perspective of one partner in the relationship over the others. Having insights about the history that consciously or unconsciously colours each partner's attitudes towards archaeological communication makes it easier to understand the current nature of the relationship, the subject to be explored in greater detail in Chapters Two to Four. In the next section, I look at the wider reasons why public communication has moved from the margins of debate to a prime position on the archaeological agenda, featuring in academic conferences, university courses and publications.

Why Now?

The growing prioritisation of archaeological communication within the British archaeological community stems from a convergence of wider theoretical and socio-political debates in society and of practical factors affecting the profession. On the one hand, concerns about the way science is communicated, about the public's level of scientific understanding and about how socially inclusive or exclusive British society is have become the focus of much attention in the academic community, as well as in government. Disciplines that see themselves implicated in these debates have responded by translating the issues into their own terms. For archaeologists, this has meant asking questions about how archaeology is communicated, how much the public knows about archaeology and whether the profession is making adequate efforts to address the needs of Britain's multicultural population. On the other hand, as discussed above, archaeologists have simultaneously been coming to terms with the practical consequences of an increase in their activities alongside fundamental changes in the profession, in the media landscape and in public interest, and this has meant coming to terms with public communication.

Of the wider issues, the one most relevant to archaeological communication and this dissertation is the debate about the 'public understanding of science'. According to Dawkins (1998: 21-22), this movement started in America in the 1960s as a counter to Soviet scientific advances, but was taken up in Britain (from the mid-1980s) as a response to falling student numbers in science courses. PUS (as it came to be known) created a platform for research into the perceived growing distance between scientists and the public and proposed ways of trying to improve the situation, primarily through education. The explanation of why the public communication of archaeology matters largely correlates with the reasons offered by Durant, Evans and Thomas (1989: 11) about why society should care about the public's understanding of science:

> First, science is arguably the greatest achievement of our culture, and people deserve to know about it; second, science affects everyone's lives, and people need to know about it; third, many public policy decisions involve science, and these can only be genuinely democratic if they arise out of informed public debate; and fourth, science is publicly supported, and such support is (or at least ought to be) based on at least a minimal level of public knowledge.

As the writers add (*ibid*), "common sense suggests that the scientific community would be unwise to presume upon the continued backing of a public that knows little of what scientists do." The PUS campaign was, however, to be attacked for elevating scientific expertise beyond criticism and above other types of expertise held by the public and for not being a dialogue with, but a monologue to, the public (Hargreaves and Ferguson 2000: 23, 5).

That the campaign was failing in its mission was acknowledged in the later 1990s, when an adversarial climate, blamed primarily on the media, developed between the public, government and scientists over issues like BSE, GM foods, cloning and the Foot-and-Mouth epidemic. This was taken as a sign that a basic rethinking of PUS was needed, and this led to new attempts to clarify the issues, focused largely on the media's role in science communication. Two reports duly appeared, one initiated by the House of Lords Select Committee on Science and Technology (*Science and Society*, February 2000) and one commissioned by the Economic and Social Research Council (*Who's Misunderstanding Whom?* [Hargreaves and Ferguson 2000]).

Both reports addressed a central paradox: that public trust in science was decreasing at a time of increasing public interest in the subject. As Gordon Marshall (2000), chief executive of the ESRC, put it: "The public is increasingly intrigued by science...but tends to be suspicious of it, a phenomenon which scientists often blame on the media." The picture painted of scientists' central worries could just as well apply to archaeologists, as can be seen here:

> [the GM food furore] has re-ignited a sense of frustration about the difficulties of conducting science in a society where public knowledge about science relies upon increasingly unreliable mass media....Propelled by competition, newspapers and broadcasters are widely seen to be 'dumbing down' at a time when the pace and salience of scientific change demands a smarter, calmer, more scientifically literate public. (Hargreaves and Ferguson 2000: 1)

> Archaeology and the profession of the archaeologist are now common subjects for portrayal on television. Particular programmes and even whole series often stir strong passions within the profession....Debates about the media version of archaeology often centre on whether the use of audio-visual techniques of presentation involves 'dumbing down' the message....It is also worrying that, in spite of the increased exposure, the image of the archaeologist as portrayed on the screen seldom agrees with the reality of life in the profession. (Henson 2001)

This wider debate about science, the public and the media is reflected in the discourse of current theoretical work within the archaeological profession,

namely interpretive archaeology (and the questions it raises about reflexivity and heritage) and public archaeology and archaeological representation, the academic sub-fields under whose umbrella the study of the public communication of archaeology through the media now resides.

That the term 'public archaeology', at least in Britain, has its origins in the RESCUE movement of the 1970s is clear from one recent definition of it as "a generic term for that branch of archaeology that deals with the impact of contemporary construction and other developments on archaeological sites, and the various laws enacted to mitigate the threat" (Bahn 2001a: 369). Its brief has, in fact, been broadened to include archaeological ethics or "the problems that arise when archaeology moves into the real world of economic conflicts and political struggle" (Ascherson 2000: 2). Public communication and archaeology's representation in the media are also considered parts of public archaeology. Yet their inclusion is usually tied to their role in educating the public about the value of its archaeological heritage (e.g. McManamon 2000), rather than to their role in self-defining the discipline and constructing public knowledge about the past. These latter aspects fall instead within the catchment of one of the discipline's newest specialisations, archaeological representation. This field investigates both academic and non-academic (i.e. media) ways of presenting archaeology and "asserts that non-academic forms of presentation are not merely by-products of academic research, but rather that they have their own distinctive ways of participating in the process of making meaning" (Moser 2001: 262). Thus, archaeological communication now has two homes within the academic community from which questions about the interface between archaeologists, the public and the media can be explored.

These questions are turning British archaeology into "an increasingly self-aware and outward-looking profession" (Beavis and Hunt 1999: v) for whom "communication has assumed a far greater priority...than was the case 25 years ago" (Hinchliffe 1999: 21), and yet one in which archaeologists still sense "a general failure in archaeological communication at several levels" (McAdam 1999: 50). Evidence that these concerns are moving up the archaeological agenda can be found in the recent proliferation of forums devoted to exploring them. The All-Party Parliamentary Archaeology Group (APPAG) was formed in 2001 "to promote archaeology and education in the parliamentary sphere"

and is chaired by archaeologist Lord Renfrew (Stoddart and Malone 2001: 479). A new peer-reviewed journal, *Public Archaeology*, edited by journalist and writer Neal Ascherson, was launched in 2000. Postgraduate university courses focused specifically on public archaeology, archaeological representation and 'archaeology for screen media' have been established at the Institute of Archaeology, London, the University of Southampton and the University of Bristol. And the number of conference sessions devoted to archaeology and the media has expanded, including ones organised by the Society of Museum Archaeologists (October 2000), the University of Southampton (November 2000), the Theoretical Archaeology Group (December 2000), the IFA (April 2001, April 2004), the Council for British Archaeology (February 2002) and the Sheffield Archaeological Forum (March 2002).

Public communication has also been at the heart of concerns that have recently surfaced in the world of artefact and site ownership, management and access. 1997 brought a new Treasure Act that led to the setting up of the Portable Antiquities Scheme. This non-statutory pilot project was aimed at persuading amateurs (especially metal detectorists) to volunteer to have their finds officially recorded in order to bring both them and the otherwise lost information their finds represent into the professional 'fold'. Deemed a success by the Government (DCMS 2001: 50-51) and then expanded (Selkirk 2002), the scheme has been criticised for potentially encouraging that which it is attempting to control, namely treasure-hunting (Lambrick 2001). This issue flared up in 2003-4 with the airing of the BBC series *Hidden Treasures* (2003), that followed cases of discoveries made by metal detectorists and was linked to a British Museum exhibition of some of the finds (see *Current Archaeology*, No. 189, pp. 389-393 and No. 190, pp. 252-254). 1999 witnessed a return of the perennial stand-off between the British and Greeks over the Elgin Marbles (see Hencke 1999a, 1999b; Wilson and Hencke 1999). This time it was, however, against a backdrop of two government initiatives, involving archaeologists, established to examine artefact ownership and the UK's role in the black market in antiquities (the House of Commons Culture, Media and Sport Select Committee on Portable Antiquities and the Illicit Trade Advisory Panel). 2000 saw Stonehenge opened for summer solstice revellers for the first time in 16 years, an indication of the pressure on site managers to encourage public access

and on English Heritage to redeem itself after the public relations disaster over the lifting of the Neolithic timber circle known as Seahenge in July 1999 (Champion 2000, Denison 2000a, Miles *et al.* 2000). Later in 2000, public access and social exclusion/inclusion would return as major themes in English Heritage's review of government policy on the 'Historic Environment' (*The Power of Place: The Future of the Historic Environment*).

As significant as these recent developments are, they are still only half of the story of why archaeological communication is a topic of such currency. The other half involves the dramatic changes identified in phase five above. The archaeological profession has been transformed in ways which directly affect the people who engage in, the motivations behind, the mechanisms used for and the importance, amount and nature of archaeological communication. The profession's hyperactivity in the 1990s has been matched by archaeology's hypervisibility in the media, which has, in turn, stimulated the public's re-discovery of the subject. Although evidence for this has already been given and will be elaborated on in later chapters, it would be useful to highlight here some of my findings about media and public interest.

Between 1996 and 2002, the mass media's coverage of archaeological subjects grew significantly, with increases first noticeable in the press and then in television. *The Daily Telegraph*, for instance, expanded its archaeological coverage over 600% in the three years between October 1994 and September 1997. Although later declining, the newspaper's coverage remained in 1999-2000 three times higher than it had been in 1994-1995 (see Figure 4.1 in Chapter Four). The number of archaeological documentaries broadcast by two of Britain's terrestrial channels (BBC2 and Channel 4) grew only slightly between 1998 and 1999, but increased by 80% in 2000 and went up a further 10% in 2001 and 24% in 2002 (see Figure 4.2 in Chapter Four). Counting original and repeat broadcasts across the (then) four terrestrial channels, the total number of individual archaeological programmes aired between 1998 and 2002 would amount to 651 transmissions. This huge investment in archaeology was rewarded by the creation of a devoted core audience. Almost a quarter of the BBC2 and C4 documentaries reached the 'top ten' of audience ratings in their transmission week, with 47 of the top 50 programmes claiming between 3.49 and 5.52 million viewers, at a time when a 3.5 million audience was considered

"phenomenal" for factual programmes (Kinnes 1999a; see Table 3.5 in Chapter Three). When TV archaeology re-appeared on mainstream channels in 2001-2, audience figures skyrocketed to over 9 million, and in 2003, to over 10 million.

All of these statistics, trends and developments are persuasive testaments to support the view that the public communication of archaeology through the media is a topic whose time has finally arrived. In Britain, at the turn of the new millennium, a seminal point in the relationship between archaeologists, the media and the public has been reached. In order to benefit from this and move forward, it is essential that we endeavour to understand the current situation and its implications for the future. Blanket assessments and homilies about the public communication of archaeology (usually centred on the media's role in mismanaging it) are no longer acceptable: what is required is new ways of thinking and new types of questions, backed up with detailed analyses of concrete evidence. The overall agenda seems clear: we need to deconstruct and reconstruct our views about archaeology and its public value, about archaeologists and their attitudes to the media, the public and communication, and about the roles of the media and the public in the process of mediating archaeology. This structural rethinking supported by evidence-based analyses is the primary objective of this dissertation. But if one has gone some way towards answering the 'why now' question, one should perhaps step back and ask the more basic 'why?'

Why at All?

If one takes timeliness out of the equation, there are still at least five reasons why the public communication of archaeology through the mass media is an important field of study. Any one of these on its own merits would be sufficient to justify serious study: together they make an overwhelming case.

First, because archaeology plays an integral role in a society's understanding of its past and how its past is relevant to its present and future.

Archaeology is a doubly resonant or reflexive field of work. On the one hand, its findings are a source both for understanding the past and for making sense of the present. It is this cross-over into the present, what Trigger (1989: 14) calls its "transparent relevance for current political, economic and social issues",

which earns archaeology its responsibility toward the public, and, which, as he goes on, "makes relations between archaeology and society especially complex and important." On the other hand, archaeologists' priorities at any one time (what they choose to investigate and the methods and theories they apply) tell us even more about the present. "Far from being an irrelevance on the pale of society," Fowler (1981: 58) has remarked, "archaeology is a very sensitive indicator indeed of changes in social attitudes and in the elements of society itself." The recent emphasis on gender archaeology, for example, allows us to seek new evidence, to ask new questions of old evidence and to propose new interpretations, which may help to make visible previously invisible parts of human history and prehistory, as well as provide insights of relevance today. But the fact that this work should be undertaken at this point in time also speaks volumes about our critical stance towards the androcentric bases of previous archaeological work and about the role of gender issues in today's society. The same analysis can be made about public archaeology: the why now, and not before now, being as relevant as the actual findings.

Futhermore, archaeology has an inherent public dimension in that, like many sciences, it is a narrative-constructing process in which material evidence is used to create interpretations or 'stories' about the past (see Pluciennik 1999). Its focus on the human past makes archaeology more suitable than many other sciences for producing narratives with meanings beyond the scientific. It is this potential for creating a human story or "heroic narrative pattern" which so attracts the media and which, as Silberman (1995: 252) argues, "deeply colours the general public's understanding of all archaeological work." "We cannot understand another culture if we do not understand its stories," writes Silverstone (1999: 40), "We cannot understand our own culture if we do not know how, why and to whom our own storytellers tell their tales." All those who practise and/or mediate archaeology are, in this sense, storytellers. Dissecting their archaeological stories and the how, why and to whom (as well as the when and by whom) they are told therefore provides keys to our past-and-present views of our past and present.

Second, because archaeologists have a duty to communicate but are insufficiently reflective about or schooled in the variety and consequences of their communication choices.

As elemental as public communication is for practising archaeologists, as will be discussed in Chapter Two, it is normally defined in archaeological literature in either a pedagogical or, more normally, a museological sense. This is largely due, I would suggest, to the roles that education and museums have traditionally played as two of the profession's main employers and thus where archaeologists' ideas about and expertise in communication have been developed and are seen to be relevant. There is substantial literature on archaeology and education/museums, some of it, like Merriman (1991), Hooper-Greenhill (1995), Jameson (1997) and Beavis and Hunt (1999), offering important insights into the public's consumption of archaeology. By contrast, the public communication of archaeology *through the mass media* is seldom dealt with in academic writing, there being, for instance, no books solely on this subject. Several books do refer to or include articles on public/media communication within the broader topics of preservation, presentation, valuing the past, or archaeology and politics (e.g. Fowler in Lowenthal and Binney 1981; Lowenthal 1985; Stone and Emmott in Layton 1989; Gero and Root, Spriggs, and Scarre in Gathercole and Lowenthal 1994; Silberman in Kohl and Fawcett 1995; and Hodder and Roth in Meskell 1998).

Historical insights into the subject can be gleaned from Bacon (1976), Schnapp (1996) and notably Evans, Cunliffe, and Renfrew (1981), which includes a valuable section about archaeological publishing, stereotyping and television. Of historical interest, too, are the first-hand accounts of the profession's great popularisers, Mortimer Wheeler (1954, 1955, and 1966) and Glyn Daniel (1964, 1967, 1986, and 1992), as well as Jacquetta Hawkes' (1982) biography of Wheeler and Charles Thomas's (1976) article on the archaeological novel. Four TV producers have also left useful accounts of their archaeological programmes or strands (i.e. Johnstone 1957, Jordan 1981, Norman 1983 and Forbes Taylor 2001). In addition, television series have generated a host of tie-in books (too numerous to mention), which, although basically replications of the programmes, offer occasional insights into the problems of presenting archaeology to the public. Archaeologists' critiques of these programmes and books (e.g. Cleere 2000 or Faulkner and Harris 2000) can provide poignant evidence of the profession's attitudes towards media representation.

Of more contemporary relevance, British archaeologists' stance on public communication *per se* since the 1980s (sometimes with references to the mass media) can be traced through several books and articles (e.g. Cunliffe 1981, Bray 1981, Fowler 1981, Greene 1983/1995, Hodder 1992 [1984], Prince and Schadla-Hall 1987, Stone 1989 and 1997, Barrett 1995, Bahn 1996, Renfrew and Bahn 1996/2000, Schadla-Hall 1999, Champion 2000, Wainwright 2000 and Baker and Morris 2001). However, archaeology's relationship with the press or television has only been covered in any depth in five texts: Finn (2001), Stoddart and Malone (2001), Russell (2002a), Hills (2003) and Ascherson (2004). Research in this field has been assisted by journals like *British Archaeology* and *Current Archaeology*, which have increasingly made TV archaeology a staple ingredient in their coverage. That archaeologists are beginning to examine 'archaeological representation' in the mass media is evidenced by a small, but growing number of studies on specific media artefacts (e.g. Girdwood 1984, Finn and Henig 2001, James 2001 and Trümpler 2001 on fiction; Russell 2002b on science fiction; Forte and Siliotti 1997 on virtual reality; Solomon 1976, Evans 1983, Day 1997, Stern 2001 and Membury 2002 on feature films; and Bray 1981 and Hamilakis 2001 on cartoons). Nevertheless, given the vast literature that exists about archaeology as a whole—Oxbow Books had catalogued over 10,000 books on ancient history and archaeology between 1991 and 1999 (David Brown, *pers. comm.*)—the fifty-odd texts referred to above represent a small corpus indeed.

With so little literature, educating archaeologists about public communication has had to rely on personal experiences. This pragmatic approach tends to encourage the recycling of 'horror stories', with anecdotes replacing analysis or practical instruction. Without more theoretical and empirical study and application, one is likely to continue turning out archaeologists lacking the skills to function competently as communicators or even the necessary framework to understand the process of communicating archaeology itself. If we accept Sabloff's assessment in *Antiquity* in November 1982 (Daniel 1992: 165) that it is "the responsibility of archaeologists to correct the misinformed perspectives of the discipline of archaeology that many members of the popular media and the general public seem to have", then it is essential that they learn how the process of mediation works in order to make more informed choices

about when, where, what, how and with whom they communicate: in sum, to become better informed communicators. More study is clearly called for.

Third, because the mass media and how it represents archaeologists and the profession play a part in the discipline's definition of itself and what it means to be an archaeologist.

The above quote from Sabloff is more problematic than it appears, for it implies that a major reason why archaeologists need to work with the media or the public is to rectify "misinformed perspectives." This formulation ignores the degree to which media representations, informed or misinformed, have been critical to how the profession has defined itself. In this sense, the task is far less one of correcting false images than of understanding how *all* images of the profession and its practitioners, whether produced by those inside or outside the discipline, have become internalised into norms that characterise how archaeologists look, behave, work and play, that distinguish archaeology from other professions, and that determine who is and who is not 'an archaeologist' (see Moser 2001: 263).

As discussed earlier, the move towards professionalisation in archaeology, the drive to create what Moser (1995) terms "a distinct cultural identity for the discipline", has created tensions within the profession, such as over the growing exclusion of and diminishing opportunities for amateurs. It has also made archaeologists particularly uneasy with representations that remind them (and the public) of the roots of archaeology in grave digging and artefact collecting. The "dividing line between [archaeologists] and the grave robbers" is, Deuel (1967: 52) reminds us, "uncomfortably thin," and, in Schnapp's view (1996: 12), archaeology could be called "the little bastard sister of collecting." I would further argue that it is this issue of constructing and defending boundaries around the profession in order to legitimate it which lies behind many criticisms of media representation, a subject which will be discussed in Chapter Two. More attention to and analysis of media representations of archaeology could help archaeologists to understand better not just the media and the public, but also themselves.

Fourth, because for most members of the public it is only through the mass media that they become informed about archaeology.

The past itself, let alone archaeology, had little meaning to earlier generations. "During most of human history," Lowenthal and Binney (1981: 17) remind us, "people have lived under much the same circumstances as their immediate and even remote forbears, major change has occurred at an imperceptible pace, and past has scarcely been differentiated from present." Today, people live with a concept of the immense expanse of human history. Their capacity to access and understand this, and subjects like science and archaeology, has likewise expanded, thanks to the broadening of educational opportunities and the development of the mass media (Nelkin 1995: 2; Fenton *et al.* 1998: ix). No matter who we are, little of our factual information about the world beyond our own private circle comes to us first-hand; rather it comes to us through the intervention of a medium: e-mails, websites, books, magazines, newspapers, radio or television. This information is offered to us in a constant daily flow, and, as readers, viewers and listeners, we participate in the mediation process, using these varied sources to help us construct our ideas and opinions.

At times one feels, however, that archaeologists' articulated worries about media misrepresentation and public misunderstanding (and the science community's obsession with PUS) are grounded in an unarticulated low assessment of public intelligence and of the public's ability to judge the media critically. This estimation of the public as "easily irrational" and "malleable to media hysteria" assumes, in the words of Hargreaves and Ferguson (2000: 17), "that the public is stupid, or at least less able to make valid judgements than expert scientists." Surely, the scientific community's need for "informed public debate" leading to democratically-arrived-at decisions (Durant, Evans and Thomas 1989: 11) is doomed, if they take this view of the public and fail to acknowledge, study and, above all, value the public's own expertise, as well as the sources that they rely on in forming their opinions. With so little study and evidence (mainly, as we shall see, a few surveys), it is impossible to judge either the public's level of knowledge about archaeology, or where they get the information to construct it from or how they themselves mediate it. Since the 1970s, some detailed research has been done on the public consumption of media messages (e.g. the work of the Glasgow Media Group). Yet thirty years on, this type of research is struggling to keep pace with the fast-changing media landscape, and the need for it to catch up is ever more urgent.

And fifth, because the mass media have for too long taken the brunt of criticism for mis-communicating archaeology, while archaeologists' own responsibilities in the communication process have been insufficiently scrutinized.

Media coverage makes it possible for large numbers of people to share the same information at the same time. This is what makes the mass media intrinsically democratic, and, as with most things democratic, one tolerates the bad to guarantee the good. This was implied in one of the conclusions in the House of Lords' *Science and Society* report (cited in Hargreaves and Ferguson 2000: 8, my emphasis) that "scientists must take the rough with the smooth and learn to work with the media *as they are*."

Nonetheless, certainly throughout my lifetime, it is the media who have taken the blame for any and all misrepresentations in reporting, what I call 'the blame game'. Since one of the tenets of professional etiquette is not to criticise one's colleagues in public, it is unlikely that colleagues will be blamed publicly even if they are deemed to be at fault over media misrepresentations. Occasional references to unnamed colleagues who may over-hype their findings (e.g. Fagan 2001: 459-460) is about the closest one comes to archaeologists' accepting responsibility for inappropriate media coverage. This one-sided apportionment of blame is lazy and un-self-critical; it abnegates one's own accountability and ignores the powerful roles that sources and means play in disseminating information, as will be explored in later chapters. By constantly focusing on the issue of 'accuracy', the blame game also obscures other questions that need to be addressed and studied. As Silverstone (1985: 2) puts it, "it is not only a question of what we know, how much or how little, or even necessarily how accurately, but of how what we know is presented to us and framed in a particular way." In the end, as Hargreaves and Ferguson (2000: 4) say, "crude oversimplification about the media is as damaging as crude oversimplification about science."

Although the media landscape has changed beyond recognition in Britain over the past twenty years, the discourses and mindsets about the media have remained static. It is hard to disagree with the "underlying message" in Hargreaves and Ferguson (*ibid*: 46, their emphasis) that "*science communication issues are still, to an alarmingly large extent, trapped inside mechanisms and habits which may have been appropriate in the early 1950s* and relying upon research

which has not even come to grips with the arrival of television." It is clear from this that all those involved in the communication process today need to up-date their "media literacy" (Silverstone 1999: 153). The recent emergence of public archaeology and archaeological representation is an encouraging sign that the profession has recognised that it cannot have 'reflexivity' without redefining the debate about the media's role in archaeological communication. As one archaeologist (Dalwood 1999) riposted on the internet:

> Personally I am not sure that [*Time Team*] gives any more of a 'false' view of archaeology than (say) a serious news article about an archaeological site in *The Guardian*. The fact that a number of *Time Team* programmes met quite real problems, or did not quite provide the desired answers to the original problem, is, I would suggest, pretty radical. Isn't this what a self-reflexive archaeological practice [is] meant to be like?

In the final analysis, we need to study the public communication of archaeology and the relationship between archaeologists, the public and the media because the latter are all mediators bound together in determining the former. We need to understand that there is no one 'archaeologist', no one 'public' and no one 'media'. Above all, we need to overcome out-dated frames of reference and begin to throw away words like 'blame' and 'dumbing down', because they get us no closer to understanding the process of mediating archaeology.

Why So Little Research?

Although the literature on the public communication of archaeology through the media is sparse, some research has been undertaken since the 1980s. This has consisted almost exclusively of public opinion surveys conducted to provide statistical evaluations of the nature of public attitudes towards archaeology. These surveys attempt to put evidence behind assumptions and to fill a void in archaeologists' knowledge, as called for by W.D. Lipes in Canada as long ago as 1974 (Pokotylo and Guppy 1999: 400) and as explained by American archaeologist, Francis McManamon (2000: 5,11; my emphasis):

> Although there seems to be an inherent public curiosity about and interest in archaeology and archaeological resources, the nature of these are not well understood. Also, we know very little about how the public absorbs information about archaeology. [...] Archaeologists' knowledge about the kinds of archaeological subjects that are of most interest to the public, how

> well the public understands archaeological interpretations and most other aspects of the public's understanding of archaeology, is *practically non-existent.*

In Britain, this void was flagged twenty years ago as a "matter of concern" by Bray (1981: 221), who added that the "raw materials" for understanding the public's perceptions were all around us "in the form of ephemera of all kinds: newspaper cartoons, television programmes, magazine articles, pulp fiction, advertisements, and even popular songs." Four years later, Lowenthal (1985: xxvi) found "the virtual absence of large-scale inquiries" into how people "see, value or understand the past" as "astounding." By 1989, Stone (1989: 203) would chastise the profession for "the complacent attitude of archaeologists and their apparent disregard of the opinions of the rest of the population."

Despite these warnings, ten years later, the situation had not improved, as Schadla-Hall's assessment (1999: 151, 155) testifies:

> Despite the assumption that the public in general supports the efforts of archaeologists in protecting their heritage...there is remarkably little hard statistical evidence for the level of public support and interest in archaeology. [...] We do not know if the public does distinguish between 'good' and 'bad' archaeology in the media. This is another area where in-depth research would be most informative and also give us real insight into the nature of public interest in archaeology.

What, then, had been done in twenty years? To date, the results of a dozen surveys (**Figure 1.1**) in North America and Britain have been partly or fully published or announced (although it is likely that smaller or site-specific ones have been undertaken only for internal use). Despite good intentions, most of these surveys produced only patchy results.

A potentially interesting survey in four UK cities in 1983-84 was never published, due presumably, as one of its organisers acknowledges (Stone 1989: 197), to conclusions "not seen as fully conclusive" and problems of "size, bias and coverage." The limited objectives, demographics or geographics in some of the surveys and the political agendas behind others force us to query how the survey questions were framed and how results were interpreted. For instance, although 58% of those polled about Stonehenge in 1998 "said that they would pay up to £7 per household in extra taxes for two years" to protect the site, 16% "insisted that they knew absolutely nothing about Stonehenge, not even what it looked like" (Kennedy 1999a). And although 60% of the American public "believes in the value of archaeological research and education", the latest

Figure 1.1: Public Opinion Surveys about Public Attitudes to Archaeology (UK/US/Canada)

1. **YORK 1979-81** (Jones 1999: 65): Interviews and questionnaires of visitors at the Coppergate excavations in York, UK

2. **HODDER, PARKER PEARSON, PECK, STONE 1983-84** (Stone 1989: 197-205; Hodder 1992 [1984]: 128): pilot study in 1983 in Cambridge followed by four-city UK survey of 301 people in 1984 (results not fully published)

3. **GRIGGS AND HAYS-JACKSON 1983** (Merriman 1991: 101): survey on "public image of archaeological museums", UK

4. **KINGSTON UPON HULL 1984** (Prince and Schadla-Hall 1987): survey of the public image of local UK museum (including archaeological holdings)

5. **FEDER 1984, 1987, 1995, 1998** (Feder 1999: 4): US university students' knowledge of archaeology

6. **EMMOTT 1980s** (Emmott 1989: 21-44): UK survey of 117 Southampton students (10-12 years old) on knowledge of prehistory and archaeology

7. **MERRIMAN 1985** (Merriman 1991): UK-wide random postal survey (965 replies) of "patterns of people's heritage visiting, their attitudes to them, their images of the past, and on other, non-museum, ways in which they experience the past" (*ibid*: 4)

8. **POKOTYLO AND MASON 1991; POKOTYLO AND GUPPY 1996** (Pokotylo and Guppy 1999): Canadian surveys of residents of Vancouver, British Columbia in order to gauge levels of heritage and legislation consciousness

9. **NATIONAL TRUST 1996-99** (Taylor 2004: 44,46): UK survey of Avebury visitors to help in drawing up of new interpretation plan

10. **ENGLISH HERITAGE 1998** (Kennedy 1999a): Survey of 500 visitors to Stonehenge and UK-wide poll of 700 people on attitudes towards Stonehenge (announced, not published)

11. **HARRIS INTERACTIVE 2000** (Neikirk 2000): US random sample of 1,016 adults on attitudes to archaeology and heritage, conducted by Harris Interactive and commissioned by a coalition of US archaeological organisations led by the Society for American Archaeology

12. **HISTORIC ENVIRONMENT 2000** (English Heritage 2000): MORI poll and Socioconsult survey on UK public attitudes to the historic environment, commissioned by English Heritage for their report to UK government

Harris poll has to admit in the same breath that "they may be unclear about the primary activities of and topics studied by archaeologists" (Neikirk 2000). Which statements and figures are the more significant? Also, more than half of these polls date from before the 1990s, and thus their results have historical significance, but are of questionable value as indicators of present attitudes. Having said that, the results of some of these surveys will be discussed in greater depth in Chapter Three. There and elsewhere in this dissertation, I use television audience ratings for archaeological programmes to gauge the level of general public interest in archaeology. I am, however, under no illusion that these figures tell us whether or not the British public *supports* "the things archaeologists do in defence of 'their heritage'"(Ascherson 2000: 4).

These surveys have only focused on the public-archaeology axis of the relationship; the media-archaeology axis has fared little better in research terms. I am unaware, for instance, of any significant attempts to measure archaeological coverage in the UK mass media quantitatively (outside this dissertation). Moreover, although Gero and Root (1994), Spriggs (1994) and Scarre (1994) have analysed the content in *National Geographic*, Hawaiian newspapers and archaeological atlases respectively, the only content analyses of British media coverage of archaeology appears to be a breakdown of editorial subjects during Glyn Daniel's editorship of *Antiquity* (Atkinson 1981: 237-238), Thomas's (1976) now dated analysis of the British novel, and Norman's (1983: 30-32) summary of topics dealt with during his time as producer of BBC's *Chronicle* series. Given the thousands of media artefacts about archaeology in existence, these three articles and the dozen other articles or case studies referred to earlier barely scratch the surface. This overall lack of research attention may be, as Matthews (2002: 129) calls it, "merely a reluctance to perform the necessary analysis", but why the reluctance?

It seems clear that the subject of archaeology and the media has not been perceived as one of pressing importance to practitioners or academics in either field. I would suggest that the reasons for their reluctance are both transparent and opaque. Transparent, because the volume, pervasiveness and ephemeralness of media artefacts make monitoring and analysing media coverage, quantitatively or qualitatively, an almost herculean task. Opaque, because of academic reticence to cross disciplinary boundaries and, on a deeper

level, because of perceived differences in status of the two fields, which have, paradoxically, reached similar stages in their maturation as academic disciplines.

The inherent difficulty of conducting wide-ranging mass media research is the biggest single hindrance to progress in this field. With regard to broadcasting, Hargreaves and Ferguson (2000: 44, 12) have pointed out that "the time involved in recording, logging and analysing television and radio coverage is beyond the means of most research projects" and that consequently TV monitoring, in particular, "tends to be done inadequately or not at all." Although audiovisual recording has improved the situation, "it is all too easy," as Eldridge (1995b: 10) reminds us, "to underestimate the time and energy involved, with the potential danger that qualitative analysis gets squeezed out or marginalised because of the need to deal in the first instance with quantitative measures of coverage." Since the 1980s, the increases in television news broadcasting (on both terrestrial and cable and satellite channels) have made even quantitative measurements close to impossible. This is especially problematic for those examining the media's role in informing the public, since television is demonstrably the public's main source of regular information (Walker 2000). The only way to conduct broadcast research is either to limit one's time frame or to shift one's focus away from news *per se* and onto documentary output, as I have done in Chapters Four and Seven.

These problems are not exclusive to broadcasting, for the British press present similar difficulties due to the number of national newspapers, their longevity, the lack of adequate indexing of back issues and the only recent appearance (since the mid-1990s) of searchable internet editions. Certain topics, like mummy or 'lost civilisation' discoveries, are recurring favourites, generating unmanageable amounts of material to digest and interpret, unless, again, a specific time or issue focus is imposed. Similarly, long-running archaeological controversies, such as the site management problems at Stonehenge or artefact ownership rights (like the Elgin Marbles), provide fascinating territory for analysis, but the dynamics of long-term press management and coverage often create complicated histories, which, though worthy of study in their own right, can cloud the kind of basic structural mapping and investigation that is needed, and that is intended here.

There are, in my view, deeper undercurrents that have affected research on archaeology and the media. One is the different academic weight accorded to the subjects by academics in the two fields. For archaeological scholars, archaeology is seen as a serious, long-term endeavour and the media as an ephemeral and lightweight subject, which explains, if not excuses, the flippant tone of some archaeologists' media analyses (e.g. Russell 2002a, Membury 2002). For media academics, media coverage of archaeology is perceived, if at all, as an arcane and sociologically insubstantial topic, compared to say 'hard' news or even entertainment programmes. This is because its effects are not seen to have the same impact on the kinds of contemporary social behaviour and attitudes that they deem worthy of study (see, for instance, Stokes and Reading 1999). Interestingly, a common ground shared by both types of scholars seems to be a preference for analysing science fiction over science fact (Hargreaves and Ferguson 2000: 29; Russell 2002b). Given these (admittedly generalised) stances, it is not surprising that these academic communities have neglected each other. Contributing to this neglect is the fact that both professions are in analogous stages in their development. With their origins in the second half of the 19th century, the mass media and archaeology are comparatively young. Their professionals, both practising and academic, have spent most of the 20th century trying to distance themselves from their fields' pre-professional roots in order to be taken seriously. Professional insecurity has therefore also played a part in why the fields have avoided each other.

This is not meant to obscure the considerable problems inherent in any research that depends on pan-disciplinary work. Reticence to cross territorial boundaries is part of academic etiquette, but it is based on a real concern that insufficient expertise in other fields makes it difficult to speak authoritatively. To gain an authoritative voice requires not just learning another discipline's facts, theories and methodologies, but also its discourse. As Hargreaves and Ferguson (2000: 31) opine, "It is rather like being invited to learn five foreign languages before proceeding to study the subject that interested you in the first place." When one has to be able to decipher *Antiquity* with as much facility as *Variety*, the scale of the problem becomes evident. On a more mundane level, where is the funding to encourage such pan-disciplinary research? And where is the impetus to forge a new mental 'space' in which it can take place?

Media or cultural studies might have been appropriate homes for research on archaeological communication. Their analytical tools are useful in unpacking the language of science in order to understand how scientific meaning is constructed, and their insistence on the equal value of all cultural products encourages the serious study of media artefacts. However, their focus on the end result (i.e. text, reception) rather than the process of creation and their insistence on developing an arcane meta-language for linguistic deconstruction have reduced their effectiveness as critical approaches for studying science communication. Some groundbreaking work from Silverstone (1985, 1986, 1999) has suggested a process-based and pan-disciplinary direction for media studies that would improve its relevance to science and archaeological communication. For now, one is left agreeing with Hargreaves and Ferguson (2000: 63) that "science and media studies have missed each other, not so much like ships in the night as like ships sailing in opposite hemispheres."

Another home might have been amongst the sociological and PUS community. Their research has, however, been criticised for not giving adequate attention to the media's, especially television's, role in the partnership (*ibid*: 4, 12, 44-45, 64), and it would be impossible to study archaeological communication without giving full weight to the media's (especially television's) role in it. In my view, all existing research has placed the media in isolation and relied too heavily on content analyses or public opinion surveys. It has thus treated media coverage as if it were a stand-alone product, analysable in itself without reference to the processes of scientific mediation, of media production and of 'mediation' in its widest sense. By emphasising all three partners and the processes involved in archaeological mediation and by examining the content and form of media coverage of archaeology, this dissertation takes these concerns on board in an attempt to see if this approach can produce a more holistic understanding of these timely subjects. In the end, it is right and appropriate that the first steps towards creating a cross-disciplinary platform for archaeology-media-public research are taken by archaeologists. The mental space, framework and tools to support this research are within our grasp. With the amount of work ahead of us, this dissertation is only a start.

Notes to Chapter One

[1] This description of J. Battely's *Antiquitates Rutupinae* (1711), written in Latin, gives a flavour of the content of and audiences for these books: "It is in the form of an elegant dialogue between himself and fellow scholars...who are described meeting in his study, examining a tray of Roman coins and other Richborough antiquities." (Castle Bookshop, Catalogue 94, October 2003, 1).

[2] From his research on 19th century archaeological communication, James Phillips (*pers. comm.*) confirms that in 1832 the Society for the Diffusion of Useful Knowledge, established to "educate the masses" at a time of increased interest in the issue of public education, began publishing a *Penny Magazine* which "included archaeology as part of its contents." As Phillips puts it, "the strength of the *Penny* was that it was illustrated and included an extensive series on the contents of the British Museum, as well as descriptions of some of the most famous archaeological sites in the world. The *Penny* had a circulation of around 200,000, so had perhaps a million readers...mainly from the lower middle classes. Most of the accounts were worthy but dull (although their archaeological content was good), and the *Penny* periodicals have a strong claim to introducing archaeology to a mass audience for the first time."

[3] Although British newspapers began publishing during this period, and expanded rapidly in the 1750s and 1760s (Price 1996: 322; Colley 2002: 174), there is no mention in archaeological histories of antiquaries' use of newspapers to disseminate their work, although research would be needed to confirm this. Similarly, despite Daniel's (1950: 55; 1964: 152) references to geological and archaeological lectures given to the Mechanics' Institutes (formed in the early 1800s for the education of the working classes), more research would be needed to gauge the extent of this outreach.

[4] As Moser (1998: 154) points out, "Throughout the late 1800s and early 1900s the *Illustrated London News* played a leading role in introducing the subject of archaeology to the wider public and quickly became recognized as a major international forum for reporting archaeological news from home and abroad." While accepting the *ILN*'s key role, Bray (1981: 221-222) adds that "*Punch*, too, was doing its bit" with cartoons and parodies, many of which display both "an insider's knowledge and a genuine affection for the subject."

[5] One should, however, be under no illusion that this changeover occurred quickly, for treasure-hunting continued to be the major motivation behind many excavations. Amelia Edwards (cited in Lowenthal 1985: 43) may have shown "remorse" for her part in the "plunder" of Saqqara in Egypt during a dig in the 1870s, but she acknowledged that one became "hardened" to rummaging "among dusty sepulchres with no more compunction than would have befitted a gang of professional body-snatchers." "So infectious is the universal callousness," she added, "and so overmastering is the passion for relic-hunting, that I do not doubt we should again do the same things under the same circumstances."

[6] The issue of financial independence was key, as Davidson (2000: 40) makes clear in his review of a book on Sir Arthur Evans: "What distinguished both Schliemann and Evans was not belief or good fortune, but the fact that they were rich and could command the influence and resources to achieve what their predecessors could only wish for. They were inspired philanthropists more than inspired explorers, but that should not take away from their achievement; there were many less useful things for a late Victorian to squander his fortune happily on."

[7] According to Pitt-Rivers (cited in Daniel 1967: 239), his excavations at Cranbourne Chase had between 100-300 visitors on Sundays and holidays in the 1880s.

[8] The irony of this countertrend is worth noting. One of Italian Futurist poet Filippo Marinetti's goals (cited in Lowenthal 1985: 380) was "to free this land from its smelly gangrene of professors, archeologists, ciceroni and antiquarians."

[9] *The Daily Telegraph*'s motives need to be seen in perspective, for in the same year (1873) the paper also 'discovered' the Loch Ness monster, and, as Price (1996: 324) points out, "long before the rise of the tabloid press, [*The Daily Telegraph*] was fond of using stunts and promotions."

[10] The four seasons (1934-37) of Wheeler's excavations at Maiden Castle in Dorset were 85% financed by the public, mainly through donations (raised privately or via Wheeler's annual 'appeals' in *The Times*), but also through sales of reports and items on site (Wheeler 1943: 3).
[11] For example, Sir Leonard Woolley's book *Ur of the Chaldees* went through eight printings in 1929 (McAdam 1999: 51), and the *Times* outbid the *New York Times* for exclusive rights to cover the official 'opening' of Tutankhamun's tomb in 1923 (Patzek, Hauses and Dudde 2001: 400-401). Three years later, Wheeler and the *Daily Mail* agreed a deal for the paper to sponsor excavations at Caerleon in exchange for exclusive coverage (Wheeler 1955: 75).
[12] Stanley Casson and Sir Leonard Woolley gave talks on radio in the late 1920s and 1930s (Daniel 1986: 245; Woolley 1965[1930]: 4), and from 1949, a number of archaeologists were to contribute to producer Gilbert Phelps' series, 'The Archaeologist' (Daniel 1986: 245). In addition, Crawford (1955: 182) credits his radio appeals in 1927 with helping raise the monies needed to buy Stonehenge for the nation, and Wheeler (1955: 9) intriguingly mentions that radio was "sponsoring a highly technical archaeological enterprise in the Mediterranean" in the mid-1950s.
[13] Some statistics help to illustrate this. O.G.S. Crawford (1955: 175,182) sent a mailshot to the 20,000 members of historical or archaeological societies in 1927 in order to generate subscribers to *Antiquity*, and he hoped for a positive response from '.004% of the population'. If Daniel's claim of 5 million viewers for *Animal, Vegetable, Mineral?* is correct, this represents 10% of Britain's then population.
[14] Although primarily concerned with the factual media here, one cannot forget the influence on the public's access to and interest in archaeology generated by the cinema. From its earliest days, the cinema used archaeological subjects, settings and characters as bases for a number of feature films, with *The Mummy* (1932) probably having the greatest impact until the *Indiana Jones* trilogy of the 1980s (see Solomon 1978 and Day 1997).
[15] At the start of the 1960s, there were 17 British universities teaching archaeology (Kenyon 1964: 167-187). By 2000, there were 54 universities teaching archaeology at degree level (CBA *Annual Report*, No. 48, 1999-2000, 20), with the majority of this expansion occurring in the 1970s and with another boost in the early 1990s as polytechnics became universities. The expansion in adult education, an important aspect in archaeology's growth, has also been dated, by Peter Fowler (2001: 607) to the 1960s.
[16] Jacquetta Hawkes wrote in 1968 (cited in Shackel 2002: 158) that archaeological discussions of the time "seemed to me so esoteric, so overwhelmed with unhelpful jargon, so grossly inflated in relation to the significance of the matter involved, that they might emanate from a secret society, an introverted group of specialists enjoying their often rather squalid intellectual spells and rituals at the expense of an outside world to which they will contribute nothing that is enjoyable, generally interesting or of historical importance."
[17] For instance, the number of science journals worldwide doubled between 1950 and 2000 to over 100,000 (Shermer 1997: 24-25).
[18] The period up to the 1980s (I would include the 80s) was, according to Baker and Morris (2001: 608) a time when "economic irrelevance allowed the discipline to develop internal philosophies, methodologies and practices which were largely unconditioned by either external paymasters or wider social obligations. Perhaps no bad thing in itself, this had a downside in weak structural and intellectual contact with the rest of humanity." As Bucchi (1998: 16) points out, "once a discipline has been established and recognized as such, the public no longer plays a constitutive and fundamental role [in defining the discipline]."
[19] Interestingly, Thomas and Arnold (1974: 243-244) felt that "internal reform" and professionalisation were *prerequisites* for increasing public involvement, and the discipline followed this path, somewhat losing sight of the public as beneficiaries of this process.
[20] Wainwright's figures (2000: 914, 920) of the British government's funding of archaeological work make this evident: £18,000 in 1953-4, £150,000 in 1967, £310,000 in 1971, £813,000 in 1973-4, £2.1 million in 1976-7, and £4.8 million in 1982-3.

[21] Sponsorship was particularly pursued by the Sunday qualities, with the *Observer* funding Leslie Alcock at South Cadbury in 1966 (Hawkes 1982: 343), *The Sunday Times* putting money into the excavations at Fishbourne, and *The Times* and *Sunday Times* sponsoring the 'Treasures of Tutankhamun' exhibition at the British Museum in 1972.
[22] The Department of the Environment's 1990 Planning Policy Guideline note number 16 set out the government's position on procedures to protect nationally important archaeological remains threatened by land development in England. PPG16 is a guideline (not a law) which puts the onus on local planning authorities to monitor the archaeological impact of development applications in three stages: appraisal, archaeological assessment and field evaluation. Once assessed, the authority may refuse planning consent, or ask for plan modifications, a watching brief during development, or excavation. It also forces the 'polluter' (i.e. the developer) to pay for this work (CA 2001, Wainwright 2001).
[23] A new levy in 2002 on just the aggregates-extraction industry, the Aggregates Levy Fund, alone raised £9 million in 2002-3 for archaeological work (*Current Archaeology*, Issue 189, December 2003, 377), compared with that year's government grant to English Heritage of £115,156 (*British Archaeology*, Issue 74, January 2004, 6).
[24] The only obligation for disseminating the results of PPG16 work is that the data must be recorded in the SMRs, Sites and Monuments Records (recently re-titled Historic Environment Records). These are, in theory at least, available to the public (and are increasingly being made available on-line), but no member of the public I have ever met knows of their existence. What PPG16 has, in fact, created is thousands of less accessible reports, a mountain of grey literature.
[25] The 2001 IFA conference was largely focused on how best to live with the 'developer-led' system and on the need to reposition archaeologists in society (IFA 2001). The major concern was that the increase in activity caused by PPG16 had not been matched with an increase in the status of practitioners or in society's valuing of archaeology; rather it had led to archaeologists being marginalised as 'executors' of government policy. Thus, the 'repositioning' sought was from the fringe to the core of the development process, and this was seen to require a change in how archaeologists promote themselves (and archaeology's 'value') to government and industry first, and then to the public. These concerns about status are not exclusive to Britain; Schnapp (1996: 64) has noted a similar crisis in France, where the status of rescue archaeologists "is still obscure, for they are considered in a certain way as employees of the building sector."

CHAPTER TWO

A SYMBIOTIC RELATIONSHIP? THE ARCHAEOLOGIST'S PERSPECTIVE

Chapters Two through Four explore the nature of the archaeologist-public-media relationship in Britain today. How the three members of this triangular partnership perceive each other, how they think the others perceive them and the reasons why the relationship and archaeological communication matters to them are examined from each of their perspectives. Understanding these issues, what each partner seeks to gain from the relationship and the attitudes and values they bring to it, can help us gauge how receptive they are likely to be to archaeological communication. The overall question being asked here is to what extent can the relationship be said to be interdependent or 'symbiotic'? Answering this puts the dynamics of the relationship into sharper focus, and this is necessary for understanding the mediation process and how the issues of the control and release of archaeological messages affect the three partners, their relationship and the mediation of archaeology.

This chapter examines the relationship from the archaeologist's perspective and seeks answers to a number of interrelated questions. How are the public, the media and communication perceived and valued by archaeologists? Why do archaeologists need to communicate? Why might they be reluctant to do so? What are their preferred strategies for communicating, and what lies behind their media preferences? Since archaeologists' perceptions about their public are likely to play a major role in determining their approach to public communication, they deserve to be tackled first.

Archaeologists and their Publics

In the past, British archaeologists seldom analysed or differentiated, at least in print, the various publics to or with whom they communicated. Some might argue that this is because archaeologists, like antiquarians before them, saw their audience primarily in terms of their own peer group.[1] In this scenario, there are

only two publics: specialists (archaeologists, scientists and historians) and non-specialists (everyone else). Twenty years ago, Fowler (1981: 56-57) expanded this to four. There were the "few hundred" engaged in archaeology, the "hundreds of thousands" willing to devote time to it, the "several millions" mildly interested in the subject and "the bulk of the population" who "do not give a damn about the past or archaeology." More recently, British and American archaeologists have acknowledged that "there is no single public" (Little 2002: 7), rather "various public constituencies" (Thomas 2002: 138); that one must "learn to deal with a public that is...diverse" (Molyneaux 1994: 6); and that the public is represented by "different groups of people" whose "needs and receptiveness" might cause one to alter the "detail, style, and vehemence", but not necessarily the substance, of one's messages (A. Lawson 1999: 29; see also Gale 2002: 7; McManamon 2000: 6; and White 2002: 150). In many cases, however, this has been an acknowledgement of the cultural diversity within the general public, not a recognition of totally different categories of public.

One could, in fact, argue that there are at least nine distinct publics to whom archaeologists might want to establish a channel of communication, namely: other archaeologists; specialists in related fields; the non-professional archaeological community; decision-makers (e.g. funders, employers, government officials); the educational community and youth audience; media professionals; the local community being directly affected by archaeological work; the 'core' national audience interested in archaeological matters; and the general public in all its own diversity. In daily practice, archaeologists change their discourse depending on which public they are addressing (Gale 2002: 7), but they seem to ignore this plurality of publics when theorising about public perceptions and public communication. The problem with this is that it accentuates the 'otherness' of the public (i.e. confirming a 'them' and 'us' mentality), validates a 'top-down' notion of communication and makes 'public discourse' appear to be more homogenous than it is. Recognising the distinctiveness of these publics puts the emphasis instead on the heterogeneity of public communication and thus on the number of discursive options that are available and the decision-making that is involved in every act of communication. What needs to be said and why? For which publics is it relevant? Which medium will be most appropriate to which public? How much

prior knowledge can those publics be expected to hold, and how much new information can those publics absorb or do they need to know (i.e. the content of the message)? Which style, angle or frame is most suitable (i.e. the form of the message)? This process of decision-making is the first step in archaeological mediation and defines what I mean by the term 'first mediator'. By not differentiating often or clearly enough their various publics, archaeologists may be undervaluing the importance of their role as first mediator.

With little critical reflection and research, as we saw in Chapter One, it is perhaps not surprising that, as Stone (1989: 195, 196) concluded, "professional archaeologists in Britain (both academic and field-based) do not take enough notice of the perceptions of the past held by the public" and "have little understanding (or even regard) for what the public thinks about the past or archaeology." More than a decade later, Arnold (2001: 463) would write that there are "many academic archaeologists for whom 'popularising' and 'public education' are pejorative terms." This has not stopped archaeologists from making judgements about what this undifferentiated public think about archaeology. Archaeologists often start from the premise that there is a "potential, and often real, gap" (Fowler 1981: 63), "a wide...comprehension gap" (Bray 1981: 221), a "yawning gulf" (Jones 1999: 65) or a "discrepancy" between "what professional archaeologists do and what the public believe they do" (Stanley Price 1994: 284). Seeing the complex archaeologist-public relationship in such reductionist terms is not the most productive way to move the debate forward, but a brief digression into this 'gap' territory provides a useful step in unravelling archaeologists' attitudes towards the general public.

Archaeologists on Public Perceptions of Archaeology

When archaeologists write about public attitudes to archaeology, their evidence tends to be based on their personal experiences of teaching, reading popular archaeological books and magazines, watching films and television programmes, and talking to the public on sites or at lectures (Hodder 1992 [1984]: 128). Relying on anecdotal evidence, archaeologists often paint a picture of the public's perception of archaeology that is confused, defensive or patronising.

Into the 'confused' category I would put archaeologists' attempts to define succinctly what the public finds interesting about archaeology. While most would concur with Jameson and Ehrenhard (1997) that archaeology's *human* focus contributes greatly to public interest, archaeologists seem unable to agree on whether it is the *results* or the *process* of archaeology that most attracts the public. Some have combined both ideas by saying that the public is fascinated by "discovery" (Biddle 1994, cited in Barrett 1995: 5). Some have chosen the results (e.g. "skeletons and treasure" [Thomas and Arnold 1974: 248], "death and treasure" [Fowler 1981: 63], "bones and treasure" [Richards 1999] or "treasures" [Zangger 2002: 104]), 'treasure' clearly being the operative word. Others have suggested that the public are primarily attracted to the archaeological process (e.g. "digging", "fieldwork" or "excavation" [Bahn 1996: 1; Greene 1983/1995: 58; Crist 2002: 114]). Relying on a public survey, Merriman (1991: 102) was able to offer a more nuanced, although still confusing, picture of public perceptions:

> ...*few people seem directly to associate [archaeology] with death and treasure,* although most see it as the simple recovery of objects and structures. A relatively small but significant proportion do realise that it has the ultimate purpose of trying to understand the development of past societies. However, the fact that the majority of respondents see the subject as the mere excavation of objects confirms the concern felt by some writers that archaeology is still seen by the public as glorified treasure hunting.

That there remains a lack of consensus in the profession over whether results or process matter most to the public is best illustrated in two recent assessments:

> ...the public is interested in the results, in the content of archaeology as a subject rather than in the methodology of archaeology as a profession. (McAdam 1999: 50)

> ...I will argue that there is a domination of media interest in the product while the public have an equal interest in the process of archaeology. (Henson 2001)

I would suggest that neither of these statements is true. In television output alone, the late 1990s and early 2000s witnessed the media producing and large audiences watching in equal numbers programmes about results and about processes. Looking just at the top-rated series in my survey period (see Table 3.5 in Chapter Three), *Journeys to the Bottom of the Sea* (2000) emphasised both the underwater finds and the processes of discovering and excavating them. *Meet the Ancestors*

(1998-2003) may have been devised, as its archaeologist-presenter (Richards 1999) claims, expressly to guarantee success in results (i.e. the finding of an intact skeleton), but the series used a format that highlighted the excavation and post-excavation processes. *Secrets of the Ancients* (1999) capitalised on the techniques of experimental archaeology, and *Secrets of the Dead* (1999-2003) did the same for forensic archaeology. Even the success of *Time Team* (1994-present) has owed more to its demonstration of archaeological processes at work than its less than spectacular finds.

'Defensive' assessments of public interest in archaeology include those which claim that the public thinks of archaeology as either "a parasite and a useless luxury" (Bahn 1996: 27) or as "esoteric" and of "no relevance" (Trigger 1989: 3). Although probably meant to be provocative (or to be refuted, as Trigger goes on to do), these kinds of comments reveal a genuine concern that archaeology might be viewed as irrelevant by the British public. While there is scant evidence that this is the case today, there appears to have been some proof of this from two public surveys in the mid-1980s. From one, Hodder (1992 [1984]: 128) concluded that "Individuals in unskilled employment and who have left school at an early age are more likely to feel that people do not need a distant past, and that archaeology is 'generally useless' and a 'complete waste of money'." From his own survey, Merriman (1989: 23, cited in Schadla-Hall 1999: 151) would conclude that "for most people [archaeology] is seen to have little relevance to their lives, and it is this lack of perceived relevance which leads to lack of interest and understanding." The problem may stem from using the word 'archaeology' itself in public surveys (Prince and Schadla-Hall 1987: 70). For instance, when it was exchanged for the more accessible 'heritage', a recent poll showed that 81% of the British public considered heritage valuable to society, only 19% finding it "irrelevant" or "of no interest whatsoever" (English Heritage 2000). From my experience, archaeologists seem nervous about canvassing the public on its views about archaeology's relevance until *after*, as one archaeologist said to me, the public have been sufficiently educated as to archaeology's importance. This reluctance to delve too deeply into public opinion based on fears about negative responses is, I suspect, a widely-held attitude and may explain the ambivalence some archaeologists have towards public communication.

In the category of 'patronising' assessments are statements, like these below, which underestimate the sophistication of the public's interest in archaeology by consigning it to Hollywood, the fringes of pseudo-archaeology or both.

> If you were to ask members of the public...to name a living archaeologist, it is a safe bet that hardly any of them would come up with a single example other than the fictional Indiana Jones. Such is the power of Hollywood, and such is the anonymity of present-day archaeology. (Bahn 1996: preface)

> ...[S]cratch a Guardian reader and she is more likely to be swinging a pendulum over a plan of the Cerne Giant than poring through the Proceedings of the Prehistoric Society. (Fowler 1981: 65)

> Archaeology, in fact, may be more susceptible to public misunderstanding and misinterpretation [than other sciences], as examples from ancient astronauts to Indiana Jones testify. (McManamon 2000: 6)[2]

These assessments exaggerate the distance between the public and archaeologists and in so doing possibly betray a deeper agenda: that of maintaining archaeologists' right to be in sole control of the discipline. Furthermore, by diminishing the intelligence or credibility of the public because of the media sources which some choose to use, these stances presume a monolithic public with little faculty to distinguish fiction from non-fiction and deny the constitutive role that other media play in archaeological mediation. In understanding scientific information, as Fenton *et al.* (1998: 131) remind us, "people constantly draw their reference point from other forms of mass media consumption." For example, in their research on the public reaction to cloning, the Wellcome Trust found, as Hargreaves and Ferguson (2000: 18) put it, that the public is capable of understanding complex arguments, but "they make these arguments with reference to ambient cultural material—whether deeply laid myths like Frankenstein, memory of old films like *Boys from Brazil* or in response to stories in the news." Taking a patronising stance towards public consumption also allows archaeologists to side-step their own responsibility for offering the public equally compelling archaeological stories.

What these assessments of public interest ignore is both the extent to which archaeologists use some of the same terms and sources to define their profession and the discipline's own lack of consensus over definitions in general. For instance, that the public equate archaeology with 'discovery' or 'digging' does, in

fact, accord with archaeologists' own self-definitions. Archaeologists commonly use "the trope" of "discovery" (Terrell 1999) and have tended to define their profession in terms of its distinctive methodology, namely fieldwork and excavation (Moser 1995). Even the profession's definition of what an archaeologist 'is' has, according to Henig (2001: 73), "changed with time, and even today is perceived differently from person to person." This is an understandable consequence of the profession's relative youth, the expansion of its boundaries and "a growing dislocation in the academic community in general" (*ibid*). Henig's solution—that archaeologists should define themselves in whatever way they want—seems an inadequate response, as is simply changing the vocabulary. Archaeologists may be unhappy with archaeology having been subsumed since the 1980s by the word 'heritage' (see Champion 1996: 137-140), but does allowing it to be replaced by another, more "politically acceptable" (Pryor 2002: 1) term ('Historic Environment') improve the situation? I would suggest not. In a similar vein, recent attempts to redefine archaeologists' professional roles in terms of "the so-called big 'C's'" of *curator, contractor, consultant* and *client* (Thomas 1995, cited in Wainwright 2000: 930; and Darvill 1999: 47) fail to consider the role of *communicator* worthy of inclusion, as Baker and Morris (2001: 609), who would also add *researcher*, point out. Equally worrying is the profession's increasing tendency to label archaeological communication and public outreach as 'public interpretation' and to define it in such a way (as we shall see below) that the mass media is excluded. In the end, these perceptions of public interest lead us to ask a pertinent question: if archaeologists cannot agree on what interests the public or what defines the profession and its practitioners, if they are reluctant to find out what the public really think, and if they dismiss the public's sources of information, then how can they frame their communications to that public or decide whether it is appropriate or worthwhile to communicate to them at all?

Given this confusion and ambiguity over the public's perception of archaeology, it is surprising to find a marked homogeneity in how archaeologists describe the public's image of an archaeologist, in the way they define the public agenda and in their accounts of why the public is important to them.

When archaeologists describe how the public pictures an archaeologist, the stereotypes they elaborate have varied little over the past fifty years, the "clock" having stopped, in Bray's (1981: 228) calculation, in 1939. Despite a welcome change of gender in the late 1990s as Indiana Jones was transformed into Lara Croft, the clock seems at first glance not to have restarted, as the quotes in **Figure 2.1** demonstrate. To my knowledge only one archaeologist (Flannery 1976) has tried to vary and enrich this repertoire in an academic publication, although a few have tried in fiction (e.g. Daniel 1973[1945] and Hawkes 1959). In fact, given the number of novels and television programmes that have offered a more multi-dimensional image of archaeologists over the past fifty years, it is surprising that the classic stereotypes have not been overtaken.[3] Three questions spring to mind. To what extent have archaeologists (not just the media) created and reinforced these images? As Frayling (2000: 18) noted in an article about the portrayal of scientists in Hollywood films, "The rhetoric of some real-life scientists, when trying to be dramatic about new discoveries, has too often resembled the dialogue in some of these movies."[4] And is it not perhaps the case that the public image of archaeologists *has* become richer and more diverse in other media, but that the more potent movie stereotypes have not changed and thus still prevail? Or is it archaeologists' assumptions about their public image that have not kept pace?

There is also marked consensus in how archaeologists define what they see as archaeology's 'public agenda' in both generalist and specialist publications. Although Bahn (1996), Greene (1983/1995), and Renfrew and Bahn (1991/2000) devote space to public archaeology in their introductory textbooks, the last of these, one of the most widely-used textbooks, marginalises 'the wider public' by covering it in just four paragraphs in its 543-page first edition (1991). This was later increased, primarily with warnings about pseudo-archaeology, in its third edition (2000) to seven paragraphs (out of 640 pages). The topics that are dealt with by these archaeologists under the rubric of public archaeology revolve around three issues: ownership rights to archaeological remains and the related problems of looting and the antiquities trade, the political abuse of archaeology by nationalists and ideologues, and archaeological site and artefact presentation and

Figure 2.1: Archaeologists on the Public Image of Archaeologists

For many people the word 'archaeologist' immediately conjures up the memory of Labiche's character, M. Poitrinas, solemn of speech, vulgar in appearance, puffed up with empty and pretentious learning; who passed for a harmless and amusing lunatic, without malice save at the expense of his colleagues. For other people, however, an archaeologist wears a romantic halo: he is the man who searches for cities lost in the jungle, or buried in the desert; who discovers at one stroke of the pick, dazzling works of art or fabulous treasures. Both of these conceptions are false....just as a bone-setter is not representative of the medical profession, so the bearded and sententious dilettante has no right to be dubbed archaeologist. (de Laet 1957, cited in Daniel 1967: 14)

If you think of an archaeologist, what probably comes to your mind first is an image of a bearded professor who goes to Egypt to dig up the treasure-filled tomb of a long dead Pharaoh. (Braidwood 1960, cited in Daniel 1967: 17)

[Archaeology's image] is still encumbered in the public mind by the vision of the grey-bearded eccentric peering into the soil through rose-tinted spectacles. (Thomas and Arnold 1974: 245)

Three Archaeological Stereotypes
The Explorer: "an endearing, incompetent figure in pith helmet and baggy shorts, with ill-concealed inclination towards lechery...tough, and sometimes sinister"
The Collector: "a sinister stop-at-nothing monomaniac"
The Antiquarian Scholar: "slightly dotty; single-minded, elderly and rather dull, incompetently amorous, possessive about data, jealous of reputation, and concerned with matters of no relevance to the world of real life"
(from Bray 1981: 225-227)

Some people think an archaeologist is a person who dons a pith helmet, travels to exotic lands, finds something valuable that solves all the big questions, and returns home to get rich on the proceeds of magazine and television interviews. This book is dedicated to those who know otherwise. (Michael Pitts' dedication in *Fairweather Eden*, Pitts and Roberts 1998)

He wore a tweed suit and bow tie, was clearly stuck in the 1920s in terms of speech and mannerisms, was from Cambridge (obviously) and was overweight and pedantic in the extreme. (Pettitt [2001: 466] describing how an actor played an archaeologist in a British TV variety programme)

preservation. These are unquestionably significant issues, although the first two could perhaps better be defined as constituting the *ethics* of archaeology. What archaeologists seldom define as part of this agenda is the process of archaeological communication to the wider public and the role of the mass media in this process. In launching the specialist journal *Public Archaeology*, editor Neal Ascherson (2000: 2) did include "the representation of archaeology in fiction, film, TV and other media" as one of the "things which concern public archaeology", but the journal has primarily focused since then on the above three issues. From these examples, one could argue that archaeologists frame the public agenda as mainly one of *content* and tend to shy away from the *process* through which this content is communicated to the greatest number of people.

The Public as Legitimator, Mobiliser and Financier

As with public image and agenda, archaeologists tend to agree on the reasons why the general public is essential to archaeology. These reasons rarely involve what the public can contribute to the knowledge-construction process; rather they cluster around the social, political and economic benefits of public support and focus on the public as legitimator, mobiliser and financier.

The public is essential to archaeology, firstly, because archaeologists consider their profession to be a "public discipline" (Cunliffe 1981: 192). Cunliffe's assertion that it "always has been" a public discipline is, however, historically debatable, for in its antiquarian phase archaeology was, I would suggest, a 'private' discipline. Moreover, the degree to which it has been seen as a 'public' discipline has wavered over time, as was evidenced in Chapter One. Even today, Schadla-Hall (1999: 155, my emphasis) suspects "that many archaeologists in Europe choose to ignore or discount public opinion, and *do not see archaeology as a public activity.*" Nevertheless, most archaeologists would likely accept the proposition that they are the custodians or stewards of the "collective patrimony of humankind" (Day 1997: 29), and that the general public are the ultimate beneficiaries on whose behalf archaeological work is undertaken. It is this foundational notion that underpins archaeology's legitimacy and that might be in threat should archaeologists canvass the public about their attitudes to archaeology and find

that the public are unwilling to accept the role they have been assigned or are unhappy with what archaeologists have been doing on their behalf. How archaeologists would reframe their profession's legitimacy should this public foundation crumble is a fascinating problem, beyond the scope of this dissertation. Here it is enough to note the fragility of archaeologists' position regarding legitimacy, as this may account for the urgency which underlines some of the calls for greater attention to public opinion, education and communication (e.g. Bray 1981: 221; Cunliffe 1981: 194; Stone 1989: 203; McManamon 2000: 14-16).

The public, through public opinion and almost always in tandem with media coverage, also function on a more periodic basis as a mobilising factor in archaeology's development or behind specific archaeological campaigns. Public interest can push archaeology higher up social, political or educational agendas, just as public disinterest can banish it from these agendas altogether. As Pitts (2001b: 342) says, "Public ignorance is archaeology's loss of strength." Writing about the post-war development of the profession, Cunliffe (1981: 194, my emphasis) has said: "There can be little doubt that the work of those concerned to publicize and popularize archaeology during the last thirty years or so has been a deciding factor in helping archaeology, *through public acclaim*, to gain its position of pre-eminent respectability in the academic world...and has encouraged national and local government alike to build a substantial archaeological presence into the administrative structure of the country." Public mobilisation over a series of key rescue campaigns—from Fountain Yard in the 1970s to the Rose Theatre in 1989—was "instrumental...in establishing the planning policy document PPG16...which entrenched archaeology within the planning process" (Lambrick 2002b). Yet the public has not been similarly mobilised to support archaeology's value to the educational syllabus, and this has had dire consequences for the subject's growing marginalisation within English primary and secondary education (Dobson 2000).[5] Why these two issues have had such differing fates may relate to the greater immediacy, newsworthiness and 'stage-management' potential of a series of 'sites under threat' over the less dramatic, long-term campaign that would be required to affect changes in the educational curriculum. One needs to remember, however, that the evolution from RESCUE to PPG16 owed as much to major changes in government policy, in particular the Thatcher

government's drive to commercialise previously public entities, as it did to public mobilisation *per se*.

Of the three roles assigned to the public, it is the last, that of financier, which archaeologists have depended on the most. The profession's economic dependence on the public has evolved over time from direct funding through public appeals and tourism, to indirect funding through the 'public purse' and then to the mixture of some direct but mostly indirect funding that we have today. The first of these changes from a personal accountability to physical people to a general 'public accountability' distanced archaeologists from those sources to whom communication was 'owed'. Since the public were not likely to know exactly where tax monies were going, archaeologically-speaking, how could archaeologists know what it was they needed to account for? They had to determine themselves what this should constitute, demonstrating, for instance, 'value for money', but using their own judgements of what this 'value' was and what it might mean to the public. This computation became further complicated in the next changeover, as commercial financiers (sponsors and especially developers) entered and began to dominate the picture, bringing with them their own conceptions of why the public is essential to *them*, not archaeology. In other words, the public today are valued not only, as in earlier times, as direct financial contributors to archaeological projects and as citizens on whose behalf the government makes policy decisions that affect the profession's funding, but also, increasingly, as consumers whose recognition, respect or custom commercial companies will demand as recompense for their often reluctant financing of archaeological work. As Hinchliffe (1999: 26) says, "The implications of [the emergence of the private sector as the principal source of funds for archaeology] have been far-reaching and communication is a central issue...The shift of funding from the public to private sector in many ways makes [the] communication of the archaeologist's work even more important."

What this section has highlighted is that there are gaps in archaeologists' perceptions of their publics and of public interest in archaeology that are as wide as the gap they have discerned between the public's perception of them and what they really are. It is paradoxical that archaeologists can acknowledge, on the one hand, public 'fascination' with archaeology (Stone 1989: 201; Bahn 1996: 6, 91;

Jones 1999: 68; McManamon 2000: 7), while, on the other hand, showing little consensus on the nature of this fascination and even suggesting that the public may find archaeology 'irrelevant'. Such conflicting perceptions, allied with a tendency to see the public monolithically, to frame the public agenda as pedagogical content rather than process and to denigrate the public's sources of information only help to widen the distance between archaeologists and the general public. This may place them in firmer control of their discipline. As Wainwright (2000: 939) suggests, "archaeologists have traditionally felt self-conscious about involving the media and the public and have patrolled the boundaries of their profession in an attempt to exclude rather than engage." But such attitudes leave them ill-equipped to handle public communication at a time when engagement is so clearly needed. The value that the public bring to archaeology in terms of legitimacy, mobilisation and finance is substantial, and the profession could not (or not easily) survive without the public and their support. Looking at just the archaeologist-to-public axis of the triangle seems to sustain the notion of a symbiotic relationship. As a preamble to the next section, it has also provided some clues, many of them inauspicious, to the attitudes with which archaeologists approach communication.

Archaeologists and Communication

For archaeologists (and scientists in general), the sharing of information is a "moral imperative and a pragmatic need" (Nelkin 1995: 147). Archaeologists need to provide a permanent record of their work for present and future colleagues, because one's findings may have direct consequences for others' research and especially because the excavation process destroys the context of finds, making verification by others impossible without this context being accurately recorded and made accessible. But this moral and practical obligation only explains why archaeologists write reports, articles or books for specialist publication, and why not publishing one's research quickly, or at all, has been termed "the unforgivable destruction of evidence" (Wheeler 1954: 209) or "a form of theft" (Renfrew and Bahn 2000: 559). It does not explain why archaeologists should share this information with the world outside their peer group.

Why Communicate Wider?

Since there is no 'one' archaeologist, it is hard to generalise about the reasons why 'archaeologists' need to communicate to their other publics, and (in the next section) why they may be reluctant to do so. Different types of archaeologists are likely to respond differently to public communication. Their degree of commitment to it will depend on many factors: the nature of their work, where and for whom it is undertaken, their position in a project or institutional hierarchy, their proximity to the public, and their own or their funders' or employers' needs for publicity. For instance, academic archaeologists not engaged in fieldwork may feel less of an obligation to public communication than their museum- or field-based colleagues, either because they regard teaching as a fulfilment of this commitment, because 'popular' work is seldom counted in academic advancement or because they are "in a state of denial with respect to [their] dependence [on public support]" (Arnold 2001: 463). Yet, regardless of individual circumstances, archaeologists are likely to have an attitude towards the more general reasons why communicating archaeology to those outside the profession is important. Although not every reason outlined below applies equally to every archaeologist, the analysis is inclusive enough to encompass a variety of factors that most archaeologists would recognise as applicable to the profession as a whole.

Surveying the literature, it is clear that archaeologists most often give three reasons why archaeology should be more widely communicated, namely: to fulfil a moral or educational obligation to society as a whole, to raise money or to justify monies expended and policies enacted.

The obligation of archaeology's 'custodians' to its 'beneficiaries' is a frequently offered reason (e.g. Bahn 1996: 88; Schadla-Hall 1999: 152-153; McManamon 2000: 6-7, 16; Smith and Ehrenhard 2002: 126). For some, this is a moral duty deriving from a personal belief in the importance of sharing knowledge. For others, it is a pedagogic imperative to teach the value and methodologies of archaeology in order to encourage the public to protect their heritage or to think critically about the information they receive on a daily basis (Little 2002: 11-12). In this sense, public communication seems sometimes to be viewed as a kind of insurance

policy. As Jacquetta Hawkes (cited in Wheeler 1954: 219-220) wrote in 1951: "If archaeology is to make its contribution to contemporary life and not risk sooner or later being jettisoned by society, all its followers, even the narrowest specialists, should not be too proud to take part in its diffusion." Twenty years later, Thomas and Arnold (1974: 241) echoed these sentiments: "the public are entitled to know the results, problems, and limitations of the archaeologist, for after all the pitch on which he is playing is their heritage. If they remain in ignorance, then they cannot be expected to contribute to the future battle against destruction." Fifteen years further on, Stone (1989: 204) remarked that "Archaeology will only continue, or continue to develop, if it can show itself to be interesting and relevant to the public at large." Today, Arnold (2001: 463) continues the theme: "[we] have an obligation to make some part of our research accessible to the public. This is also the most effective way to ensure that there will be an archaeology around several centuries from now."

Raising money from the public through public appeals or tourism was a potent reason for public communication in the first half of the 20th century, a period when little other archaeological funding was available, as we saw in Chapter One. Tourism remains today an important factor for site and museum archaeologists, but, as outlined above, the shifts in archaeology's funding base have meant that this reason has become less crucial, ceding its place to the third reason.

Archaeologists consider public accountability—the need to justify the monies invested in archaeology and the policy decisions made on its behalf—to be the major reason why one needs to communicate one's findings to the public at large (e.g. Wheeler 1954: 220; Thomas and Arnold 1974: 242; Bray 1981: 221; Silberman 1995: 250; Bahn 1996: 88; Hinchliffe 1999: 26; McManamon 2000: 7; Renfrew and Bahn 2000: 559; Pettitt 2001: 468; Stoddart and Malone 2001: 459; Lipe 2002: 25). This is also the reason why one communicates with decision-makers and funders, directly through reports or presentations or indirectly through the mass media. In the latter case, as Nelkin (1995: 124) neatly put it, "Scientists ventriloquate through the media to those who control their funds." Increasingly today, publicity is an expected recompense to sponsors and developers, and a commitment to public outreach is often a precondition for receiving funds from sponsors or from agencies like the Heritage Lottery Fund.[6]

As cogent as these three reasons are, archaeologists' emphasis on them should not deter us from suggesting and examining other, less-often-articulated reasons why archaeologists might be motivated to pursue public communication. I would propose that there are at least ten further motives that, singly or in combination, justify the wider dissemination of archaeological information.

To gain publicity, recognition and growth for one's profession: As the Cunliffe quote cited earlier reminds us, the popularising of archaeology and public acclaim have contributed significantly to the profession's development. By engaging in the popular arena (through books, TV appearances and the like), archaeologists are investing in the profession's future, as this work is often what attracts new people to an archaeological career (Thomas and Arnold 1974: 242; Jordan 1981: 209; Hatley 1997:14). Maintaining "good public relations" is considered by Brian Fagan to be "a basic responsibility of any late 20th century archaeologist" (Fagan 1991, cited in McManamon 2000: 7).

To encourage community support and participation in archaeological work and to create a dialogue between the public and archaeologists: A growing number of archaeologists are acknowledging the need to democratise the profession, not merely by encouraging 'feedback' and more local volunteers, but, more importantly, by allowing the public to have a voice in archaeological matters (Faulkner 2000; Moser *et al.* 2002). Creating an active, public platform of debate is about communicating *with*, not *to* the public so that the public become a constitutive part of archaeological thinking, planning and doing and so that the discipline can benefit from public input.

To gain publicity for one's self: Scientists seem to be ambivalent towards self-publicity, employing what Bucchi (1998: 175) calls a "dual repertoire" of wanting recognition and wanting to be left alone. However, as Gripsrud (1999: 43) discusses, scholars may turn to public communication for personal reasons: to gain power and promotion, to earn money (e.g. publicity being used to encourage book sales), or to win esteem ("as compensation for lack of esteem within the academic field"). Archaeologists appear to be more comfortable with public anonymity and are often unprepared for the consequences of greater public visibility (see Arnold 2001: 464-465). They may even be loathe to admit publicly the role that ego might play in their motivations, for fear of being chastised for

denigrating the profession, as Philip Rahtz was (1999: 13), for making such an admission. Since the days of Wheeler and Daniel, archaeologists who bask too often in the public spotlight have faced censure from their peers for 'grand-standing' or for 'over-hyping' their work (Hawkes 1982: 96-99; F. Taylor 2001: 471-472; Fagan 2001: 459-460; Shackel 2002: 158). Despite peer pressure, some archaeologists undoubtedly enjoy the personal attention that public communication can bring.

To make a priority claim: Especially in a crowded or competitive field, some archaeologists may find it necessary to establish their right to be the first person identified with a particular discovery, theory or interpretation. Thus they may decide to follow up specialist reports published for their peers with press announcements or press conferences that will disseminate the news to a wider public. As long as the order of announcement (specialists first, public second) is respected, this is, in fact, one of the most traditional routes through which archaeologists communicate with the general public, as will be discussed in Chapter Five.

To announce a priority find: In cases where the age, scale or rarity of a discovery is deemed a major factor in its archaeological importance, it may be difficult for archaeologists to resist the temptation to broadcast the news as widely as possible, especially given the few times that this is ever likely to occur in any archaeologist's lifetime. The case studies in Chapter Six will provide good examples of this. Given that one archaeologist's "galactic" discovery may be another's "mere dots on the tops of archaeological 'I's" (Fagan 2001: 460), this motive may, however, be the source of many of the profession's criticisms of 'over-hyping' colleagues.

To validate or overturn orthodox thinking or paradigms: Once ideas are well-established at the specialist or public levels (or both), new evidence that supports or, more usually, challenges them may need to be disseminated widely. Within the scientific community, the creation and shifting of paradigms is not easily accommodated (see Kuhn 1996 [1962] or Fowler 2000: 104), and specialist journals have been criticised for their conservative tendency to prefer publishing articles that confirm rather than question orthodox thinking (Faulkner 2002). Even to be heard within one's profession, one may therefore find that the public arena is the only platform available for releasing information. A broad outreach is even more

necessary when one is contesting concepts that are entrenched in the public's mind, for these are difficult to dislodge and require greater efforts in public communication. Under this rubric, one should also include the denouncing of archaeological fakes, hoaxes and mistakes, for these, too, need the widest possible airing, as much to set the record straight as to ethically cleanse the profession.

To accelerate public and decision-makers' awareness of urgent issues: This motive for public communication comes into play when time is seen as a crucial factor and when there is a chance that public opinion can be enlisted in an attempt to force immediate changes in commercial or governmental decisions. It most often involves cases where archaeological sites are under threat either in the UK or in other countries. As a tactic, it was well exploited by the RESCUE organisers in the 1970s and 1980s and features in their guidelines for how to run a successful 'rescue' campaign (Thomas and Arnold 1974: 247-248). It remains today an effective tool in site or artefact preservation. In September 1999, for instance, local archaeologists excavating a site in advance of the building of "Britain's biggest warehouse" turned to the press when they discovered an Iron Age settlement and were running out of time to excavate it properly (Kennedy 1999b). In 2002, the campaign to save the remains of a medieval ship found in Newport, Wales "galvanised all sectors of archaeology into working together, engaging with the public in a common cause" (Lambrick 2002b) and winning a "last-minute promise of £3.5 million from the Welsh Assembly" for the "long-term preservation and display of the ship" (Denison 2002).

To speak quickly to your profession and other disciplines at the same time: Archaeologists may prefer to go straight to the mass media to disseminate information when it is deemed to be too important to wait until it can be published in specialist journals (where lead-times range from 2-3 months to over a year) and/or when it has relevance for and may stimulate support from professionals in other fields who might not read specialist archaeological journals. Although similar to the last reason, here the intended audience is actually a specialist one even though the mode of delivery is a public one. As Bucchi (1998: 12) points out, when scientists speak through the media, it is often "not actually meant to address the general public, but to reach a vast number of colleagues rapidly by sending them 'coded messages' without having to conform to the times

and constraints of specialist communication." This explains in part why scientists tend to prefer the quality newspapers as their vehicles of mass communication, for it is these papers which their peers read (Fenton *et al.* 1998: 115). This way of communicating deviates from accepted professional practice because it bypasses peer review (as discussed in Chapter Five). Its increasing use by the scientific community is evidenced by the number of cases where scientists first hear news from the mass media, not specialist publications, as happened during the Kennewick Man controversy in America in the mid-1990s (Downey 2000: 44; Thomas 2000: xix-xxvi).[7]

To highlight, dispute or defend issues that cannot be resolved internally: There are at least three cases where wider public communication becomes the main recourse open to archaeologists: when the issues at stake are beyond the profession's ability to resolve, when they are being ignored by the profession or when they involve the negotiating of boundaries between archaeology and other disciplines or interest groups. The first of these frequently involves issues that require changes in governmental or institutional policies and where galvanising public opinion to one's cause is seen as a vital component in effecting these changes. For example, the recent exposing of London as a centre for the black market in illegally-acquired artefacts and the UK government's refusal to sign a UNESCO treaty aimed at preventing this illegal trade has been highlighted in the mass media by archaeologists like Lord Renfrew and Peter Addyman amongst others (Brooks 2000a). This kind of public exposure serves a dual purpose: embarrassing the government into complying with a treaty already signed by most other European countries and cautioning the public about the problems of looting and about the need to check the provenance of objects put up for sale. Public communication is appropriate here, because it is not the archaeological community *per se* that needs convincing, but the public and the government.

Archaeologists may need to turn directly to the wider public because they feel they are being denied a 'voice' by their colleagues or profession. The Iron Age site rescue mentioned above is relevant here, since it was the local archaeologists who instigated the news story: the local council, CADW (the Welsh heritage quango) and the archaeological trust behind the excavation having all felt that the excavators had already been given sufficient time (Kennedy 1999b). That the

profession has effectively silenced the voices of a large portion of its workforce (freelance diggers) so that they have felt the need to set up a *samizdat* publication, *The Digger*, in order to air their grievances (usually anonymously), is proof both of the strength of internal pressures to maintain a positive professional image and of the degree of self-censorship that may be operating below the surface. Further evidence of this comes from a rather sobering admission by *British Archaeology's* then editor Simon Denison (2000b) that "there are some in academia who argue that research should remain unpublished if its implications run counter to the political orthodoxies of the day."

Defining and defending the 'boundaries' of a profession are also endeavours that, by their nature, require communication beyond the perimeters of the discipline in order to gain interspecialist agreement and public acknowledgement or understanding.[8] Such boundary work is almost always about negotiating authority, staking claims to certain territories and warding off intruders. In the early days of archaeology, archaeologists needed to define, both for themselves and the public, what archaeology constituted and what distinguished it from other related fields (e.g. Crawford 1921). Once initial boundary lines were established, the work then entailed either expanding the borders, as the profession developed more specialised branches, or defending them against perceived interlopers. Of these two, the latter is the more contentious and provides archaeologists with more impetus to communicate. Defending boundaries usually involves conflicting points of view and touches on areas beyond the academic, both of which are likely to guarantee media and public attention. Whether out of complacency, good manners or arrogance, archaeologists seem to be less defensive about their own borders than many other professionals (e.g. the cold fusion dispute between physicists and chemists [Bucchi 1998]). Nevertheless, archaeologists have been drawn to defend their positions publicly on at least three types of boundary disputes: those that pit archaeology against pseudo-archaeology, against other scientific disciplines or against other societal forces.

Although archaeologists have usually preferred to ignore rather than expose the pseudo-archaeological theories of writers from Erich von Däniken to Graham Hancock, there have been notable exceptions. For some thirty years, the British campaign against pseudo-archaeology was waged by Glyn Daniel, both on

television (e.g. *Myth America* [1984]) and in his editorials for *Antiquity* (Daniel 1992; and see Atkinson 1981: 238). Daniel was clear about why this boundary between the profession and what he called "the lunatic fringe" (1992: 64) or "bullshit archaeology" (1986: 365) should be defended. As he wrote in 1966 (1992: 40), "bogus learning seems sometimes to discredit serious scholarship and undermine the widespread faith in scientific archaeology as a serious discipline." Today, the boundary seems more in flux as some archaeologists seem to accept that 'alternative' archaeologies may have something to offer the discipline. Others continue to defend the profession, witness their contributions to BBC *Horizon*'s documentaries about Hancock: *Atlantis Uncovered* and *Atlantis Reborn* (1999).

Since public criticism of one's colleagues is professionally discouraged (Darvill 1999: 42), publicly-fought boundary disputes with scientists from other fields are rare in archaeology, as in most sciences. Archaeologists are, however, occasionally drawn into debates that are ostensibly about the weight of conflicting evidence, yet which betray some territorial wrangling (e.g. the arguments between geologist Robert Schoch and Egyptologist Mark Lehner over the age of the Sphinx [Stille 1997: 60-62; Roth 1998: 221]). One boundary never to have been satisfactorily explained to and understood by the public is that between palaeontology and archaeology. One poll in 1988 showed that 31.6% of British adults believed that humans and dinosaurs co-existed (Durant, Evans and Thomas 1989: 14), and an American one in 1990 showed that 41% of American adults believed the same (Shermer 1997: 26). As Pokotylo and Guppy (1999: 403) conclude from their Canadian surveys, the public's conflation of fossils and dinosaurs with archaeology "is a major obstacle to overcome in developing an archaeologically-informed public." The task of distinguishing this border is an uphill one, thanks to the pervasiveness of images from the media (especially cartoons and films), but this does not diminish the importance of the task, nor does it totally explain the confusion. Taking a cue from Bucchi's comment (1998: 17) that "the thinner the boundary at stake, the less visible it becomes in public terms", I would argue that it is the *thinness* of the boundary between palaeontology and archaeology which is partly responsible.

It is the boundaries between archaeology and other societal forces, like religion, politics and economics, that have provided some of the longest-running public

debates and thus offered archaeologists numerous occasions to communicate to the public in order to focus attention on, argue or defend their points of view. Religion and politics may present fewer disputes in Britain than they do, for example, in the Middle East, where "the fight to control the past is just as volatile and dangerous as the fight to control the land" (Marcus 2000). Yet even in the UK, certain conflicts have drawn archaeologists into the public spotlight: like the Seahenge controversy over a site's spiritual value versus its archaeological value (Champion 2000) or the issue of repatriation, whether of artefacts like the Elgin Marbles or of human remains (Garner 1997). The boundary between archaeology and economics—the dividing line between archaeological and commercial value—is perhaps the most often contested boundary today. Looting and the illegal trade in antiquities is the easiest end of the border to highlight and argue in public (if not patrol), and thus the amount of publicity generated, or contributed to, by archaeologists on this issue is not surprising. Archaeologists' exposure of London's role in trafficking stolen antiquities (Brooks 2000a) and the public censuring of the Horniman Museum for having bought smuggled African artefacts (Brooks 2000b) are just two of many recent cases to surface in the press. Less easy to publicise (and win) are the arguments about the legal selling of antiquities, the damage caused to sites by the zealous pursuit of tourist monies and the boundary between underwater archaeology and commercial salvage. As two of these can only be resolved with international co-operation, the efficacy of purely national publicity is limited. Nevertheless, the boundary between archaeology and commerce is set to dominate archaeological communication for many years to come.

And, finally, archaeologists need to communicate to their wider publics, *because if they don't, someone else will.* Like the scientific community as a whole (Nelkin 1995: 144-158), archaeologists have become increasingly concerned about the need to control public discourse on archaeology in the face of a growing recognition that others are or could be usurping this role (McManamon 2000: 6; Fagan 2002: 259). In the UK, these 'others' include social groups outside the largely WASP- and male-dominated archaeological establishment (Hodder 1992[1984]: 131), those with mainly political or economic interests (like government or commercial developers), those offering 'alternative' archaeologies, and the media itself.

Archaeologists have taken a long time to recognise this, and many may not be aware of the extent to which it is *they* who have allowed others to dominate archaeological communication (see Chapter One). Today, as these other 'voices' sometimes have powerful rhetoric, more money and better communication skills on their side, the task of re-gaining control is not easy. One course of action is to try to do this alone; another is to join forces with the most powerful of these other voices, the media. Referring to her frequent collaborations with the media, archaeologist Bettina Arnold (2001: 466) explains: "somebody has to do it, since the media have latched onto the appeal of archaeology, and will present it one way or the other. If we don't want others to wholly define us, and what we do as archaeologists, we need to be willing to participate in the process of defining ourselves—one could even say justifying ourselves—to a wider audience." This view, although expressed somewhat begrudgingly, may herald a new era in archaeological communication.

These thirteen reasons why archaeologists need to communicate with their publics do not all depend on the mass media as the medium of communication, and even those that do will not have equal success in passing the media's 'newsworthiness' test. Yet they are ample proof that archaeologists have a number of motives for disseminating their information and views to the outside world. Given this, one might suppose that archaeologists would be enthusiastic communicators. On the contrary, I would argue that British archaeologists today are at best reluctant communicators. Why are they shy of public communication?

Reluctant Communicators

Archaeologists may be better at communicating with the public and each other today than they were in the previous generation (Hinchliffe 1999: 21), but their public outreach tends to be limited to on-site activities, the internet and, as McAdam (1999: 53-54) suggests, "days schools and lectures rather than publication or the broadcast media." Bahn (1996: 88) has even admitted that "one still finds examples of archaeologists who are too busy to [convey their findings to colleagues and the public], or who, amazingly, do not feel any necessity to waste their time on it." This reticence to engage in public communication is likely to

derive in part from a basic conservatism innate in the academic/archaeological process and ethos. "Archaeologists know how much research is actually involved in the release of new evidence," Finn (2001: 264) explains, "and they are initially cautious, holding back information until it makes sense in academic terms." Other factors contribute to this cautious approach: the speculative, destructive and often accidental nature of much archaeological work; the length of time it takes to find, process and analyse evidence; the increase in specialisations with specialised language that complicates pan-disciplinary and public discourse; the data overload that is swamping the profession; and the perceived damage done to the discipline by precipitous announcements, misinterpretations and hoaxes. Perhaps the most significant factor of all has been the growing canon of unofficial 'rules of conduct' governing public communication that have been established over the years.

These unwritten rules, largely inherited from the scientific and academic communities (see Nelkin 1995: 148-156), sanctioned specialist communication through scientific journals as the proper channel of dissemination and offered guidelines or 'do's and don't's' about non-specialist communication. Some of these relate to matters of professional etiquette, like *'don't criticise colleagues in public'* (Pitts and Roberts 1998: 233-235; Darvill 1999: 42; Fagan 2001: 462) or *'don't presume to speak for the whole profession'* (Paynton and Barclay 2001: 1). Others (e.g. Wheeler 1954: 220-224; Thomas and Arnold 1974; McManamon 2000: 15; Fagan 2001: 462-463; Allen 2002: 247-250; Young 2002: 241-242) are pragmatic suggestions aimed at improving archaeologists' communication skills, like the following advice about avoiding jargon:

> don't try to write [your press releases] in journalese.... Use straight, simple, unemotional English and explain in brackets any difficult archaeological words, because the man with whom you are communicating has just come back from an inquest on an old lady who gassed herself and, when he has written your piece, he is off to watch the local Old Age Pensioners' Christmas Play; to him archaeology is Stonehenge, Sir Mortimer Wheeler, and the British Museum. He would much rather hear about skeletons or buried treasure, as he is writing for the mass readership of his paper not for a few local conservationists and historians. (Thomas and Arnold 1974: 248)

There are, however, other rules that actually discourage public communication, such as:

'Don't speak to the media.' Nelkin (1995: 149) lists discouraging colleagues from "going public" as one of the strategies that American scientists use to control science news. In Britain, Wilkie's study on media coverage of 'Dolly', the cloned sheep, "makes the point forcefully that many British scientists are culturally attuned if not actually trained to resist discussions in the general media" (Hargreaves and Ferguson 2000: 53). This rule has been applied in archaeological cases where communicating to the media was seen to pose a threat to site security or to one's own or one's colleagues' rights to excavate. Both threats, for instance, were used in an attempt to silence Mike Bishop over his palaeolithic finds in Westbury-sub-Mendip in 1974, until it was too late and the deposits were dynamited by the quarry company involved (Pitts and Roberts 1998: 121-123).

'If you have to speak to the media, be circumspect.' The need to predict how one's words will be interpreted by the public and especially one's colleagues when replicated in the mass media can lead to self-censorship. As Sattin (2000) writes: "Egyptologists tend to play safe, and most would rather say nothing than risk a statement that could be shot down by their colleagues." Paynton and Barclay (2001: 1) remind us of the dangers of making incautious remarks: "Casual comments, taken in or out of context can come to assume a disproportionate significance and to be treated as the views of some mythical and homogenised archaeological 'establishment'." Perhaps the best example of how the precipitous use of one word ('Caucasoid') fuelled a lengthy public controversy is the Kennewick Man case in America in the late 1990s (Thomas 2000: 115-118; Downey 2000: 11). A British example of the repercussions of 'off-the-cuff' remarks will be examined in Chapter Six.

And, *'If you have to speak to the media, make sure you have spoken to the profession first.'* This rule is the most relevant in terms of this dissertation, for it privileges the slow release of information to a circumscribed audience of one's colleagues through peer-reviewed specialist journals over quicker and wider disclosure through the mass media. It forms the basis of the traditional communication pathway used by archaeologists and scholars in general, as will be examined in Chapter Five. Rushing to the media before communicating to your peers is, in Bucchi's terms (1998: 61), "not just unseemly...but it is a 'code-breaking' offence." Sticking to the code does, however, have drawbacks for public communication, for

it sets up a time delay between specialist and non-specialist communication that may not always be desirable. It may also jeopardise the 'newsworthiness' of the information, for by the time information is finally allowed to percolate down to the mass media, it may be more credible as information, but it may no longer be judged to be 'news'.

These constraints on public communication all involve some degree of self-censorship and can lead to the kind of 'no-win' situation regarding communication implied in the following pictures of the archaeologist in present-day Britain:

> Archaeology is tough in England. You get cold, wet, bored, you struggle with absurd levels of funding, and all for what? A small heap of junk that people will look at and say: 'You did all that for *that*?' Even other archaeologists will tell you they would've done it better....And if you publish it no one ever seems to read it and, if you're really, really lucky, it gets a review in an academic journal subscribed to by a few hundred institutions. (Pitts and Roberts 1998: 75)

> It is a perilous business to straddle the two worlds of scholarship and journalism. The journos think you must be tightly buttoned up in your boring pedantry. The academics look down their noses at you as having sold out to the yahoos. (Howard 1992: 8)

While the above gives us some clues to archaeologists' shyness about public communication, it would be useful to look more closely at some of the reasons that are articulated by scientists and archaeologists for why they do *not* communicate their findings outside the profession.

'I Don't Communicate Because...'

The analysis that follows was inspired by the work on social scientists and the media in Fenton *et al.* (1998: 76-93) which included a survey in the mid-1990s of 674 social scientists who were asked, among other things, for their reasons for "not pursuing mainstream media attention" (*ibid*: 90). These results became the springboard for my thinking on why archaeologists might be de-motivated to communicate beyond their peer group. The expansion of ideas beyond Fenton *et al.* is my own, as is the phraseology of 'excuses' for not communicating. The first three reasons relate to media indifference or "source inertia" (ibid: 91). Or, in other words, 'I don't communicate because...':

'My work is of little or no relevance to the media or public.' It is likely that some archaeologists consider their work to be too esoteric or arcane to be of interest beyond their peer group (see Jones and Longstreth 2002: 187). This may stem from a perceived social difference between archaeologists as a group and society as a whole. As Hodder (1992 [1984]: 128) remarks, "It is probably the case that most professional archaeologists come from a fairly limited range of social backgrounds. The past that interests them (us) may not be of such interest to others." Archaeologists taking this position may be right, but if no attempt is made to communicate their findings, then only they and no one else will be able to judge. The editor of *Archaeology*, Peter Young (2002: 241), has advised archaeologists to stop presupposing "that your material will not be interesting" and to remember that editors help authors find the relevance in their material.

'Public communication is irrelevant to my work: It's not my concern.' In this perspective, communication is not acknowledged as 'real' work, or it is seen as the responsibility of others (for instance, the leader in a team project or one's employer). Some archaeologists consider it a waste of time (Bahn 1996: 88) or don't "necessarily see themselves as 'messengers' at all" (Holtorf 2000: 214). In a recent American book, Kennedy (2002: xiii) stated that it is "not yet a convention of the profession to assume public discourse to be an essential aspect of the work." Wheeler (1954: 220) was perhaps too optimistic when he forecast 50 years ago that "There may yet linger in remote cloisters a few pedants of the old school who will have none of this vulgarization, but their mortality-rate is happily high."

'I'm not ready to communicate: It's not my first concern.' The length of time involved in archaeological research and archaeologists' concerns with premature announcements mean that public communication is likely to be deferred until the timing is deemed to be 'right'. Yet for many, public communication is a low priority regardless of timing, and is often seen as "a bolt-on extra" (Frodsham 2004: iii) or "an 'extra frill' rather than a major commitment" (Stone 1989: 204). Archaeologists' unwillingness "to devote more of their own professional activity to [public education and outreach] or to set higher priorities for it among the activities of the institutions where they work" (McManamon 2000: 5) may be rooted in an innate shyness. "Generally archaeologists seem to be frightened by contact with real people," Thomas and Arnold (1974: 243) have suggested, "Some

seem to be so fascinated with their own miniscule [sic] pursuits that anything remotely resembling publicity, fund-raising, newspapers, and television is relegated to a remote part of their minds, normally reserved for the especially sordid." Moreover, if archaeologists are indeed "better at communicating with each other rather than with those whom they increasingly claim they seek to serve" (Prince and Schadla-Hall 1987: 70), and if public communication must, under the rules of proper conduct, take a back seat to communicating with colleagues, then as a priority it is languishing at the back of a rather large bus, given archaeologists' "appalling record" (Renfrew and Bahn 2000: 559) in publishing specialist accounts of their work. "Estimates vary," they write, "but it has been claimed...that up to 60% of modern [British] excavations remain unpublished after 10 years." This may be due, as these writers claim, to laziness, incompetence, the labouriousness of post-excavation work compared to the excitement of a new project or the lack of proper budgeting. Whatever the reason, this mounting backlog of specialist publication needs to be remedied, perhaps through greater use of the internet or the application of more rigid preconditions about publication, as is being considered in Greece (Platt 2001a). Whatever the solution, public communication is unlikely to fare better until these problems in internal communication are resolved.

Source inertia is, however, only one of many factors hampering archaeological communication. Archaeologists' reticence may also be the product of institutional censorship, scientific arrogance, a lack of confidence or skills, or mistrust and fear, the last being what Fenton *et al.* (1998: 91) term media "aversion". I therefore propose seven further reasons that inhibit archaeologists' public communication.

'My funder or employer has restrictions that limit my communication.' Working for institutions or government agencies often entails some restrictions on an individual's rights to communicate publicly, and as archaeology becomes more commercialised, the more likely it will be that funders, clients or employers will control archaeological communication in this way. There have already been cases where the public relations demands of funders have taken precedence over public disclosure. This occurred, for example, in 1993-94 when English Heritage imposed a five-month delay in announcing the palaeolithic finds at Boxgrove so that it could coincide with their 10th anniversary celebrations (Pitts and Roberts 1998: 55-

57, 211-212). As one science journalist remarked to Hargreaves and Ferguson (2000: 59): "The problem at the moment is censorship by those who run institutes: I have had four cases recently of scientists who wanted to discuss their results being banned by their bosses. This is madness." Such madness appears to be spreading from institutions to archaeologists themselves. In the case of one particularly 'marketable' discovery (Ötzi), the lead archaeologists forced their colleagues to sign contracts that restricted their rights to communicate information about the discovery in order to preserve exclusivity deals or commercialisation prospects (Fowler 2000: 174-179).

'Too much public attention interferes with my work, and the media invariably oversimplify the subject.' These reasons, which I attribute to a kind of scientific arrogance, are based on the weighing of any 'benefits' accruing from wider dissemination of one's work against two 'costs': the disruption to archaeological fieldwork caused by public visitors encouraged by media attention and the potential 'dumbing down' of the subject by the media. The former has had an interesting history. Although the fashion for the public visiting excavations goes back to Victorian times, by the 1920s, such visits had become a serious concern to British archaeologists (Crawford 1955: 153). In the mid-1930s, Mortimer Wheeler's encouragement of public and media site visits brought him censure from his colleagues "who believed that catering for the press and public on excavations had ill effects on the work itself...[for] curious sightseers took too much time and energy and produced a hectic atmosphere"(Hawkes 1982: 98). Forty years later, as Hinchliffe (1999: 22) remembers about excavations he worked on in the early 1970s, "Visitors were at best a diversion, and visitors with questions a nuisance." In the 1990s, these sentiments were still rife (Bahn 1996: 93, Renfrew and Bahn 2000: 563; Shackel 2002: 157), but the profession had devised a number of strategies (e.g. display boards, open days and viewing platforms) that meant that public access could be managed in order to minimise disruption. These solutions may have been forced on archaeologists by publicity-seeking funders, yet this is one case where the problem was faced and partly, if not wholly, resolved.

The same cannot be said of the second perceived 'cost': the assumption of media 'dumbing down'. Despite the current vogue for popular archaeology and the number of archaeologists (like Paul Bahn, Mick Aston, Julian Richards and Francis

Pryor to name the most obvious examples) turning their hands to it, many archaeologists seem to find it difficult to make the transition from scientific to public discourse or to understand the journalist's need to do this for them. This is bound to produce a reductionist attitude that sees any attempt to use a different or more accessible discourse as 'dumbing down'. Equating popularisation with (over)simplification disregards how popularisation "feeds into the research process" and how simplification is itself a tool of scientific discourse (Hilgartner 1990, cited in Fenton *et al.* 1998: 20). It also ignores the fact that this is an elitist criticism with a long history (see Carey [1992] on intellectuals' views about the masses and mass culture at the turn of the 20th century and Hargreaves and Ferguson [2000: 7-18] on scientists' using out-dated mental constructs about communication, inappropriate for working in a democratic age). What lies behind the dumbing down charge is perhaps more interesting, as journalist David Walker (1999) claims, than the charge itself, for hidden within it is a class-ridden attempt to privilege one voice over others in the face of what Walker calls the "cultural cacophony".

'I lack the confidence or skills to communicate well'. The likelihood that any profession would produce more than a handful of competent popularisers in any given period should not deter us from recognising that some archaeologists do lack the confidence or skills for public communication. Playwright J.M. Barrie commented more than sixty years ago that "The Man of Science appears to be the only man who has something to say, just now—and the only man who does not know how to say it"(cited in Wheeler 1954: 186). That archaeologists should be included in this assessment can be deduced from Woolley's (1965 [1930]: 137) admission at the time that field archaeologists "may not possess any literary gifts, and that, therefore, the formal presentation of the results to the public may be better made by others." These views were still valid in 2000, when 81% of science journalists judged scientists to be "ineffective communicators" (Hargreaves and Ferguson 2000: 52) and when some archaeologists were seen to be unsuited "by ability, personality or skills for effective public outreach" (McManamon 2000: 15).

Professional jargon remains a major stumbling block. "Jargon in any specialized discipline," writes Little (2002: 15), "develops as a shorthand to make communication [amongst specialists] more efficient, but to the uninitiated, such

language is obscure and confusing." The need to learn and show proficiency in an archaeological discourse that has become increasingly technical, specialised and scientific (Hodder 1992 [1984]: 127) is a defining feature of the profession. It is therefore not surprising to find archaeologists becoming estranged from public discourse and their writings being criticised, even by colleagues, as "utterly impenetrable" (McAdam 1999: 50). Gale (2002: 7) well summarises the dilemma:

> We are so preoccupied with qualifying our every breath, afraid that a metaphorical Brutus is about to strike (for Brutus substitute your relevant pet hate figure or organisation who has an element of editorial control over your work), that we go for safety and make even our most exciting discoveries sound bland and lifeless. Unless, however, we are trying to attract funds, then we all begin to wax lyrical and get embarrassingly enthusiastic, informing interviewers from the media that our particular piece of research or site is fundamental to life on the planet....Most of our literary output is so constrained by its format, it is often dull even to ourselves. We are not as archaeologists often required to deal in rocket science, and although we make increasing use of science to recover data, when we present interpretation we increasingly try to do so in a quasi-scientific manner. We should perhaps endeavour to undertake our business and write about our ancestors in ways, which inform, not bore people to death. The past is a foreign country, with a difficult language to interpret but perhaps it's losing something in the translation?

The skills needed for better translations are harder to learn today given that they extend beyond writing. That some suggest that public communication might best be left to others more adept at it is an interesting proposition explored in later chapters. If, however, archaeologists are unhappy with the 'doers' and 'public interpreters' of archaeology being different people (Frodsham 2004: iii), then teaching better communication skills is the only viable option.

'I mistrust the media for its inaccuracies, omissions, distortions and manipulations.'

This reason accounts for a large measure of archaeologists' resistance to public communication strategies that involve the mass media, for it is clear that they (and scientists in general) have little trust in the media or its practitioners. Although it is the media's job to "*refocus* the results of scientific research" (Thomas 2000: xl, my emphasis), "So far as scientists are concerned, the media form a distorting lens designed to obscure the passage of truth and rational argument" (Hargreaves 2000: 14). Most archaeologists have 'horror stories' to relate (see **Figure 2.2**) about how archaeological information was inaccurately reported, how important details were omitted or distorted, or how journalists tried to manipulate their

Figure 2.2: Media 'Horror Stories'; Alternative Interpretations

Antiquity 's editorial (Stoddard and Malone 2001: 459-479) on archaeology and the media in September 2001 was a welcome addition to the subject, but one introduced by five media "outrages and mistakes" summed up this way: "We could relay many successful and accurate examples of coverage of archaeology, but these stories of deviation from the real archaeology, either through simple error or through the sidelining of the archaeological facts in search of a good alternative and usually creative story, remain more prominently in our minds" (p.459). Below is each story (summarised where necessary) and my suggested alternative reading.

1. "Giornalist" for "prominent" Italian newspaper is pipped to a parking space by one of the editors attending a press conference. The journalist's subsequent column "neglected to cover the archaeology of the press conference, preferring the immediate copy offered in the square outside, adding his personal view of the local government administration. Admittedly, he may not have parked his car in time for the press conference."
The journalist may have missed the conference and been forced to use his column by venting his spleen on the archaeologist's '"low Sherpa van" and local bureaucrats. If he did attend, he obviously felt the information offered was less relevant than local parking problems. Without being told the news announced, it is hard to judge its relevance.
2. A journalist "redistributed all the periods of an Umbrian landscape from the Palaeolithic to the Medieval onto a single hilltop."
The result of sloppy journalism or unclear explanations. Were journalists offered press kits with clear identifications of sites and periods?
3. "A respected British newspaper almost caused a diplomatic incident with a headline along the lines of 'British Navy rescues Maltese Ancestors' after it was revealed that the present editors had persuaded the Royal Yacht Britannia to carry precious human remains from Malta for study in the United Kingdom."
Given the current climate regarding ownership rights, the removal and the vehicle chosen to accomplish it seem insensitive and newsworthy, something one would have expected the editors of Antiquity to realise.
4. "[D]istinguished British newspaper preferred to carry an extensive full-colour story on the sponsor of the project rather than the archaeology itself."
Given the difficulty in securing sponsors for one's work and the greater difficulty in getting, as reciprocity, sufficient mentions of sponsors in any coverage, the paper's focus on the funder is indeed surprising and highly commendable, as it might guarantee more support.
5. "[A] journalist from a *serious* tabloid (that is, the more serious end of the popular press) was more interested in the fact that Cambridge and Oxford universities were working together than in the aims of the archaeological project."
Given the competitiveness of Britain's top universities, their cooperation was deemed a more appropriate angle to exploit. Without knowing the nature of the project or its aims, nor how its relevance was explained to the press, it is hard to assess which story was the more newsworthy. In any case, 'aims' as opposed to 'results' will always be more difficult to get across, as they are rarely considered 'news'.

Author's Note: *These negative and rather petty stories, retold in a flippant style, especially in the first case, seem an inappropriate introduction to a subject, unless one wants to diminish its seriousness, but this lightweight treatment is a pattern often replicated in archaeological studies of media coverage. One also notes the editors' use of 'coded' adjectives in describing British newspapers: "respected" and "distinguished" used to tell readers that these were 'quality' papers (which should presumably 'know better'), while the word "serious" attached to "tabloid" having to be italicised (and then explained) implying this is an oxymoron.*

contribution to "fit a preconceived news angle rather than to provide genuine insights" (Finn 2001: 267). Although often relayed in a jokey manner, these stories build barriers. As Fenton *et al.* (1998: 73) found amongst social scientists, "the wounds from these encounters continued to smart long after the event and appeared to exert a cautionary influence on all subsequent dealings with the media." "Unfairly," as Stoddart and Malone (2001: 459) admit, "we tend to remember the outrages and mistakes rather than the smooth successes."

The dangers in this selective amnesia are threefold. First, it presumes that scientists are beyond reproach. As Fenton *et al.* (1998: 19-20) point out, "it is specious to concentrate on error stemming from journalists because it can give the deceptive impression that mistakes are their exclusive preserve." Even Stoddart and Malone (2001: 462, my emphasis) confess that "The colourful stories which archaeologists relish telling (including perhaps the ones we as editors have reported!) *are often the result of inexperienced handling of the media.*" Second, it ignores the changing nature of archaeological interpretation. "What exactly is a 'distortion' of archaeological interpretation, or a 'damaging' and 'fanciful' interpretation, as opposed to one based on the 'proper' study of archaeological remains and resulting in 'accurate' information about the past?" asks Holtorf (2000: 214), replying "Surely such judgements are socially negotiable and subject to change over time." Third, by overemphasising the negative, archaeologists and scientists overlook the positive. Most media and science research seems to demonstrate that science is well-treated by the media, and, if anything, that journalists and editors have been too uncritical (in the past, though less so now) about the information that they receive from scientists (Nelkin 1995: 117, 146; Fenton *et al.* 1998: 13; and Hargreaves and Ferguson 2000: 12-13). Taking a wider view of archaeological press coverage, Fagan (2001: 462) admits: "If you look behind the façade, I would say that archaeology generally gets an excellent press," a statement which is supported by the analyses in Chapter Six. Pettitt (2001: 466) makes a similar case for TV archaeology: "In my experience, there is a great deal of enthusiasm, professionalism, and genuine concern to 'get things right' scientifically," a view that is backed up by the case study in Chapter Seven. While accepting that archaeologists may have legitimate grievances with the media, this wider perspective places them in a more informed context, one which challenges

the bases of their mistrust of the media and acknowledges that the popularisation of archaeology is a shared responsibility.

'I fear for the security of my site.' More potent than the fear of disruption to work are archaeologists' concerns about the potential damage to a site, its contexts, artefacts and environment from over-eager tourists, journalists, TV crews and especially treasure hunters. This explains why they avoid public communication about site location, until the safety of artefacts or structures can be secured. In 1999, such concerns were raised about Seahenge and the nature reserve in which it was located, when an estimated 17,500 people descended on the site following media attention (Platt 2001b). One year later, when a similar find nearby was discovered, it was not publicised at all "in the wake of controversy over Seahenge" (Kennedy 2001). Except perhaps in countries where looting is an endemic problem, this pretext need only limit the fulsomeness of, or perhaps delay, public communication, not stop it altogether.

'I fear reprisals or rebukes from my peers, employers or the public.' The mass media's tendency to personalise news by identifying sources (Nelkin 1995: 162) and the academic community's tendency to view the seeking of media attention as "grand-standing" (Womack 2001) and to devalue popular communication in career promotion (Stone 1997: 28; Young 2002: 240), can act as a brake on public communication. Although some archaeologists, as mentioned earlier, may be officially restricted in what they can say publicly, others may prefer self-censorship rather than risk the consequences of information being transmitted or reported incorrectly or of the timing or substance of its release being deemed inappropriate (even if accurately reported). For instance, in a book on archaeology and nationalism, no Eastern European archaeologist contributed "because they feared the effect such publication could have had on their professional careers" (Diaz-Andreu and Champion 1996: 12). More recently, British Egyptologist Joann Fletcher found herself banned by the Egyptian authorities from "conducting any more expeditions" when she "broadcast the images [of the mummy she claimed to be Nefertiti] before publishing in the official channels" (Dunk 2003: 57). Used to toiling "in relative anonymity" (Fowler 2000: xv), archaeologists may feel uncomfortable, even threatened, by becoming 'visible' to and directly contactable by the public (see Arnold 2001: 464-465).

'I fear the unpredictability of communication.' Saved for last is the rational fear shared by all those who face the choice of communicating or not: what will happen to my messages once they have been released into the media vortex? The answer is the outcome will always be unpredictable, and this applies to the actual process of announcing, not just to its aftermath. Interviews and press conferences can, for instance, be dogged with unexpected questions, *ad hoc* replies immediately regretted and, even, accidents of fate. Underwater diver Don Bullivant (in one of the case studies in Chapter Six) did not expect to be asked what the 'boat', which his 6,000-year-old Solent timbers might be evidence of, might have looked like. Yet his off-hand remarks about early Egyptian raft-building resulted, to his chagrin (Bullivant, *pers. comm.*), in a large illustration of an 'Egyptian' raft sailing off England's unmistakable White Cliffs (Derbyshire 1997). Chagrin was the least of excavation director Ian Hodder's worries at a press conference stage-managed by his credit card sponsors at the Neolithic Çatalhöyük site in Turkey. The discovery of a missing artefact during the press junket and the three-hour police interrogation of journalists produced unexpected media stories that could have jeopardised the whole project. "Everything happened so quickly," Hodder (1998: 136) writes, "and in such a variety of directions that the outcome was unpredictable."[9]

Once information is released into the public arena, it does have a habit of 'snow-balling'. It took only a matter of days for inaccurate reports of William Murray's (1999) finding of seabed anomalies—that 'might' indicate the remains of some of Cleopatra's Actium fleet—to race round the world. Unlike Hodder, Murray was penalised by having his project closed down by the Greek authorities (who held him responsible for not having better controlled the release of information) and by being forbidden by them to communicate publicly about his research. As the scientists involved in the Kennewick Man case found out, "perhaps the most disturbing things about [it] was its apparent inexorable transformation from a matter of hard science into a kind of serial drama with a life of its own" (Downey 2000: 120-121). In this case, the onus of responsibility rested not only on the media, for the palaeoanthropologists "were also uncomfortably aware that they themselves had, if not actively, fostered that transformation, at least failed to speak out against it." The same could be said of Seahenge, for, as Champion

(2000: 30) reminds us, "by describing it as 'the most important ancient discovery...for many years' the archaeologists in favour of its excavation were ensuring that it received the maximum amount of media coverage." What cases like these demonstrate is that, at the most basic level, no matter how well-prepared or stage-managed the communication may be, there is no guarantee that the information will appear where and when you expect it to, that its content will not be transformed, that the form in which it is presented and illustrated will be seen as appropriate or that the information will not snow-ball around the world. For that matter, there is no guarantee that it will appear at all, anywhere.

The above picture of archaeologists' perspectives on communication may give the impression that there are as many sound reasons *against* communicating as there are *for*. Yet the reasons *for* carry greater weight, I would suggest, because more of them are incontrovertible, most of the reasons *against* being predicated on conditions that can change or on 'worst-case' scenarios. The cost/benefit equation itself is not a set formula. It needs to be reassessed every time there is something to announce, and weighed differently depending on what kind of work one is doing, who is paying for it and what one's motives are for wanting the information to reach a wider audience. There are, however, other factors affecting the equation. Some reflections on archaeologists' views of the media as a whole, of specific media and of media professionals reveal other considerations that must be accounted for before the whole picture comes into focus.

Archaeologists and the Media

Defining the Media

In books about the public presentation or communication of archaeology, like Jameson (1997) and Beavis and Hunt (1999), the media or means of delivery of archaeological communication are normally defined as museums, site-based activities and educational courses. This focus is understandable since archaeologists have close links with and find most of their employment in these fields. Yet Merriman's 1985 public survey showed that only the second of these warrants such attention, for site visits rated highly (first and second) in the

public's choice of "most enjoyable" ways of finding out about the past, with museums and evening classes coming sixth and eighth respectively (Merriman 1991: 120). Given some acknowledgement of the "tiny proportion of the population" that museums reach (Hooper-Greenhill 1991, cited in Stone 1997: 28) and some evidence that visitors' interest in museums' archaeological holdings are "rated low" (Prince and Schadla-Hall 1987: 69-70), the profession's emphasis on museums as 'the' vehicle for the public's consumption of archaeology (Schadla-Hall 1999: 150) seems unjustified. The absence of the press as an important vehicle is notable, both in the literature (excepting Finn 2001 and Ascherson 2004) and surveys, as is the marginalisation of television and books, which ranked third and fourth in the 1985 survey (Merriman 1991: 120). One has to conclude that archaeologists are using very selective definitions of the communication media.

This selectivity is also evident in scientists' and archaeologists' tendency to treat specialist publications as though they are *not* part of 'the media', but a "a part of science" (Hargreaves and Ferguson 2000: 20). These writers continue: "the implicit assumption persists that there is a personal, political, economic and social agenda at work in the media of mass communications which does not apply to 'codified scientific papers', that the two types of media are so different that they cannot be analysed using the same tools, or really spoken of in the same breath." In this view, they conclude, scientific publications are considered "non-ideological" and, unlike media professionals, "scientists, it seems, are capable of setting aside cultural prejudice and influence, in order to write objectively and rationally." Although archaeologists have been questioning this last assumption for some time, few would dispute that this distinction is made between specialist and non-specialist publications. There is, for instance, little critical examination of the agendas of scientific publications, exceptions being Atkinson (1981) on Glyn Daniel's tenure at *Antiquity*, Faulkner (2002) on *Britannia*, and a reference in Fagan (2001: 459) to the commercialisation of *Nature* and *Science*.

Given these narrow definitions of 'media', it is not surprising that archaeologists tend to see their collaborators in the process of public communication as those experts in museums, exhibition design, cultural resource management and education with whom they closely work (see Jameson 1997: 11). While some acknowledgement is made of the contributions that *local* media professionals can

make (see below), the vast array of professionals working in the *national* media are seldom mentioned as collaborators, although Lipe (2002: 25) does include them in his list of "interpretive specialists". Thus, the national media and its practitioners are implicitly written out of archaeologists' scenarios for public communication, most recently in the definition of what constitutes 'public interpretation'.[10] Circumscribing in this way both the playing field and the players involved in public outreach may be unintentional, or it may be part of an unconscious strategy to ensure that play remains in the hands of archaeologists and their team and is not contested by more powerful players in a larger arena. Whatever the rationale, putting up these fences around public communication is unlikely to build bridges between archaeology and the mass media.

When archaeologists discuss the factual mass media, they usually make a distinction between *local* and *national* media. Local radio and newspapers are seen as less guilty of the excesses of their national counterparts, more interested in "less galactic discoveries", and thus more 'valuable' as tools of communication (e.g. Thomas and Arnold 1974: 246-251; Stone 1989: 201; A. Lawson 1999: 32; Fagan 2001: 460; Oswald and Lee 2002; McManamon 2002: 34, 39). Nevertheless, these assumptions have not, to my knowledge, been backed up with any empirical evidence or analysis. With a few exceptions (e.g. Atkinson 1981, Gero and Root 1994, Scarre 1994, Peters 1981, Kemmis Betty 1999), the same could be said of magazines and book publishing. Archaeologists may acknowledge these other media as part of the mass media, but when critiquing archaeology's representation in the non-fiction media, they are most often referring to national newspapers and television, and treating them as one entity, not two, thus overlooking the differences between them. So, how do they view these media?

Archaeologists' Views on the National Press and Television

Since a number of views have already been explored in preceding sections, I will concentrate here on three other aspects: what archaeologists believe the press and television find interesting about archaeology, the distinction they draw between their profession and these media and some of their other complaints about where they feel these media 'go wrong'. Until recently, archaeologists have tended to

keep their opinions about the mass media to themselves, or at least out of print. The September 2001 *Antiquity* editorial (Stoddart and Malone 2001) offered a platform for archaeologists to air their views, and much of the following analysis derives from statements in that editorial.

As to archaeologists' perceptions about which archaeological stories attract the press and television, the view most often repeated is that they are only interested in 'big' stories about discoveries or valuable artefacts (Fagan 2001: 459; Pettitt 2001: 467; Russell 2002a: 47), or that will "cause the textbooks to be rewritten" (Bahn 2001b). As Stoddart and Malone (2001: 459) put it: "the media are keen on a good story (disputes/debates/disagreements) and the tangible value of objects." They then catalogue the recent subjects that the media 'latch' onto as "bodies, cannibalism, monuments, and repatriated artefacts" and "drugs, first colonists, first humans, sensitive ethnographic politics, and treasure" (*ibid*: 460). Four observations seem appropriate.

First, one notices some ambiguity as to what makes a 'good' story. Stoddart and Malone's equation of 'good' with "disputes, debates, disagreements", in other words, 'conflict', is not supported by my own research which has demonstrated that 'conflict' as defined here does not figure high in either press or television coverage of archaeology. Instead, as the others state, it is stories about new discoveries of sites and artefacts that dominate, accounting, for instance, for more than 20% of 1,000 press articles in my database. That some stories emphasise the overturning of conventional thinking (Bahn's point) may explain why archaeologists might consider these as 'conflict' stories (see Fenton *et al.* 1998: 17). Yet such stories, I would contend, are deemed newsworthy by the media not solely because they exploit 'conflicts' between archaeologists, but because they allow new information to be anchored in pre-existing knowledge, those ideas that "everybody knows" (Gould 1992: 211-212), and thus make the news accessible and relevant to the public.

Second, 'good' stories can seduce archaeologists as well as journalists and programme makers, as Stoddart and Malone's (2001: 459) own preferences for reporting "outrages" over "smooth successes" proves. Conniff (2002: 26) reminds us that "the trouble with a good story is that it has a way of distorting the facts; we see what we want to see and close our eyes to everything else." The history of

archaeology is full of cases where compelling stories (like some of the diffusionist theories applied to monuments from Stonehenge to Great Zimbabwe) have led archaeologists astray and left them, like the archaeologist in Julian Mitchell's play *Half-Life* (1977), personally and professionally stranded.

Third, regarding the size of stories, it is clear that in every field of endeavour, not just archaeology, 'big' stories are likely to attract more media attention than 'small' ones. Given the amount of news stories competing for space every day, breakthroughs will always take precedence over small incremental advances. Yet I would argue that the mass media in Britain, especially the press, have at least over the past six years covered a number of smaller archaeological stories. For example, the new calculations for assessing skeletal age from bone 'wear-and-tear' would generate stories in half the national papers in March 1999 (e.g. Arthur 1999, English 1999, Hanlon 1999, Hawkes 1999, Uhlig 1999), primarily because journalists found relevance in how this news might upset professional and public perceptions of the presumed early age at which our ancestors died.

And fourth, with respect to the media's alleged favourite archaeological subjects, my own research on archaeological documentaries on British television paints a somewhat different picture from that drawn by Stoddart and Malone. Over four years (1999-2002) and 590 broadcasts, "bodies" indeed figured highest in the list (12.7%) and "monuments" came in fifth place (7.8%); but the other subjects mentioned in no way dominated coverage: "cannibalism" (1%), "drugs" (0.8%), "colonists" (2.4%), "first humans" (3.9%), "repatriated artefacts" and "ethnographic politics", which I grouped together under 'Heritage and Public Archaeology Issues', (2.5%) [see Figure 4.11].[11] My research has, in fact, proven that British television has 'latched onto' a very wide spectrum of archaeological subjects and time periods, as discussed in more detail in Chapter Four. Even if one accepts that certain subjects, periods or areas are 'over done', is this the media's 'fault'? The media often take their cue in subject choice from the public, through audience ratings (see Chapter Seven). Are archaeologists not, in actual fact, condemning public interest when they condemn the media's choices? While accepting that some subjects are just not 'saleable'—especially in TV where cost means that certain proposals will 'sell' better to commissioning editors—Pettitt

(2001: 467) suggests that it is archaeologists' "responsibility to interact with the media to ensure that the same old themes...do not keep reappearing."

The other perception that seems to dominate archaeologists' views of the press and television relates to their positioning of archaeology and these media as two professions operating under different and irreconcilable agendas, as the following three statements from 'pro-media' archaeologists testify. Stone (1997: 28) interrupts his call for archaeologists to "use every means" including the mass media "to reach the general public" and his assessment that "the potential benefits" of so doing outweigh the costs, to issue this warning:

> There are, of course, dangers associated with this approach: media communication is an industry in its own right and responds first to business imperatives, rather than cultural or academic ones, thus creating a constant risk of distortion or sensationalism in archaeological material.

Pettitt (2001: 468) is "strongly in favour of the media's interest in archaeology" and sees the mass media as "the main route in which our endeavours are fed back to the funders [the public]", but he reminds us that archaeology and the media "are two very different enterprises. One exists unashamedly to tell stories; the other vociferously denies that it does so" (*ibid*: 466). He later adds: "I think it is worth emphasizing—as it seems to me most academics forget this—that the media exist predominantly for entertainment, whether or not an educational element is involved"(*ibid*: 467). Arnold (2001: 463, 464, 466) continues the theme:

> The relationship between archaeology and the media is a conflicting one mainly because the agendas represented are so disparate. On the one hand, both fields depend on public support to a considerable extent. However, while academic archaeology is frequently in a state of denial with respect to that dependence, the media are often too willing to cater to the demands of public taste and opinion, sacrificing content and quality to soundbites and sensationalism.[...] the message most archaeologists want to send to the public—concern for the protection and preservation of the past—is seen by the media as tedious and do-gooding—in short, not 'newsworthy'. This is the reason virtually every encounter between 'us' and 'them' turns into a sort of tug-of-war between the education and entertainment potential of a magazine article or documentary film.[...] I am still...idealistic enough to believe that archaeologists have something to say that people need to hear....the problem is that the conduit, the delivery system, the middleman in the transaction between archaeologists and the public is unequal to the task, and the message frequently gets through in truncated and garbled form. [...] I believe in the power of the message to transcend the medium of its transmission.

My response to these contributions to the debate is threefold, namely:

'Them' and 'Us': Contrary to Pettitt's aside, there cannot be many archaeologists who "forget" the commercial-entertainment-industry versus non-commercial-education-academe dichotomy expressed by all three writers. This is the underlying premise that frames the 'media as other' perspective. The assumption that 'the media' equals newspaper editors and broadcasters (rather than individual journalists and independent television producers) and that *all* media professionals see (or are forced to see) their primary function as providing entertainment cannot be justified. I say this from my own experiences of working with over 2,000 European independent film and television producers and from reading science journalists' explanations of their work (Hargreaves and Ferguson 2000: Chapter Five). Moreover, it is doubtful that field or contract archaeologists have escaped the pressures of commercial imperatives the way academic archaeologists seem to think *they* have. While agreeing that these are two different professions, I would contest Pettitt's definition of them as different 'enterprises'. One could instead say that both are engaged in a similar enterprise: constructing stories from information gathered. Archaeologists' *denying* that they tell stories does not mean that they don't or shouldn't; it just means they like to pretend that this is not part of their job. Similarly, how can archaeologists' *denial* of their dependence on the public, in Arnold's thinking, be viewed as a pillar of their "disparate agenda"? If archaeologists accepted, rather than denied, this dependence, then the "disparate agendas" argument begins to collapse, as 'us' become more like 'them'. Arnold's problem in judging the conduit as "unequal to the task" lies in her assumption that the media is merely a 'delivery system' for one's messages (like a post box), rather than an integral part of the mediation process. As long as archaeologists hold such views, each media encounter *will* be a "tug-of-war".

'The One Message': Given the amount of new data, theoretical and practical research, discoveries and excavations arising each year in Britain and elsewhere, archaeologists are short-sighted if they truly think that there is only one message worth sending to the public: "the need to protect and preserve archaeological resources" (Little 2002: 10). If there is indeed nothing else to say, then it is small wonder that the media find this "tedious" and yet surprising how often the media

do pass on this message, as I have found in my research. Archaeologists need to recognise that there are many other archaeological messages that the public might be interested in (Young 2002: 241), that it is archaeologists' own agendas that need broadening and that communication is a dialogue, not a call centre with only one button to press.

'Sensationalism': The attitude that fosters the 'them' and 'us' scenario also produces the equation of commercial imperatives or "catering to the public taste and opinion" with "sensationalism", as though all archaeological stories are only ever covered in the downmarket tabloid press. As will be demonstrated in Chapter Six, most of the British press do not sacrifice "content and quality to soundbites and sensationalism", and where misrepresentations or 'hyping' do occur, they have sometimes originated from the *sources* of the information, not from the media, as Bahn (2001b) and Fagan (2001: 459) have also pointed out. When a journalist (Farrar 2003) reported some of my television research, along with my suggestion that the current period was a "golden age" for TV archaeology, I was not surprised to read an archaeologist responding (without offering any examples) that "some of the more sensational programmes" were "dangerous". If archaeologists are so concerned about distortion and sensationalism, then, in Pettitt's own words (2001: 467), "the onus is upon us to redress this...to develop a meaningful dialogue [with media professionals]."

Archaeologists' complaints about media coverage extend beyond the points raised so far. Two of the most prevalent relate to differences in discourse:

'Closed' vs 'Open' discourse: The media do have difficulty in dealing with the ambiguous and 'open' discourse of archaeology and may "overemphasize unresolved controversies and mysteries" as archaeological failures rather than as interim positions essential to the research process (Lipe 2002: 26). Journalists may push archaeologists to make definitive statements (Stoddart and Malone 2001: 462) or feel justified in filling in the gaps themselves (Pettitt 2001: 467). Although more likely to be true of generalist than specialist journalists, the onus here is on the media to train its practitioners to accept and transmit open-ended information and, above all, to comprehend that the public can indeed handle 'ambiguity'.

Narrative discourse: As mentioned earlier, archaeologists seem to be uncomfortable with the media's need to 'tell stories'. The fact that so much

archaeological work is about the human past in a collective, rather than individualised sense, may predispose archaeologists to find it "a daunting task" (Lipe 2002: 23) to transform their information into the kind of personalised stories appreciated by the media and the public. On the evidence of the many "bone dry and bloodless" manuscripts he receives, editor Peter Young (2002: 240) goes further, suggesting that most archaeologists "are trained to be bad storytellers." Yet, archaeologists' focus on humankind, chronologies and interpretations of evidence, as well as their teaching experiences surely prepare them for constructing narratives out of archaeological data. Archaeologists may "have tended not only to work within limited understandings of the possibilities of narratives but also rarely to step outside the single-voiced, third-person narrative form itself" (Pluciennik 1999: 668), but they have the potential to do so.

These problems of discourse will return and be further tested in Chapters Six and Seven. To the above views, we now need to examine how archaeologists perceive media practitioners and how they think these professionals see them.

On Media Professionals and their Perceptions of Archaeologists

Archaeologists, and scientists in general, tend to make assumptions about those who work in the mass media that further confirm their perception of media professionals as 'them', rather than, as Womack (2001) proposes, as "extensions of ourselves". One is that their knowledge of the subject is insufficient or "superficial" (Finn 2001: 265). In terms of the press, this criticism is mainly aimed at generalist reporters or specialists working outside their primary field. These journalists are most likely to have only a cursory understanding of the subject (Thomas and Arnold 1974: 248), to be under pressure from other assignments (*ibid*), or to misinterpret information "with a cavalier disregard for the consequences to their sources" (Fenton *et al.* 1998: 73). A specialist—in the case of archaeology, usually a science, heritage or environment correspondent or editor—is likely to know more and to care more about getting stories 'right' and thus maintain the bond of trust with their sources. The British press regularly use only three 'archaeology' specialists (David Keys of *The Independent*, Mike Pitts of *The Guardian*, and Norman Hammond of *The Times*). *Antiquity*'s tribute to

Hammond (Stoddart and Malone 2001: 461) reveals that what archaeologists really want is *archaeologists* to cover their stories.[12] Yet, on this issue of depth of prior knowledge, science journalists appear to place less value on it than archaeologists. Although 84% of those surveyed by Hargreaves and Ferguson (2000: 48-49) held science qualifications themselves, two-thirds of them said that such qualifications were less important than "being a good reporter". The discussions of journalism and communication in Chapters Four and Five and the case studies in Chapter Six support the view that the type of journalist covering archaeological news may make less difference than archaeologists think.

Another assumption relates to the different ethos and thus priorities under which archaeologists and media professionals are deemed to work. Journalists, editors and media producers, by the nature of their practice, tend to focus on immediacy (what's *news*) and on public relevance (what's *worthy*). These intrinsic media concerns are distant from how archaeologists approach their work: taking a long-term perspective and judging data on its scientific relevance. Thus, each is likely to use a different yardstick in measuring archaeological significance. This can lead to archaeologists feeling that there is a "lack of reciprocity" in their relationship with media professionals (Tim Champion, *pers. comm.*), as archaeologists are forced to respond to stories that journalists consider important, while journalists are unwilling to report on matters of interest to archaeologists. Media professionals are also seen to be disingenuous, their professed concern for facts and objectivity being a ruse to disguise their real priority of gaining the most readers/viewers for their employers. "Journalists are slaves of cynical commercial systems, scientists independent truth-tellers" is how Hargreaves (2000: 14) characterises this perspective. Certainly, there are cases where archaeologists have sussed out ulterior motives behind journalists' questions (Finn 2001: 267; Pettitt 2001: 467; Arnold 2001: 464). But how open are archaeologists about their own motives for seeking media coverage?

That there are some truths in the above assumptions does not change the fact that they set the professions apart and create an uneasy tension between the two parties that is likely to colour their interactions. The scientific and archaeological communities may find it useful to hold onto these views, rather than challenge or work to change them, because this allows them to feel superior to, and to diminish

the power of, a profession too unqualified to control the public agenda of their field. It is this power struggle that shapes the relationship between archaeologists and the media, to the detriment of the relationship itself and to public communication.

This concept of diminishing the media takes on added piquancy when one turns to look at how archaeologists think the media views them. Most journalists may think, as Finn (2001: 265) suggests, that archaeologists are "mean with information or don't make themselves clear." Archaeologists are, however, more disturbed by how the media reduces them to a few stereotypes, like those in Figure 2.1. According to Finn (*ibid*: 267), to journalists, "archaeological enthusiasts are still either boffins in that familiar enclave, Ivory Towers, and/or camped out close to the hippies' tent, with one axe short of a tool box." Russell (2002a: 53) suggests that media stereotyping of archaeologists is more problematic than stereotyping of other professionals (like doctors, lawyers or the police), because the public seldom meet 'real' archaeologists and thus have less evidence for disbelieving the stereotype. I would counter that if the public can see the difference between fictional and real members of other professions, then we should not presume that they lose this critical faculty when presented with archaeological stereotypes. Moreover, the public *have* been receiving a wider portrayal of archaeologists in recent years, due primarily to the media.

What annoys archaeologists even more is how the media uses these stereotypes to set them up as pedantic killjoys in debates about 'overturning orthodoxy'. In her appraisal of a contentious American documentary about the antiquity of the Sphinx, Roth (1998: 221) points out that "Such television programmes often depict professional Egyptologists as rigid conservatives, blind to the wonders of simple, non-scholarly 'common sense' logic....They defend traditional (therefore boring) interpretations and object impotently to the selected bits of evidence cited that distort the overall picture." As Roth concludes, it is difficult to refute seemingly simple ideas within the time and context that television can allow, but it is unfortunate that some archaeologists lack the skills that would make them less vulnerable to being stitched up. By diminishing archaeologists in this way, media professionals may have evened the score, but they have only further alienated archaeologists and added more barriers to a harmonious relationship.

The Costs and Benefits of Different Media

This chapter has outlined some of the perceptions, motivations and inhibitions that shape archaeologists' perspectives on the public, the media and communication. In weighing up the costs and benefits of archaeological communication, there is a final element that needs consideration: the degree of control that archaeologists want to have over the mediation process. Some may have little choice in the matter or may be content to hand over data or research to an intermediary (such as their project leader or employer's press officer) who assumes responsibility for deciding the most appropriate communication strategy to pursue. In this case, the archaeologist invests minimal time and energy (low cost), but is unable either to guarantee that the intermediary's agendas will coincide with his or her own or to gauge results in advance (unknown benefits). This option is becoming an accepted way of life for many archaeologists in Britain today, as more of them become employees or contractors of companies or agencies that want to control the release of information. Despite or perhaps because of this, a counter trend is also evident, one in which archaeologists retain control over their own communication and calculate for themselves the costs and benefits of different media strategies. For them, the issue of which medium of communication offers the most or least control becomes important and may, in fact, influence their choice of strategy more than any other factor.

The media that offer the most control to an archaeologist are specialist presentations and publications, local outreach and the internet. Of these three, the internet offers the greatest degree of control, especially in the publishing of one's work or articles. However, the nature of the web is such that the outcome may be easy to quantify (numbers of hits on one's site), but difficult to qualify (whom do these hits represent). Websites are particularly useful in bringing together material that is dispersed around the country, as in the case of Creswell Crags (Wall 2001a: 478; 2004: 35), and they are likely to satisfy sponsors and funders. However, by privileging the computer literate and by-passing the peer review process (as discussed in Chapter Five), web publishing does not ensure public accessibility nor professional validation. Greater control and more costs (in time) thus need to be weighed against uncertain benefits.

The specialist route, giving presentations at professional conferences or having one's work published by an academic journal or specialist imprint, fulfils obligations to one's colleagues and is seen to be a major factor in career promotion. There is, however, no guarantee that an article or book will pass unscathed, or at all, through the peer review system operated by specialist publishers nor that anyone outside the profession will ever read it. That specialist information *may* trickle down to the public (through journalists attending conferences or reading specialist journals) is a by-product, not the goal, of this pathway. In this route, the responsibility for whether information is academically worthy is in the hands of one's peers, and its public newsworthiness is left to the initiative of individual journalists. Thus, one cedes some control over content and all control over public outcome with this option, but the costs and professional benefits are easier to calculate.

Local outreach—in the form of public lectures—was highly popular in archaeology's early days. It remains today an important communication tool in an even greater variety of forms: such as on-site and local media activities, National Archaeology Days, Young Archaeologists Clubs, adult education courses and day schools. Promoting interventions at the local level encourages archaeologists to seek the contexts and interpretations that respond to a multi-vocal and diverse framing of the past, rather than ones that attempt to homogenise the past into a single vision applicable on a national level (Little 2002: 7). Moreover, local outreach acknowledges one's obligations to a distinct 'public', personalises communication, stimulates dialogue and participation and is likely to please one's employers and funders. Although not as suitable for archaeological research as it is for field- and museum-based archaeology and demanding greater costs in organisation, time and money, local outreach allows control to be maintained and benefits to be more immediately apparent.

Combining the above three options of websites, specialist publication and local interventions is rapidly becoming the favoured strategy of British archaeologists in control of their own communication. The equation seems to work well: a fair amount of personal control over the process, the fulfilling of obligations to a variety of publics, relatively modest costs and some predictability in outcome. It is, however, a strategy that consciously and purposely excludes the national mass

media. Its growing popularity as the blueprint for effective public communication is likely only to add further disincentives to archaeologists' efforts to improve their relationship with the wider public's major resources for receiving archaeological information.

When one turns to using the mass media in one's communication strategy, the computation of the cost/benefit equation inevitably becomes more complicated. Less control over the mediation and outcome of one's messages and greater costs, especially in organisation and time, have to be weighed against greater *possible* benefits. Archaeologists may be less comfortable with this option, but it is only in this wider arena that many of their 'reasons to communicate' can be properly addressed. In addition, the mass media option offers the greatest potential financial rewards, as the promise of national media coverage may encourage funders, and the coverage itself may generate additional support. Increasingly uneasy with its present sources of finance (caught between the dwindling public purse and a developer-led marketplace), the archaeological profession is re-awakening to the value of the mass media as financial collaborator.

After a period of relative disinterest, the mass media in the 1990s once again began to contribute often substantial amounts to archaeological work, usually in exchange for exclusive coverage. As will be more fully discussed in Chapter Seven, television has largely taken over this role from newspapers, with global players, like National Geographic and Discovery Communications, now competing with national broadcasters and independent producers for exclusive access (or all-media rights) to major archaeological expeditions, excavations, reconstructions and discoveries. The size of the incentive does not necessarily guarantee acceptance. For instance, National Geographic's offer of $100,000 for exclusive North American rights to Ötzi was rejected by the archaeologists involved because it was deemed too low (Fowler 2000: 120), and their $1 million offer for rights to an Egyptian tomb discovery was declined because of the archaeologist's fears of being "suffocated" (Millière 1998). Nonetheless, as with the one million francs offered to Jean-Yves Empereur by a French independent television producer in the case study in Chapter Seven, such investments can be the lifeline that ensures a project's viability.

The benefits of mass media involvement are not just pecuniary. Archaeological programmes on British television have been credited with boosting student numbers (Jordan 1981: 213; Hatley 1997). Moreover, since the 1950s, in its "sponsorship of the actual practice of archaeology as experiments and even digs, television has not merely drawn on archaeology to make its programmes, but contributed directly to the progress of the subject" (Jordan 1981: 211). In recent years, most of the episodes of *Time Team* have included a 'cameo' in which some type of ancient technology or process has been tested or reproduced, and *Meet the Ancestors* has similarly focused on facial reconstructions of excavated skulls. Both these series and their spin-offs (like *Blood of the Vikings* [2001]) have also paid for the dating of artefacts, the geographical tracing of skeleton origins or DNA surveys, which are beyond the budgets of most archaeological projects. Experimental archaeology has become a favourite subject for TV programmes, spawning many one-off documentaries as well as whole series, such as *Surviving the Iron Age* (2001), *Secrets of Lost Empires* (1996), *Secrets of the Ancients* (1999) and *Mysteries of Lost Empires* (2000). Certain experiments (like those about how Stonehenge was built) may be repeated too often; some may focus more on the emotional impact of the experiment than on the archaeology; and not all of them may be the kinds of experiments that archaeologists would consider worthwhile to undertake. Yet, in their defence, Julian Richards (1999) reminds us that "these were genuine experiments...nobody else would have paid for them." Horton and Stamper (1994) also admit that the involvement of *Time Team* "was able to transform our largely unfunded research project by enabling geophysics and dendrochronology on a far more extensive scale than was shown on TV." In addition, archaeologists have benefited from television paying for international experts to visit archaeological sites or examine artefacts as part of the filming, as happened, for instance, at Boxgrove (Pitts and Roberts 1998: 242, 254). Last, but not least, television crews have proven to be magnets for increasing public interest. As Horton and Stamper (1994) continue: "The presence of TV cameras enabled community participation on a scale which previously we could only dream about." That the mass media has the ability and resources to bring such added value to individual projects and the profession is an important factor to add to the equation.

Archaeological communication may appear to be a straightforward process of deciding what one wants to say, why it needs to be said and thus who needs to hear it, and how that audience can best be reached. Yet, as has been shown here, there are many factors that complicate the process and affect one's choices and decisions. Some strategies may offer a better balance of costs and benefits than others, but there is no *one* strategy that can be applied in every case or that can guarantee a successful outcome. Combining strategies, as archaeologists are increasingly doing, seems a good solution to this problem. Including the mass media in any combined strategy might be an even better one.

'A Reticent Relationship Framed by Incipient Anxieties'

This phrase was used by Fenton *et al.* (1998: 93) to sum up social scientists' relationship with the media, and it is also, I would suggest, an apt description of archaeologists' relationships with their various publics and the mass media. Beholden to these publics yet reluctant to ascertain the value they place on archaeology, obliged to communicate but reticent to do so, and focused on media shortcomings and wary of its power, archaeologists have allowed "incipient anxieties" to control their attitudes towards public communication and perhaps to excuse their poor performance as communicators. Although often exaggerated and predicated on anecdotal assumptions rather than tested evidence, these anxieties are nonetheless real. How would archaeology justify itself, if the wider public were found to be uninterested? How does a profession still engaged in defining itself successfully contest the public definition of archaeology? The problem with not valuing or prioritising enough their communication role, and with avoiding the mass media when they do, is that archaeologists have left the playing field to other players for too long. They should not be surprised that the media have dominated the field in their absence and are playing according to their rules. Neither should they be surprised that the general public have been left to find 'archaeological meaning' in sources outside the profession. Returning to Arnold's statements (2001: 466), if the media are "unequal to the task", then so, too, are the media's sources, archaeologists themselves. And yet despite the inadequacies of both source and medium, archaeology has still managed to

become a powerful subject of wide public and media interest, a resilience that says much about archaeology's value to society.

There are today a number of encouraging signs that archaeologists are recognising that "more effort" is needed in public communication (Kennedy 2002: xv), that the profession is becoming more self-critical, and that the much-needed reconceptualisation of public communication is taking place. At the 2001 IFA conference, Ian Wall (2001b) told delegates that public interpretation "requires fundamentally different skills and approaches" to those held by archaeologists and that if archaeologists "don't like what's being interpreted" then they should "develop those skills and get involved." In a heated internet debate about archaeology on TV, Bell (2000) responded:

> It seems that the only people who should be allowed to present archaeology to the public are professional archaeologists. [...] There is almost a sense of fear that archaeology could be removed from the hands of professionals and that the public could think for themselves and enjoy archaeology for the contact it gives them with the past on an emotional level. [...] What happened to the concept of multivocal narratives? If there is no one true vision of the past guarded by archaeologists then what right do we have to challenge the public over its own concepts of the past? It seems that reconstruction and re-enactment of the past have always attracted particular opprobrium from the professionals. Anything that cuts out the role of the archaeologist or historian as the arbiter elegantiarum of the past must be implicitly dangerous.

Such attempts to argue openly the issues about archaeological communication represent a sea change in archaeologists' attitudes. That this is occurring during a period of high public and media visibility may make it easier for archaeologists to follow through some of the suggestions being put forward for improving archaeology's public communication.

In a recent book on public archaeology, Lipe (2002: 25-26) offered several ways to strengthen the relationship between archaeologists, the media and the public:

1. Archaeologists "must take at least part of the responsibility for ensuring that significant research results become available to the public....and must take care to focus on the aspects of their work that have general... relevance."
2. They should be willing to seek advice from "interpretive specialists" (i.e. "journalists, television producers, museum exhibitors, schoolteachers, park interpreters, etc.") on how best to achieve this.

3. The profession "must assign greater credit and status to successful efforts...to engage with the general public."
4. Archaeologists "need to do a better job of helping the public (or the interpreters with whom they work) understand the research process," and
5. "Likewise, interpretive specialists who take on archaeological topics also need to educate themselves about how research gets done."

Although still framed in a 'top-down' rhetoric of communication, these suggestions do provide a starting point. I would take this three steps further by suggesting that the only way for public communication to fare better in the future is by canvassing public attitudes towards archaeology in a more comprehensive way than has ever been attempted, by setting up regular forums where archaeologists, media professionals and the public can meet to share their ideas and concerns and, most importantly, by making 'public communication' a mandatory subject in every archaeology department's syllabus.

The agenda for achieving a less reticent, less anxiety-ridden relationship between archaeologists, their publics and the media can at least partly be mapped. But a new agenda needs new vocabulary and grammar, a better framework for and understanding of the process of archaeological mediation as constructive dialogue (not monologue), less attention to the public benefits *of* archaeology and more focus on the values that the public and media bring *to* archaeology. The relationship clearly matters to archaeologists, for if the profession were forced to go it alone, the discipline would likely only survive in an academic cul-de-sac or return to being just a hobby for enthusiasts. In this sense the relationship is a dependent or symbiotic one from the archaeologist's perspective. Whether it is a *mutually* dependent one, as Nelkin (1995: 8, 12) claims the relationship between the media and science is, depends on the extent to which the public and the media need archaeology, the subjects of the next chapters.

Notes to Chapter Two

[1] One is reminded of Wheeler's (1954: 221) joke, in referring to a colleague who admitted writing for just five people, that "most of us are less ambitious."
[2] Why archaeology might be more susceptible to misunderstandings and misinterpretations than other sciences is an interesting question that McManamon does not deal with. The reasons might include: because archaeology depends more on speculation, because the media use archaeology more than other sciences for their narratives and characters, because the public is more interested in archaeology than in many other sciences or because archaeologists have failed to offer the public sufficient counterbalance to Hollywood and pseudo-archaeology.
[3] One thinks of John Cullinane in James Michener's *The Source* (1965), Charles Watkins and Frederick Larson in Doris Lessing's *Briefing for a Descent into Hell* (1971), Frances Wingate in Margaret Drabble's *The Realms of Gold* (1975), Mark Clare in Peter Ackroyd's *First Light* (1989), the three generations of Robertson archaeologists in Roderick Beaton's *Ariadne's Children* (1995), Verity Grey in Susanna Kearsley's *The Shadowy Horses* (1997), and David Lambert in Ronald Wright's *A Scientific Romance* (1997). In television, one could certainly make a case for a few new stereotypes, like the lab- or desk-based archaeologists juggling computer models or DNA samples in numerous programmes, the forensic reconstruction artist (in *Meet the Ancestors*), or the intuitive dirt archaeologists vs the scientifically-equipped, but charisma-challenged geophys crew in *Time Team*.
[4] Frayling (2000: 18) cites as proof of this point Stephen Hawking's comment that finding a theory of everything would mean that "we would know the mind of God." "Frankenstein," Frayling adds, "could not have put it better."
[5] In the autumn of 2004, rumours that the last examination board to offer archaeology at GCSE level would be dropping the subject in 2006 have led to concerns in the profession about the future of archaeology in secondary education (*British Archaeology*, Issue 78, September 2004, 49). Yet to date, there has been no sign of a public campaign being mounted.
[6] Archaeologists Clare Ellis and Ronan Toolis, Iain Hedley and Neil Diment, and Jo Bell (all recipients of monies from the Heritage Lottery Fund for their projects) made it clear at their presentations at the IFA Annual Conference in Newcastle in April 2001 that public outreach (via site displays, public access, special open days, websites and the media) was an explicit obligation written into their contracts with the Fund.
[7] The discovery of an ancient skeleton dated to 9000 BC near Kennewick in Washington state in 1996, one anthropologist's interpretation that the skull looked 'caucasoid', the media's transmission of this as implying non-Native American ancestry, and the legal battle that ensued between a group of American anthropologists and the Native American community over the rights to the remains was largely conducted by these anthropologists through the mass media. This was a prime example of how turning to the media first can overheat a subject, only initially cooled down when the American government stepped in (see Downey 2000 and Thomas 2000). The US Secretary of the Interior's eventual decision to return the remains to the tribes was, however, overturned in 2002 by a federal judge who ruled that scientists must be allowed to study them (*Chicago Tribune* , 1 September 2002).
[8] The 'boundary' analysis applied here to archaeology was developed from Bucchi's work on science and the media (1998: 15-17).
[9] This site had been closed down by the Turkish authorities in the mid-1960s due largely to the 'Dorak Affair' (Pearson and Connor 1967) in which the then project director, British archaeologist James Mellaart, became involved in authenticating (through an article in a popular magazine) a mysterious antiquities hoard which later disappeared without trace. Hodder feared a similar outcome, although his fears, luckily, proved unfounded.
[10] The goal of 'public interpretation' is "to make the past accessible and to empower people to participate in a critical evaluation of the pasts that are presented to them" (Jameson 1997: 14). Jameson defines its parameters in this way: "Public interpretation includes a broad scope of endeavours ranging from formal education and curriculum

development to less structured programs such as site tours and museum displays. The term also encompasses singular communication devices such as the publication of popular histories, public awareness posters and brochures, and development of multimedia presentations including the fast emerging internet sources and World Wide Web sites of modern cyberspace" (p.12). Those implicated as collaborators "include archaeologists, historians, on-site interpreters, teachers, writers, artists, curators, exhibit designers, and other cultural resource specialists" (*ibid*).

[11] I acknowledge a problem with Stoddart and Malone's category of "treasure", for although some documentaries deal with treasure in the sense I believe they meant it, most of these I categorised under other headings. For instance, a few programmes about underwater archaeology do deal with 'treasure', even using the word in their titles, but many of these, like *The Treasure of Hanover Cove* (1998), deal with the problem between treasure-hunting and underwater archaeology. In a similar vein, *Stolen Goods, National Treasure* (2000) dealt with the politics of artefact ownership, and *The Secret Treasures of Zeugma* (2001) with the urgent rescuing of sites being inundated by Turkey's numerous dam projects, again a 'heritage/public archaeology' issue, not one of 'treasure'.

[12] Relevant here, too, are archaeologists' complaints about an actor (Tony Robinson), not an archaeologist, presenting Channel Four's *Time Team* series. Since *Time Team*'s first series in 1994, archaeologists have both attacked (Fowler 1994; Cleere 2000; Stoddart and Malone 2001: 461) and defended (Dyer 1994, Lawson 1994) the producer's choice of presenter. What the attackers fail to understand or choose to ignore is that Tony Robinson is there to represent 'the public', not archaeologists: his 'ignorance' of archaeology requires him to solicit explanations from the expert archaeologists, just like the public would. The alternative, a 'knowing' archaeologist explaining things he/she knows to 'ignorant' viewers, is talking down to the audience, and this presentational style is inappropriate for *Time Team*'s format and its aim for public participation.

CHAPTER THREE

A SYMBIOTIC RELATIONSHIP? THE PUBLIC PERSPECTIVE

The focus of my analysis of the current relationship between archaeologists, the public and the media now shifts to the other two partners: first, the public and, in Chapter Four, the media. I am exploring in these two chapters the dynamics that have led Hargreaves and Ferguson (2000: 46) to describe the climate today as one of "a fast-changing, highly contingent universe in which the old, apparently reliable top-down process of scientific information, cautiously reviewed at leisure and respectfully transmitted by a media which shares the values of the scientists to a trusting public, could not survive, even if it still existed, which it doesn't." I begin by examining the British public's consumption of and relationship to the mass media, especially the press and television. This is followed by an analysis of the public's consumption of archaeology in which I look at the constitution and profile of the various archaeological publics and how they engage with and learn about archaeology. In the final section I explore the reasons why the public value and are fascinated by archaeology, a phenomenon little understood or studied, but one that is essential to understanding the public's receptivity to and dependency on archaeological communication.

It is useful to begin with a reminder of one of the basic tenets of media research into the role that the public play in the process of mediation. Whereas few would question that the media are involved in 'mediating' information, the traditional view of public consumption had been that the public did not 'mediate', but merely 'received' information 'sent' to them by the media (see Chapter Five). Some thirty years of research into 'audience reception' has challenged this view (see Hooper-Greenhill 1995: 6-9; Turner 1996: 122-155; Fenton *et al.* 1998: 2-8, 119-120, 166; Livingstone 1999: 102). The current consensus, as stated by Silverstone (1999: 79-80), is that "consumption is itself a form of mediation, as the given values and meanings of objects and services are translated and transformed into the languages of the private, the personal and the particular." Silverstone explains: "We consume objects. We consume goods. We consume information. We consume images. But in that consumption, in its daily taken-for-grantedness, we

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make our own meanings, negotiate our own values, and in so doing we make our world meaningful." Put another way by Hall (1997: 33, his emphasis), "the *reader* is as important as the *writer* in the production of meaning." This acknowledgement of the mediation work done by the public reinforces the importance of their role in archaeological mediation and explains why it is necessary to understand the various factors and perceptions that condition and affect the public when they consume and mediate archaeology.

The Public, the Press and Television

As the above quote from Hargreaves and Ferguson implies, the relationship between the mass media and the public in Britain has lost whatever innocence might have been left from the days when there were fewer media sources and greater public trust in them. One needs to remind oneself that, a generation ago, there was no *Sun*, no *Independent* and only three TV channels which had no morning programmes and ended their broadcasts before midnight with the playing of the national anthem. Since then, the number of daily and Sunday national newspapers has hardly changed (from 17 in 1967 to 19 today [Tunstall 1996: 41, 47, 54]), but the number of television channels, many with 24-hour coverage, has expanded tenfold. In addition, most newspapers and broadcasters have established internet editions of their output. Consequently, the public are now offered a media landscape with 24/7 accessibility in more than one format.

The most notable feature of the current media configuration is therefore an increase in public *choice*. More media sources may, in theory at least, expose the public to a wider variety of opinions; greater choice has certainly led to a more unpredictable pattern of usage (e.g. sampling different newspapers, channel-hopping), what Tunstall (1996: 225) calls public "volatility" and "promiscuity". Equally notable has been the rise in the public's "informational dependency" on the media, a dependency "which the media are only too happy to address" (Livingstone 1999: 99). Most of the daily newspapers have, for instance, doubled their number of pages since 1966 (Tunstall 1996: 32). A similar doubling of daily news broadcasts on terrestrial television is also demonstrable (from around 100 minutes on BBC1, BBC2 and ITV in 1974 [Eldridge 1995a: 70] to over 220 minutes on the same channels in 2004). If one includes morning and overnight

programmes on just these channels, the amount of news and current affairs programming has, in fact, increased more than ten times, considerably more if one were to add the news broadcasts on Channel Four, Five and Sky.

Choice has long been a feature of the British public's relationship with the national press, a relationship which, despite public "promiscuity", is still characterised by 'brand loyalty'. The ten daily papers, selling 13m copies (ABC: Sept. 1998 [*Guardian*, 23 Sept. 1999, p. 9]), are divided into three sectors:

1. 51% read one of the three **downmarket tabloids**: *Daily Mirror* (18%), *The Sun* (28%), or the *Daily Star* (5%)
2. 27% read one of the two **midmarket tabloids**: *The Daily Express* (9%) or the *Daily Mail* (18%), and
3. 22% read one of the five **upmarket broadsheets** or 'qualities': *The Times* (6%), *The Guardian* (3%), *The Daily Telegraph* (8%), *The Financial Times* (3%), or *The Independent* (2%).

Who reads which newspaper has been attributed to factors like family habit, age, socio-economic level, gender, education and political persuasion, and readership profiles are constantly being monitored and researched (see **Table 3.1**). In brief, the average downmarket tabloid reader is young (43.6%), male (58%) and working class (71.3% manual workers). The midmarket reader is older (39% being 55+), fairly evenly divided in gender (51% male/49% female) and mainly white-collar or professional (62.5% ABC1). The upmarket reader is most likely a middle-aged (38.8%), male (60.6%), professional (57%). The reliability of these profiles can be questioned, as can the whole concept of 'audience' (see Turner 1996: 151-155). Yet it is clear that "the papers themselves often write as though such a person exists and that there is a homogenous group of people with shared beliefs and values whose defining feature is the newspaper that they read" (Reah 1998: 36).

As one can also see from Table 3.1, these distinctions become less clear-cut when one looks at the average British terrestrial television viewer, who is most likely to be 55 or older (38%), female (54.8%) and working class (almost 60%). That television consumption crosses the press's category boundaries is demonstrable from the statistics: the TV viewer is most similar to the downmarket reader in terms of socio-economic class and the midmarket reader in terms of gender and age. Even more crossover is apparent in the profile of the average museum visitor (Table 3.1), whose demography shares aspects of all the press categories.

Table 3.1: Profiles of British National Newspaper Readers, TV Viewers and Museum-Goers

(Sources: Newspaper and TV profiles: Seymour-Ure (1996: 144-147, 174), and Museum-goer profiles: Merriman 1991: 50, 74)

	% Socio-Economic Class*				% by Gender		% by Age			
MEDIA	*AB*	*C1*	*C2*	*DE*	*Male*	*Female*	*4-15*	*16-34*	*35-54*	*55+*
Financial Times	61	28	7	4	72	28		37	45	19
The Times	60	27	7	7	59	41		35	38	27
The Independent	55	30	8	7	62	38		45	38	16
Daily Telegraph	55	29	9	7	55	45		23	34	44
The Guardian	54	30	9	8	55	45		39	39	21
Daily Mail	30	35	19	16	50	50		28	37	37
Daily Express	25	35	23	18	52	48		27	32	41
Daily Mirror	9	23	32	37	54	46		36	32	32
The Sun	7	23	32	39	55	45		44	31	24
Daily Star	5	20	35	39	65	35		51	32	17
BBC1	17	26	24	33	45	55	12	23	28	37
BBC2	19	26	23	32	50	50	9	20	28	43
ITV	12	23	26	39	41	59	13	23	27	37
Channel 4	15	25	24	36	45	55	15	25	25	35
Museum-Goers**	60	52	35	36	50	50		>38<	37	25

* AB = professional, administrative, managerial
C1 = other non-manual
C2 = skilled manual
DE = semi- or unskilled manual

** Regarding class: this is % of each class that chose museum-visiting amongst other leisure activities. As more than one choice was possible, the totals are more than 100%. (Source: Summer 1985: 38, cited in Merriman 1991: 74). Regarding gender: as 67% of males and females counted themselves as occasional to frequent museum-goers, I have computed this as 50-50 (*ibid*: 50). Regarding age, the Merriman survey (*ibid*) used only 3 age groups: under 35, 35-59 and over 60.

Market segmentation is an invaluable tool for journalists, editors and programme-makers, as it helps them select both the subjects most likely to be deemed newsworthy by their audiences and the positions they should take in relation to those subjects. It also creates an affective bond between readers or viewers and the media, giving the public the false, but comfortable, impression that their chosen medium is reinforcing rather than constructing (or challenging) their world-views. Yet, the partisan nature of the British press is seen by the public as compromising press 'objectivity' and thus, ironically, has assisted in the transfer of public trust from newspapers to television as sources of factual information.

Forty years ago, 85-90% of the British public read a daily paper (Tunstall 1996: 223). Today that figure is 49% (Walker 2000). Newspapers have tried to counter this trend by increasing coverage, offering more sections of specialist interest and re-defining themselves "as a leisure and consumption aid rather than a vehicle reporting yesterday's news" (Tunstall 1996: 224). Over the same period, television has increased its position as the public's choice of primary *news* medium, from 58% in 1962 (Eldridge 1995a: 41) to around 71% today (Walker 2000). At the heart of this shift is the concept of public trust. "What people know depends on what they are told and by whom," says Murdock (1993: 236, cited in Fenton *et al.* 1998: 141), "What people believe depends on who they trust." The issue of trustworthiness is crucial for understanding the public's consumption of the factual media, and the amount of trust that the public have in different sources of information may help us ascertain whether the *source* of information matters.

Although the public have become less naïve about their sources of information and "less trusting" in general (Elliott and Quaintance 2003), it is still "an undeniable fact about human beings that they care about the truth" (Baggini 2002: 22). In three MORI polls (as reported in Hargreaves and Ferguson [2000: 3], Hall [2001] and Elliott and Quaintance [2003]), pollsters asked the public "Who do you trust to tell the truth?" Their responses included:

In 1983: 82% doctors, 79% teachers, 63% TV newsreaders, 19% journalists, 18% politicians

In 1999: 75% TV newsreaders, 63% scientists, 10% journalists

In 2001: 89% doctors, 86% teachers, 78% professors, 75% TV newsreaders, 65% scientists, 18% journalists, 17% politicians

Such polls reveal inconsistencies (like the fact that newsreaders are often journalists or reading news compiled by journalists), but "the unmistakable general drift cannot be ignored" that current levels of trust, especially in relation to journalism, are "fragile" (Hargreaves and Ferguson 2000: 3-4). Thus, contrary to many archaeologists' assumptions, the public do seem to be highly sceptical about the information they receive from the press, if not television. Their trust in television derives from the perceived objectivity of the institutions of television, especially the BBC, and of the technology involved (e.g. 'the camera never lies') (Silverstone 1999: 34). Although these perceptions need to be challenged, it is clear that for 20 years the public's trust in television has not diminished but grown.

How valuable are these media to the public today, what needs do they satisfy? On the most basic level, the press and television pre-digest the world for us, keeping us up to date and connected with events going on around us. They give us guidance in assessing the competing claims for 'truth' with which we are bombarded and thus help us to prioritise and frame the debates that we need to be engaged with (i.e. 'agenda-building' [Fenton *et al.* 1998: 8-12]). The mantra often repeated is that the media tell us not what to think, but what to think about (Emmott 1989: 33; Hooper-Greenhill 1995: 7; Fenton *et al.* 1998: 131). By giving us ever increasing amounts of things to think about, the media may, however, be decreasing our ability to use this information effectively or to turn it into 'knowledge' (Livingstone 1999: 97). Despite this, the media may be the public's "only contact with what is going on in rapidly changing scientific and technical fields" (Nelkin: 1995: 2), and, as we shall see below, one of the public's main ways of engaging with archaeology.

On a deeper level, the media can be seen as "one of the root formations of modern society, deeply embedded in, and powerfully affecting, our humanity" (Silverstone 1999: 115). For Silverstone, the media derive their power from their ability to "locate" the public ("offering us the resources to transcend the limits of our immediate social space"), to "articulate" memory and to "define the past" (*ibid*: 87, 126, 127). And, although acknowledging that one further power is "double-edged", he also believes that the media have the ability to "deliver trust", "to keep anxiety at bay" (*ibid*: 118). As he puts it, the media allow us "to manage what otherwise would be an eternally threatening complex world in which all interactions would have to be dealt with as if they were the first, in which

experience would count for nothing and in which we would not be able to distinguish reality, honesty and good intentions from their obverse" (*ibid*). It seems reasonable to conclude that, sceptical as they may be, the public still depend heavily on their relationship to the media to satisfy a range of needs. What is fascinating is that some of the above attributes of the media apply equally to archaeology, an insight that leads us neatly to the next section.

The Public and Archaeology

In order to elucidate the public-archaeology axis of the communication partnership, I will be examining three major issues: the constituency of the various archaeological 'publics', the public consumption of archaeology and the factors that affect that consumption, and the reasons why the public 'value' archaeology.

The Archaeological Publics

Of the nine categories of 'public' outlined earlier, it would be hard to guess the true size of many of them, like the number of decision-makers or of local people directly affected by archaeological work, or the global populations of media professionals or of professionals in related scientific fields. Even with the remaining five, the figures can only stand as estimates.

From a survey in 1998 (Aitchison 1999: ix) and membership statistics of the Council of British Archaeology (CBA 2000, AGM minutes, paragraph 13), one could say that the innermost public of professional archaeologists in Britain is about 5-6,000. This figure may be higher, as the survey, for instance, may not have taken into account freelance diggers on short-term contracts (*The Digger*, Issue 11, March 2000). The international community of professional archaeologists has not, to my knowledge, been computed, and figures can be hazy, there being, for example, either 5,400 or 10,000 professionals in the United States (Neumann and Sanford 2003, cited in Nixon 2003: 52; Allen 2002: 246-247). One could estimate the amateur archaeological community in Britain as being around 200,000: 115,015 members of local archaeological societies (CA 1997: 1) and, perhaps contentiously, 100,000 members of treasure-hunting clubs (Pearce 1990: 139, cited in Merriman 1991: 106). Since some 600 archaeological students graduate each year (Andrews

1999: 92) and the CBA's Young Archaeologists Club numbers 3,000 (CBA 2001/2: 47), the 'educational' audience is likely to be in excess of 5,000, especially when one includes teachers and the adult education population. Regarding the core of 'interested' members of the British public, one could use the number of people who attend events during National Archaeology Days (60,000 in 2002 [CBA 2001/2: 47] and around 100,000 in 2003 [CBA Winter 2004 Meeting minutes, p.3]) as an indicator of active consumers. Even with some overlap, this would bring the amount of Britons actively engaged in archaeology to over 300,000. One could, of course, calculate the 'core' in terms of the number of viewers who passively consume archaeology by watching television programmes about it. This produces a range from 3-4 million who *regularly* watch archaeology documentaries, through 6-7 million who have watched initial and repeat broadcasts of the same programme, to a maximum of the 9-10 million who watched *Pyramid* (2002) or *Pompeii: The Last Day* (2003) (source: BARB).[1] Finally, the widest public is the population of Great Britain: 58,789,194 at the 2001 census. Thus, when an archaeologist says that archaeology interests "the majority" of the public (Bahn 1996: 6), he is wrong, for it interests at best only 17% of the population. Although most of these publics are quite small (professional archaeologists, for instance, being 0.01% of the population), I would contend that, even at 17%, the 'core' represents an impressive constituency.

It is possible to profile some of these publics (see **Table 3.2**). The portraits of the first five (and last) are a summary of the data in Table 3.1. The Aitchison survey (1999: ix-xi) gives us a picture of the 'average' professional archaeologist in Britain: 36 years old, male (65%) and earning just over £17,000 a year (that is, £2,000 *less* than the national average). Some clues to the profile of the amateur community come from a survey of readers of *Current Archaeology* (Selkirk 1998: 136-137), where the average reader was found to be 40 years of age or older (71.6%), male (two-thirds) and earning over £20,000 a year (60%).[2] Merriman's 1985 survey (1991: 103-105) has, however, shown a wider demographic base for members of local/historical societies and for those visiting historical sites, and an idiosyncratic profile of those involved in fieldwork or metal-detecting. To have an idea of the picture of the 'core' public, one needs to look at the viewers of BBC2 and Channel 4, the channels that air the most archaeological programmes. These channels are considered 'high-brow', and they had an 11.3% and 10% share respectively of the

Table 3.2: Summary Profiles of UK Press, TV and Museum Audiences and of Various UK 'Archaeological Publics'

(Sources: Seymour-Ure 1996: 144-147, 174; Merriman 1991: 50, 74, 103-107; Aitchison 1999: 16 and *passim*; Selkirk 1998: 136.)

Audience	*Age*	*Gender*	*Class*
Downmarket tabloids	young	male	C2DE
Midmarket tabloids	old	male/female	ABC1
Upmarket broadsheets	middle-aged	male	AB
Viewers of BBC1/2, ITV & C4	old	female	C2DE
Museum Visitors	young/middle-aged	male/female	ABC1
Archaeologists	36 years old	male	ABC1C2*
Amateur Archaeologists:			
• *Current Archaeology* reader	old	male	ABC1**
• Local society/Site visitors	all ages	male/female	high status***
• Fieldworking/Detectorists	young	male	student & unemployed
Core 'interested' public:			
• Viewers of BBC2 & C4	all ages	male/female	ABC1

* This is an assumption from the plethora of jobs described in Aitchison (1999) and from classing freelance diggers as skilled manual workers.

** Selkirk (1998: 136) used income levels, thus this is an extrapolation.

*** In his survey, Merriman (1991: 160) did not use the standard classification system, but divided his respondents by home ownership, access to vehicle and education level. 'High Status' meant people who were home owners, had access to a vehicle and had above minimum education.

total audience in 2002 (O'Connell and Kemeny 2002), less than half that of their more mainstream rivals (BBC1 and ITV). Their audiences represent a high percentage of ABC1 viewers (45% and 40% respectively) and show a slight prevalence towards female viewers (50% and 55%). Most importantly, these channels together demonstrate the most comprehensive age spread, with BBC2 appealing the most to 35 and older audiences (71%) and Channel 4 to the 34 and younger (40%).[3]

From these profiles, one is led to agree with Trigger (1989: 14) that the "educated middle class" provides the mainstay of the wider public interested in archaeology. Since he also suggests that archaeologists themselves come from this same pool, it is "reasonable", as he puts it, that archaeology is "an expression of the ideology of the middle class" (*ibid*: 14-15), that, in other words, the *doers* and *consumers* of archaeology are congruent in socio-economic terms. They are, however, less congruent in terms of gender. While some argue for an older and more educated audience for archaeology (Selkirk 1998: 136), I would suggest that the 17% is becoming more female and younger, due primarily to TV archaeology. A travel writer (Crump 2003) recently blamed his family's holiday choice on *Time Team*:

> Weekly exposure to these antics has inspired my nine-year-old daughter Daisy to decide that, when she grows up, she wants to be an archaeologist. Not that this marks her out as the playground nerd—far from it....scraping about in the dirt of our ancestors has become the coolest career ambition in primary schools nationwide. Suddenly kids dig history. The Young Archaeologists' Club has 3,000 members and rising; a series of books called Horrible Histories has become a bestseller; the British Museum hosts slumber parties where youngsters can bed down with their favourite Egyptian mummy; and Lara Croft is an archaeologist, for pete's sake. So Daisy is not unusual...

In the final analysis, bar the gender issue, there is little in these profiles of the various archaeological publics to signal any inherent sociological fault-lines in the public-archaeologist relationship. The core archaeological public are, in fact, very much like archaeologists themselves, and more Daisies might eventually wear away the profession's 15% gender gap.

Public Consumption of Archaeology

The public consumption of archaeology can be active (requiring some physical effort) or passive (like reading or watching television at home), with both modes involving the public in mediation work.[4] The British public apparently recognise

the benefits of active consumption. In his 1985 survey (Merriman 1991: 112), 60% of respondents agreed with the statement that it is "more interesting to find a piece of old pottery yourself than to read a book about ancient civilisations." More recently, the results of the English Heritage survey in 2000 have been interpreted as signalling that "history is not an armchair hobby" in Britain (Aaltonen 2003: 24). Nonetheless, few would argue that the majority of the core 'interested' public indulge in archaeology second-hand, or that passive consumption can lead to active participation, a shift recently promoted by television itself in *Time Team*'s 'The Big Dig' of June 2003.[5] To understand the public's consumption of archaeology, we need, however, to examine the more conventional ways the public 'consume' the subject, the level at which they understand it, the factors that affect their ability to understand and what they 'want' from the archaeology presented to them.

Although the questions and categories used were not exactly the same, three public surveys carried out in the UK, Canada and the USA provide us with the best available evidence about the ways the public choose to 'consume' archaeology (see **Tables 3.3** and **3.4**). From these, it is clear that the British public prefer the active route of visiting archaeological sites (39%), whether due to greater individual initiative, a higher regard for authenticity and personal experience, the omnipresence of these sites in Britain, or all three. The prevalence of this type of active consumption over, in particular, museums does seem to indicate a preference for authentic, in-context experience, although one could equally say that archaeological sites *are* 'outdoor museums'. Site-visiting can, of course, fulfil a number of needs beyond the archaeological, as the National Trust found in their Avebury survey (Taylor 2004: 44) in which 19% said their visit derived from an interest in archaeology / history, 18% came for the "environmental" ambience and 16% were "spiritually motivated". This response suggests that archaeological consumption is multi-layered, a factor addressed in later discussions of the reasons why archaeology interests the public.

Passive consumption via television and books did, however, come second and third in the overall UK results, and television was the top choice of non-museum-goers. The strength of television across these surveys (2 firsts, 2 seconds, 1 third) can be taken as encouraging results for media professionals, especially in Britain.

Table 3.3: Ways the Public Engage with Archaeology: Summary of 3 Surveys

(Sources: UK survey: Merriman 1991: 119-120; Canadian survey: Pokotylo and Guppy 1999: 405; US survey: Harris Interactive [Neikirk 2000])

	UK1 *(most enjoyable way, all surveyed)* (1985)	UK2 *(those who rarely/never visit museums)* (1985)	CANADA 1 *(where learned about)* (1999)	CANADA 2 *(where would prefer to learn about)* (1999)	US (2000)
Active Consumption:					
TRAVEL:			36.7%	62%	
Site visit			17.3%		37%
Site visit by oneself	20%	12%			
Guided site visit	19%	16.5%			
OTHER VENUES:					
Museum	7%	4%	57.5%	57.7%	88%
Lecture	12%	11.5%	2.9%	16.5%	
Local library	6%	11%			
VIA EDUCATION:				24.4%	
University			16.5%		23%
Secondary School			20.5%		20%
Primary School			9.2%		10%
Evening Classes	6%	2.5%			
Passive Consumption:					
TELEVISION	16%	24%	54.5%	67.5%	56%
BOOKS	14%	18.5%	24.3%	34.5%	33%
MAGAZINES			23.6%	33.9%	*
NEWSPAPERS			11.1%	22.8%	24%

* Books and magazines were included together.

Table 3.4: Summary of Table 3.3

(Sources as above.)

UK 1	UK 2	Canada 1	Canada 2	US
1. Visit site alone	1. Television	1. Museum	1. Television	1. Museum
2. Guided site visit	2. Books	2. Television	2. Travel	2. Television
3. Television	3. Guided site visit	3. Travel	3. Museum	3. Visit site
4. Books	4. Visit site alone	4. Books	4. Books	4. Books
5. Lecture	5. Lecture	5. Magazines	5. Magazines	5. Newspapers
6. Museum	6. Local library	6. Secondary ed.	6. Education	6. University
=7. Local library	7. Museum	7. Visit site	7. Newspapers	7. Second'y ed.
=7. Evening classes	8. Evening classes	8. University	8. Lecture	8 Primary ed.
		9. Newspapers		
		10. Primary ed.		
		11. Lecture		

Television in the UK does have a head start, as the public currently spend 10% of every weekday watching television (Allison 2002). That books do well in the UK survey is not surprising, given the country's vigorous publishing industry and its healthy ancient history book-club population of some 25,000 (Kemmis Betty 1999:61). From my own research, for instance, the number of archaeology books selected for promotion through the Ancient and Medieval History Book Club grew from 30% in 1997-98 to 44% in 1999-2000. That magazines are not mentioned in the UK results may have something to do with the fact that Britain only has two archaeological magazines of limited circulation: 10,000 for *British Archaeology* (CBA 2001/2: 44) and 15,000 for *Current Archaeology* (Selkirk 1998: 136). That newspapers don't appear in the UK survey is probably due to how the question was framed ("where would you go to find out about..."), as the press would not often come to mind as a knowledge, as opposed to a news, source. On the other hand, that evening classes are mentioned at all (and not in the other two countries' surveys) is a testament to the UK's excellent adult education system. Overall, these surveys prove that the public consumption of archaeology is not dependent on one source or one type of consumption, relying instead on a mixture of active and passive pursuits. We have already looked at some of the factors that inform the public's choice of medium, but what most affects the public's ability to understand the archaeology re-presented in these media?

As with media preferences, an individual's age, gender and socio-economic level have a bearing on receptivity to and comprehension of archaeological information, primarily due to the way these factors relate to educational opportunities, views of the past (and present), and life experiences. Media research has confirmed that it is a person's *level of education* that most affects his or her ability to understand science (Durant, Evans and Thomas 1989: 13), because it is this which determines "the ability to critique discourse", that is, to comprehend both what is being said and what is missing (Fenton *et al.* 1998: 137). That primary and secondary education in Britain no longer pursues certain subjects, like classical literature, ancient languages and even pre-Roman history, augurs ill for the public's capacity to use their education to relate to certain kinds and periods of archaeology. In Merriman's survey (1991: 100), it was those with the least schooling (as well as "those of low status, the retired, the unemployed and homemakers") who were least convinced of archaeology's relevance to society, yet, at the same time, who

most valued the past over the present (*ibid*: 39). The more educated were the opposite: most likely to assign positive values to archaeology, and least likely to prefer the past to the present (*ibid*: 39, 101). Merriman attributes these seeming contradictions to people's relative perceptions about their own present (a satisfaction or dissatisfaction with current status) and to their holding two different notions of the past: a commonly-held "personal sense of the past" versus an "impersonal" sense of humankind's past, held mainly by the "educated and affluent" (*ibid*: 4, 5). Caring about and understanding most archaeological work depends on some interest in a collective, rather than a personal 'past', and it also depends on the proximity or distance that is perceived between one's own life experiences, one's own conceptual map of the world, and archaeology. Media research has shown that the more remote from the public's experience a subject is perceived to be, the more likely that its 'messages' will be passively and uncritically accepted (Nelkin 1995: 68-69; Fenton *et al.* 1998: 160). Conversely, the closer that a subject is to one's experiences, the more likely that one will engage with, question and 'mediate' its messages. Thus, in theory, archaeology needs to be seen as proximal and relevant to public experience for the general public to be a true partner in archaeological mediation.

This connection between proximity, relevance and understanding is, however, problematic, for, according to the authors of the three surveys cited, the public *care* about archaeology, but they don't *understand* it.[6] In Merriman's survey (1991: 101), 73% of the British public challenged a negatively-put question in order to *support* the relevance of archaeology to society.[7] In the Canadian (Pokotylo and Guppy 1999: 406) and American (Neikirk 2000) surveys, positive support was lower, but still substantial (61.3% and 60% respectively). Given such acknowledgement of archaeology's 'relevance', what is surprising is that all three surveys pointed out that this support was offered without the public having, as Merriman put it (1991: 99), "a clear idea of what archaeology is really about."[8] Without other evidence, it is hard to argue with the authors on this point, although I feel that the public might have been showing support because they recognised it as the 'right' answer to give, as Merriman himself suggests (p. 100). I also question the bases on which these authors made their assessments of public 'ignorance'.[9] Certainly the generalised 'definitions' of archaeology given by the public in the Canadian survey (Pokotylo and Guppy 1999: 402) were deemed by the authors to be 81.7%

accurate or reasonably accurate. The equivalent responses in the UK survey (Merriman 1991: 97-99) also seem to me to be reasonable ones, although not perhaps as nuanced or dynamic as archaeologists might like. That the Merriman poll was canvassed during a period of low media visibility for the subject (as discussed in Chapter One) and is now 20 years old must also be taken into account. 'Understanding' is clearly a difficult quality to assess, and although I cannot *prove* that the public understand archaeology better today, I am still convinced that this is the case.[10]

To return to issues at the heart of this dissertation, the public's ability to comprehend archaeology is also affected by the source of information and the means of delivery. With their own hierarchy of media preferences, the public do understand that each medium uses specific conventions and codes that require a different approach in order to be 'read' (Fenton *et al.* 1998: 138-139). They do not apply the same criteria to fictional and factual media, and, as we have seen, they even prioritise the factual media, mostly on the basis of trustworthiness of the sources involved. Where archaeologists would stand in the public's list of whom they trust to tell the truth is debatable, probably somewhere between scientists (63-65%) and teachers (86%), and certainly way above journalists. It seems fair to say that press articles or TV programmes that have been generated by or include contributions from archaeologists or that put archaeologists up front as presenters are likely to carry greater authority with the public than those that do not. That a third of the population do not trust scientists,[11] however, could be seen either as a healthy scepticism or as a worrying indicator of the kind of failing trust in science (and perhaps archaeology as well) that sends people to alternatives like pseudo-science and pseudo-archaeology. It may well be true of archaeology, as Baggini suggests (2002: 162) of science, that the public need to be more realistic about "what kind of knowledge [it] is capable of producing", but this is unlikely to change what the public ultimately want from archaeology.

What do the core archaeological public want? If one accepts that the public are more sophisticated in their consumption of archaeology today, then they are likely to demand, and are capable of consuming, much more and more detailed information about the subject. Certainly this seems to be the case in America (Young 2002: 241), where in one survey (Lazio 1996) an audience watching archaeological documentaries summarised their expectations as wanting to be

addressed in an intelligent, non-condescending way with detailed, clearly organised and smoothly paced information offering a variety of viewpoints. We can get some idea of what *kind* of information the British public want from looking at the 50 archaeological documentaries that attracted the largest audiences between 1998 and 2002 (**Table 3.5**).

Although audience preferences are naturally affected by what the media have made available for consumption (cf. Tables 4.8, 4.9 and 4.11 in Chapter Four), these top-rated programmes represent some 8% of the total output over five years, and an analysis of them (see **Table 3.6**) can provide some useful clues. Regarding time periods, the British public seem to prefer more recent historical periods to more distant ones, with the Roman period to the 20th century attracting 74% of viewers as opposed to 20% for prehistory (Palaeolithic to Iron Age). Since the equivalent figures in the total TV archaeology output are 57% and 26.8%, there is a clear bias in public preferences over and above what is being offered to them. As there is also a greater spread of interest across time periods than there is between geographic location or subject matter, these figures do seem to confirm Lowenthal's view (1985: 349) that the public prefer a "blurred continuum" over "temporal specificity". That the British public are concerned with *geographic* specificity is the most prominent feature of Table 3.6, where programmes with a UK setting represent 56% of the total. Again, this is higher than the UK's place (47.6%) in the output as a whole, and confirms the results of Merriman's survey (1991: 128), where British history was heavily preferred over world history. Regarding the archaeological subjects preferred by the public, the dominance of 'bodies' and underwater and experimental archaeology does reflect the amount of coverage these subjects received on television, but once again their favoured status (at 38%, 18% and 12% respectively) is higher than their overall status (12.7%, 8.5% and 8.5%). Overall, it seems that, contrary to some archaeologists' assumptions (Farrar 2003), TV archaeology has offered the public a more catholic selection of archaeological locations, time periods and subjects than would have been warranted if TV executives had merely adhered to audience ratings. This snapshot of the public's taste in archaeology is, however, only one indicator of what the public want.

In a more general sense, the public want archaeology to provide them with factual information that has, at the same time, the capacity to involve them

Table 3.5: Audience Figures for Top 50 Archaeological Documentaries on BBC1, BBC2 and Channel 4--1998-2002

(Source: BARB*)

	Audience in millions	*Position in week***	*Programme*	*Strand/Series*	*Channel*	*Date aired*
1.	9.21	3	New Dawn	Walking with Beasts	BBC1	15.11.01
2.	9.05	6	The Pyramid		BBC1	28.10.02
3.	6.44	16	The Real Man	Son of God	BBC1	1.4.01
4.	5.52	1	The Mystery of the M1	Journeys to Bottom of Sea	BBC2	13.3.00
5.	5.14	1	Mystery of Persian Mummy	Horizon	BBC2	20.9.01
6.	4.88	1	Blackberd's Revenge	Journeys to Bottom of Sea	BBC2	30.3.00
7.	4.68	2	Priceless Cargo	Journeys to Bottom of Sea	BBC2	17.4.00
8.	4.6	3	Friends,Romans,Countrymen?	Meet the Ancestors	BBC2	22.1.98
9.	4.47	3	The Lost Souls	Meet the Ancestors	BBC2	27.1.00
10.	4.33	3	The Lost Fleet	Journeys to Bottom of Sea	BBC2	12.4.00
11.	4.29	3	Treasures of Dark Ages	Meet the Ancestors	BBC2	20.1.00
12.	4.25	4	Princess of the City	Meet the Ancestors	BBC2	13.1.00
13.	4.25	6	The Wolf Den	Meet the Ancestors	BBC2	8.1.98
14.	4.2	1	Death of the Iceman	Horizon	BBC2	7.2.02
15.	4.17	4	The First Blood	Blood of the Vikings	BBC2	6.11.01
16.	4.16	1	The Mighty Hood	Battle of Hood/Bismarck	C4	17.12.01
17.	4.11	4	Warriors from the East	Meet the Ancestors	BBC2	7.1.99
18.	4.1	2	Titanic Live		C4	17.8.98
19.	4.1	4	The Claw	Secrets of the Ancients	BBC2	16.11.99
20.	4.09	3	Hunter of the Plains	Meet the Ancestors	BBC2	17.2.00
21.	4.05	7	The Lost City of the Nasca	Horizon	BBC2	20.1.00
22.	4.04	8	Invasion	What the Romans Did...	BBC2	6.11.00
23.	3.95	4	The Black Hand	Meet the Ancestors	BBC2	11.2.99
24.	3.95	5	Domesday Fire	Meet the Ancestors	BBC2	10.2.00
25.	3.93	5	The Rose Garden Mystery	Meet the Ancestors	BBC2	29.1.98
26.	3.91	5	The French Connection	Meet the Ancestors	BBC2	3.2.00
27.	3.91	8	The Tomb that Time Forgot	Meet the Ancestors	BBC2	28.1.99
28.	3.89	3	Lost Palace of Hampton Court	Meet the Ancestors	BBC2	13.3.02
29.	3.87	6	Living with the Ancestors	Meet the Ancestors	BBC2	4.2.99
30.	3.86	6	Viking Voyage	Secrets of the Ancients	BBC2	2.11.99
31.	3.82	2	D-Day: The Untold Story	Journeys to Bottom of Sea	BBC2	30.5.02
32.	3.8	6	The Chariot Queen	Meet the Ancestors	BBC2	19.2.02
33.	3.8	7	The Ultimate Sacrifice	Meet the Ancestors	BBC2	21.1.99
34.	3.76	1	The Riddle of Pompeii	Secrets of the Dead Special	C4	1.2.01
35.	3.75	3	Pandora's Secrets	Journeys to Bottom of Sea	BBC2	27.3.00
36.	3.71	10	Mystery of Miami Circle	Horizon	BBC2	25.1.01
37.	3.69	5	Caesar's Bridge	Secrets of the Ancients	BBC2	9.11.99
38.	3.67	4	Lost Pyramids of Caral	Horizon	BBC2	31.1.02
39.	3.67	8	Olmec Head	Secrets of the Ancients	BBC2	23.11.99
40.	3.67	10	Life of Luxury	What the Romans Did...	BBC2	13.11.00
41.	3.65	5	Saxon Cemetery, Lincolnshire	Time Team	C4	7.1.01
42.	3.62	2	Blood Red Roses	Secrets of the Dead	C4	29.6.99
43.	3.59	8	What Sank the Mary Rose	Secrets of the Dead	C4	21.8.00
44.	3.58	2	Catastrophe: Part 1	Secrets of the Dead	C4	27.7.99
45.	3.58	7	The Lost Gods of Easter Island		BBC2	24.4.00
46.	3.57	6	The Forgotten Battlefield	Meet the Ancestors	BBC2	6.3.02
47.	3.57	7	Cirencester	Time Team	C4	9.1.00
48.	3.52	6	At the Sign of the Eagle	Meet the Ancestors	BBC2	14.1.99
49.	3.51	8	Human	ape-man	BBC2	22.2.00
50.	3.49	11	Winds of Change	Meet the Ancestors	BBC2	5.2.01

* Towards the end of my survey period, BARB took their audience figures off the internet, available only for an enormous subscription charge. Consequently, there may be a few other programmes that might have made the top 50.

** Position in week figures relate to the ranking of that programme on each channel's list of top programmes in that week.

Table 3.6: Comparing the Archaeological Periods, Locations and Subjects of the Top 50 Programmes in Table 3.5 with the Overall Coverage of Programmes in Figures 4.8, 4.9 and 4.11

	No. Programmes in Top 50	*% of Top 50*	*% of Total Aired*
PERIOD			
1. Post-Roman/Anglo-Saxon	12	24	15.4
2. Roman	10	20	17.6
=3. 20th century	6	12	8.3
=3. Palaeolithic/Neolithic	6	12	10.2
5. 14th-16th centuries	5	10	6.4
=6. 17th & 18th centuries	3	6	6.6
=6. Various period combined	3	6	13.9
=8. Bronze Age	2	4	9.5
=8. Iron Age	2	4	7.1
9. 19th century	1	2	2.7
GEOGRAPHIC LOCATION			
1. UK	28	56	47.6
=2. Europe	7	14	14.1
=2. Americas	7	14	10.7
=4. Australia/Oceania	2	4	1.9
=4. Africa	2	4	1.9
=6. Egypt	1	2	7.3
=6. Middle East	1	2	5.6
=6. Asia	1	2	4.1
=6. Various areas combined	1	2	6.9
SUBJECTS			
1. Bodies	19	38	12.7
2. Underwater archaeology	9	18	8.5
3. Experimental archaeology	6	12	8.5
4. Monuments	3	6	7.8
=5. Dev./Collapse of civilisations	2	4	7.3
=5. Lost civilisations	2	4	3.6
=5. First humans	2	4	3.9
=5. Mummies	2	4	5.3
=5. Society/settlements	2	4	9.5
=10. Colonists/Migrations	1	2	2.4
=10. Artefacts	1	2	0.7
=10. Military archaeology	1	2	4.1

personally. Confirming this, the English Heritage (2000) survey noted a "fast-growing trend" in the British public's desire for "polysensuality": a desire for engaging with human feelings and emotions, not just intellect. The survey also identified another trend, that of "the importance of personal experience and relevance" with regard to one's heritage. In other words, if archaeology is to satisfy these needs, then its public outreach has to become more personal and emotionally engaging. Its failure in this area has prompted a popular 'alternative archaeologist' like Graham Hancock (Barot 1998) to say that "Science may have wonderful techniques to manipulate the material world, but it isn't nourishing us in our hearts." Perhaps, it is unrealistic for the public to expect this, as Baggini above implied (see also Layton 1989: 14), but it is this 'nourishment' that lies at the heart of why the public are currently fascinated by archaeology.

Why Archaeology Fascinates the Public

Today—a period when "the public's appetite for archaeology seems insatiable" (Cook 1999)—is a highly appropriate juncture for trying to tease out the various reasons for this craving. Four points should be raised at the start. First, the public's appetite for things archaeological must be seen as part of a larger public hunger for things historical. Some suggest, as Wallace (1995: 121) recounts, that the "history boom" in Britain is a function of the country's "global decline" or that it is "a mere epiphenomenon of embourgeoisement" (i.e. more middle-class people with time and money to spend). As pointed out earlier, the timing suggests that millennialism has also played a part in it, as have a number of factors to be explored below. Whatever the reasons, the high level and wide demographic base[12] of public consumption of historical books, magazines, TV series and films have led pundits to describe history as "hot" and "happening" (Woods and Brooks 2002), "the new novel" (Beevor 2002), "the new rock 'n' roll" (Burleigh 2002), "the new sex" (Fernand 2003: 42), and even "the new cookery" (Guy 2001; Hunt 2001; Gill 2003:13).[13] Importantly, the history that has found such public resonance is not just the 'great-men-and-events' kind of history. It is rather a history that is "more about identity than policy" (Hunt 2002), "about who we are and where we came from" (Beevor 2002), and about the everyday, the domestic and the individual in history (Fernand 2003: 42). History so defined has much

greater affinity with archaeology, and so archaeology has become "the new history" (Kinnes 2002).

Second, the reasons for public interest in archaeology have little to do with what many archaeologists promote as the 'public benefits' of archaeology. Bahn (1996: 28-30), Crist (2002), Rathje (2002), and Renfrew and Bahn (2000: 542-545), among others, stress archaeology's 'practical applications', like what we learn about disease pathology, agricultural technology and environmental change, and how archaeological forensics work contributes to the medical, legal and human rights fields. No one questions that the public benefits from these applications,[14] but these are, I would contend, mainly *invisible* benefits seldom of daily relevance to the general public and thus we need to look elsewhere to explain archaeology's popularity.

Third, we should not be seeking a rationale for public interest in 'nostalgia', for the past covered by archaeology is normally too distant to assuage this kind of yearning. Moreover, as Merriman (1991: 26-27, 39-40) found in 1985, the majority (82%) of British people do not see the past as romantic, but as harsh, violent and difficult. Thus, their turning to the past *"is a genuine phenomenon, born out of real needs and interests"* (*ibid*: 23, my emphasis; see also Lowenthal 1985: 367).

And fourth, it is insufficient to see this phenomenon as simply generational. Although there is a generational element in the *increase* in "our backward-looking sensibility" (Howard 1992: 7), the British seem to be inherently past-orientated, or, as Lowenthal (1985: xviii) puts it, "permeated by antiquarianism." One clearly needs to dig deep to explain why this is the case.

It is important to make a distinction between *tangible* and *intangible* ways that the public may value archaeology (see **Table 3.7**). Tangible ways are concrete, identifiable contributions that archaeology is credited with making to individuals or society, like its role as knowledge producer or economic stimulant. These are both articulated and capable of being articulated. Intangible values, like a notion of one's life being 'personally enriched' by archaeology, are less often expressed, not because they are less relevant, but because they are hard to articulate, since they involve psychological criteria of analysis that are difficult to acknowledge and to survey.

The four polls in Table 3.7, although asking different questions, do offer some evidence of the grounds upon which the public value archaeology and of their

Table 3.7: Public Response to the Value of the Past, Heritage and Archaeological Objects and Sites

(Sources: UK (a): Merriman 1991: 24; UK (b): English Heritage 2000; US: McManamon 2002: 37; Canada: Pokotylo and Guppy 1999: 408)

	UK (a) *(why study the past)*	UK (b) *(importance of heritage)*	US *(value of archaeological objects/sites)*	CANADA *(value of archaeological objects)*
TANGIBLE				
EDUCATION/KNOWLEDGE		96/98%	99%	95%
• 'to understand present'	49%			
• 'to learn from mistakes and help predict future'	26%			
• to advance scientific knowledge	43%		99%	87.6%
ECONOMIC				
• Tourism catalyst		94%		
• Boost economy/jobs		88%		
• Monetary 'value' of objects			73%	54.6%
MORE LEISURE OUTLETS		95%		
POLITICAL 'VALUE'			59%	36.5%
INTANGIBLE				
'PERSONAL ENRICHMENT'		76%	93%	
SPIRITUAL 'VALUE'			88%	75.2%
AESTHETIC 'VALUE'			94%	52.4%

relative importance. From this, it is clear that the subject is acknowledged most for its educational role. However, this is less in the generalised sense of increasing knowledge than in the more personal sense of offering "practical and moral guidance" (Lowenthal 1985: 46-47), that is, offering the public lessons from the past that can be used to elucidate and contextualise the present as well as provide insights about the future. Historian Simon Schama put it more succinctly when he said that we seek "in chronicle an inverted form of augury" (cited in Lowenthal 1985: 367). Coming a close second to education are the tangible contributions that archaeology can make to a nation's economic health through tourism. In 2000, tourism generated some 200 million jobs worldwide and accounted for 11.7% of world GDP (Slick 2002: 219). Although archaeological tourism represents only a portion of this, the boost that it can give to local economies is enormous. For example, it has been reported (Keen 2000) that Hadrian's Wall contributed an estimated £184 million to the economy of northern England in 1994. That the 'political' value of archaeology does not figure in either UK survey is perhaps not surprising, given the nature of the questions posed and the fairly benign relationship between archaeology and politics in Britain.[15]

That intangible values appeared only once in the two UK polls could be explained by the framing of the questions, but it also relates to the difficulty in recognising and categorising these values. In summarising their results, both English Heritage (2000) and Pokotylo and Guppy (1999: 408) admitted that the public's responses to heritage and the value of archaeological materials were highly personal and multidimensional or polysemic (see also Hooper-Greenhill 1995: 9), conclusions that may state the obvious, but are nonetheless revealing. Encouraged to look for a multitude of reasons to explain public fascination with archaeology, I am convinced that they exist in what these polls have *not* surveyed, in particular, in what lies hidden behind the concept of 'personal enrichment'.

My research has led me to propose that there are at least seven attributes that archaeology possesses which earn it its currently high status with the public. In order of thought, not priority, these are:

1. Human Focus:

While archaeologists may argue for the importance to their discipline of 'things' over 'people' (see Ellis 2002), it is undoubtedly 'people' and the human link to

'things', rather than 'things' in themselves, that excite public interest in archaeology, as Wheeler (1954: v) acknowledged half a century ago. As journalist Roger Downey (2000: ix) writes, "The more homogenized human culture becomes, it seems, the deeper interest individuals take in what makes them unique: nationality, creed, family heritage." When I have posed the question of why the public are fascinated with archaeology to friends outside the profession, the most immediate answer has always been that it must stem from people's basic interest in their own family's past, genealogy and local history. Archaeology's focus on human beings is perhaps its most significant attribute over other scientific fields where this connection or relevance is less apparent.

2. ***Accessibility***:

Archaeology also earns its public following because it is both *mentally* and *physically* accessible. As a subject it is "readily intelligible" (Trigger 1989: 14), and its methods fascinate and are comprehensible, because they are analogous to the kind of detective work with which the public is familiar. As Daniel (1964: 161) reminds us, in other sciences, "it is not often...that the non-specialist can follow all the stages and understand all the moves in this game of research and detection." Even the high technology employed in modern archaeology can be understood by technophiles and technophobes alike. Archaeology is physically accessible in two ways: archaeological remains are visible and *visitable*, and throughout its history the discipline has accommodated and benefited from the active involvement of amateurs and enthusiasts. In sum, it's not rocket science, and you don't need to be a rocket scientist to understand it or take part in it.

3. ***Authenticity***:

Whether standing stones in a field, artefacts in a museum or the 'small walls' of an excavation, archaeology in its various guises possesses an authenticity, a bond with reality, which resonates with a public who value 'real' things. Some argue that the past untouched has greater resonance for the public than the past reconstructed, using as evidence the fact that the public seem to prefer to queue for hours to watch excavations in real time (often with little to see) than to visit the eventual displayed version of what was found (Barrett 1995: 6). True authenticity

(as opposed to mediated authenticity) seems to offer the greater imaginative experience.

4. Providing Meaning, Orientation and Reassurance:

Few professions have the capacity to mediate between our knowledge of ourselves and the outside world in a way that can be easily understood. In the past, this role was played by philosophers, storytellers and priests; then it was scientists; today it is anthropologists and archaeologists (see Curtis 2003: 29 and Kaplan 1995: 38-39). The public want to know that they are not alone, that there are some truths 'out there', and that there is some 'plan'. They need to feel that their lives are not meaningless, and their traditional belief systems (like religion and politics, and even much of science) seem no longer capable of delivering this. The public look elsewhere. Archaeology provides a continuum and a "secular substitute for the old religious questions" (Cornwell 1999). It validates some of the things that we 'know' or 'feel' and stretches our knowledge and imagination in areas about which we know or feel little. It thus provides some existential comfort while, at the same time, reminding us that there are still questions and mysteries left to be answered. The English Heritage survey (2000, their emphasis) confirmed "a growing trend in English society...which is the *need for meaning*." It continues: "As traditional institutions hold less significance in the life of the country, people are looking in new directions to help define where they personally fit it, and what is important to them. In a rapidly shifting society, heritage and the historic environment represent something constant and reliable, so that it may be that people turn increasingly to the sector to provide this meaning in their lives."

Archaeology satisfies the public's need for meaning, orientation and reassurance in a variety of ways. By seeking out patterns in prehistory, it offers up a past sequenced and ordered (Lowenthal 1985: 63), and as pattern-seeking, causally-thinking animals, we are attracted to and comforted by this (Shermer 1997: xxii, xxiv, 7). Importantly, it offers us clues about our origins and roots (Daniel 1964: 159). For Wertime (1995: 75, cited in Young 2002: 239), "archaeology is a mirror held up not to nature, but to humanity. To excavate the past is to polish that mirror, that we may better see ourselves and know more clearly who we are." William Rathje (2002: 86) became an archaeologist in order "to understand some basic threads in the fabric of humanity—which our ancestors wove into us and

which we are likewise weaving into our descendants—by touching as a person and by measuring as a scientist the artifacts people make and leave behind." Is it not likely that the public's interest is fired by the same motivation?

In addition, archaeology contributes to social cohesion by offering narratives that help people define and articulate their local and national identities. "Every society," say Smith and Ehrenhard (2002: 122), "has a connection with the past serving to assure group survival, to identify and verify shared behaviour, and to provide a means of passing on patterned behaviour to future generations." Moreover, since history, at least as it has been taught since the 1960s, has discouraged national pride because it was seen to be founded on non-PC concepts like imperialism (see Appleyard 2000: 6), archaeology also provides the British with a less compromised way of indulging in such feelings. Archaeology helps to locate us not just socially and temporally, but also geographically, giving us a much needed *sense of place*.

Through its finds and their interpretation, as well as through the careers of its practitioners, the subject can likewise satisfy the public's need for heroes and myths (see Silberman 1995: 252). Heroes render "the modern world spiritually significant", and myths are "like the walls of our interior system of belief, like shards of broken pottery in an archaeological site" (Campbell 1988 [1949]: 388, xiv). Archaeologists as people who "dredge up something forgotten not only by ourselves but by our whole generation or our entire civilization" become, in Campbell's terms (*ibid*: 17), "the cultural hero of the day—a personage of not only local but world historical moment." Finally, archaeology gives us a reassuring sense of permanence, much needed "when the pace of change exceeds people's capacity to absorb it", and it assuages our anxiety when the past is out of reach of our memories (Lowenthal 1985: 399, 191). Clearly, if archaeology held no other attributes, this one would suffice to explain the depth of the public's interest in it. But there are other, more light-hearted reasons still to consider.

5. Cultural Counterbalance:

By asserting the values of the past and the aged over the values of the new and the young that dominate our present-day cultural environment, archaeology offers respite and the balance that is missing in today's society. Although the past can make us feel "superior" (Lowenthal 1985: 40-41) or better off (Merriman 1991: 41),

it can also challenge present hubris, reminding us that ingenuity and creativity are not the sole preserve of modern humans.

6. Pleasure:

Daniel (1964: 169) was happy to include this point in his analyses of why the public are interested in archaeology. Archaeologists take their subject very seriously, but they also *enjoy* it. So does the public. In an American survey in 1994, "entertainment" was the number one reason why people visited historical sites (Slick 2002: 223), and as Slick remarks, "this is what archaeologists have been worried about—but entertainment does not need to mean fiction." There is pleasure as well in the "thrill of discovery" and in "the mystery and puzzle of [archaeological] work" (Metcalf 2002: 173).

7. Escape:

Twenty years ago, Lowenthal (1985: 66) wrote that "Today's intense absorption with the past is attributed to a no less dispiriting animus against the present." The best recent expression of this comes from an article in *The Big Issue* (Sussman 1998: 9), a magazine sold by the unemployed on the streets of Britain's cities:

> I can't help but think...that our interest in the past is more than anything a product of the blandness of our present. For all its technological gadgetry and domestic comforts, modern Britain is at heart a rather tedious, spiritless place. It lacks mystery, it lacks depth, it lacks a sense of cultural purpose and intellectual vibrancy. When we cast our eyes backwards we are not merely showing an interest in what has gone before, but also a disinterest in what is now. History is not merely a study of past cultures. It is, tacitly, a condemnation of current ones. An escape. An avoidance.

To my mind, these seven attributes capture what archaeology means to the public and why they are fascinated by it. They represent that 'nourishment' of the human spirit that cannot be addressed statistically, and at least five of the seven could be equally applied to the media, a similarity already introduced. It is when archaeology fails to live up to its full potential that alternative archaeologies and extra-terrestrial explanations step in. As Barraclough is quoted as saying (in Daniel 1964: 158), "Man is an historical animal with a deep sense of his own past, and if he cannot integrate the past by a history explicit and true, he will integrate it by a history implicit and false." There is, in fact, no appreciable demographic difference between the kinds of people who follow alternative archaeologies and

those who consume 'real' archaeology (Merriman 1991: 5, 117). Contrary to archaeologists' perceptions of public preference for the former (e.g. Matthews 2002: 130), my research has shown that over *one million* more people will choose to watch documentaries about real archaeological subjects than programmes espousing fringe theories.[16] Thus, the appeal of pseudo-archaeology *can* be countered by real archaeology that offers the public *meaningful* alternatives. What is needed in archaeological interpretation and public communication is an understanding of the deep bases of the subject's public appeal and a greater emphasis on what Wheeler (1954: 4) called "the creative act of reasoned imagination." Neither is beyond the capabilities of archaeologists. As Bradley has written (1993: 132), archaeologists "all engage in acts of intuition, in pattern recognition, in linking previously unrelated observations and ideas: the very processes that are fundamental to imaginative thought." In a similar vein, Morris (1993: 12, cited in Schadla-Hall 1999: 154) has called for archaeologists to "provide new myths, which have the potential to be more viable than the fantasies which presently rule" and has pointed out that their failure to do this means overlooking "the public's needs." "Fantasies flourish," he says, "because to many people the past is an open field in which the imagination can wander."

The British public have shown themselves to be enthusiastic and needy partners in their relationship with archaeology. Certainly during the years under discussion here, the relationship could be described as symbiotic from the public's perspective, since the public relied on the subject to fulfil a variety of tangible and intangible needs. This dependency has created a climate in which dialogue and communication are not just desirable, but essential, as the public increasingly find their 'archaeological voice'. As Matthew Champion says (2000: 100),

> The man in the street now feels that he has a knowledge of the subject, understands how sites are excavated and is familiar with the methods used. However, this new found interest in the subject, and the subsequent raising of the profile of archaeology and archaeologists, is a double edged sword. The new found popularity... has led to the public wanting a greater involvement in the way archaeology is carried out. The whole area of knowledge has been demystified and, as a result, the public now feel that they should have the right to discuss and debate archaeological issues. In the past the public, blinded by academic rhetoric and jargon, felt it best, if they considered the matters at all, to leave such issues to the experts. Now the barriers are down...

Notes to Chapter Three

[1] The 3-4 million and 9-10 million figures are evidenced and discussed later in this chapter (see Table 3.5). The 6-7 million is calculated by adding together the audience figures for initial and repeat transmissions of the same programme and assumes that the same audience is not watching both transmissions. For example, *The Lost City of the Nasca* (first shown on BBC2 in 2000) attracted an audience of 4.05 million on first broadcast and 2.33m on its repeat transmission six months later. Similarly, *The Mystery of the Persian Mummy* (BBC2 in 2001) gained audiences of 5.14 million and 2.46 million (source: BARB).

[2] This tallies with results from the US magazine *Archaeology*, which showed that its half-million readers were "richer, better educated, more well-read, and more likely to have disposable income than the average American" (Allen 2002: 246-247).

[3] By way of comparison, in Canada, Pokotylo and Guppy (1999: 414) found that the type of person most likely to be interested in archaeology was middle-aged or older, had some secondary education and was female.

[4] My distinction here between active and passive modes of consumption refers to the *activity* of consumption, and should not be confused with the way that media researchers have studied active versus passive audiences, which relates to the *degree of mediation* done, or not done, by these audiences. In my terms, the public engage in 'mediating' archaeology whether they pursue the subject actively or passively.

[5] The 'Big Dig' project, where over 1,300 test pits were excavated by the public, mainly in their back yards, with access to a support team of local archaeologists and where some of them were filmed for daily broadcasts, was a worthy but risky attempt to engage the public in archaeological work. It drew a lot of criticism from the profession, and some argued that both the actual finds and resulting TV programmes were disappointing (see the debates in *Current Archaeology*, Issues 186 and 187.) *The History Channel* had similarly been encouraging the public to reflect on and recount personal stories of how they have been "a part of history". In a full-page ad in the BBC's magazine *History* (September 2002, p. 39), the broadcaster offered readers the chance to tell the channel "your small piece of history and they could be making a TV programme about YOU."

[6] A similar paradox—that the public are interested in science, but that their level of scientific knowledge is low—was found in the PUS survey in 1988 (Durant, Evans and Thomas 1989: 11).

[7] The only more recent data in Britain on this issue comes from the English Heritage (2000) survey which, by taking as its topic 'heritage', not archaeology, cannot be taken as transportable, but which demonstrated wide acceptance (between 78% and 98%) for the importance of heritage for a host of different reasons.

[8] The US survey said that 60% "believes in the value to society of archaeological research and education though they don't have a clear idea of the primary activities and topics studied by archaeologists" (Neikirk 2000). Pokotylo and Guppy (1999: 406, 403) said that Canadians showed "a high level of interest and support for archaeology and heritage conservation, but also a high level of misunderstanding about the archaeological record and current legislative measures to protect it", as well as little understanding of who does archaeological work, only 3.9% giving the 'correct' answer of private consultants.

[9] Merriman (1991: 99) judged public ignorance on the fact that 41% replied to a question on whether archaeology should be taught in schools with "I don't know enough about archaeology to answer this question properly." Does this really mean that they don't know enough about archaeology, or that their knowledge is not sufficient to enable them to choose at which educational level it should be taught? I do not feel that this reply alone suffices as a judgement on the level of public knowledge. The Canadian authors (Pokotylo and Guppy 1999: 402-404) based their perception of the public's archaeological ignorance on, for instance, the fact that they heavily underestimated the number of archaeological sites in British Columbia, did not know about current heritage legislation and thought that 'universities' did most archaeological work, not private consultants. My guess is that all three would be true of the public in any country in the world, certainly in Britain,

where no one I know outside the profession could 'count' the number of sites or has ever heard of PPG16 or its implications. This leads me to doubt the validity of their questions and conclusions.

[10] Some comfort for this assumption comes from America, where one archaeologist (White 2002: 146) has written: "Thanks to increased visibility in the media, and the expansion of the internet, Mount Vernon's archaeologists find themselves interpreting the past to an increasingly educated audience. Because of the audience's increased knowledge, expectations of archaeological interpretation are more sophisticated."

[11] According to Baggini (2002: 147-148), scientists are mistrusted by the public because of conflicting advice, previous scientific mistakes, a perceived hubris in scientists' stance towards the public and, also, because science can "cause harm".

[12] As TV critic Sally Kinnes (2001a: 4) explains, "History on television has seldom been more popular....Nor is the audience just the leisured middle-aged. If there is a documentary-maker who doesn't know that a third of the audience for Simon Schama's History of Britain was under 16, he or she ought to switch to making another type of programme." Historian David Starkey's TV series on Elizabeth I clocked up audiences of 3.5 million, more viewers than watched popular comedy series like *Ali G* or *Friends*, as many would point out in the press (Baxter 2001; Kinnes 2001a: 4; Starkey 2000).

[13] The comparison with 'cookery' (as the mark of a popular subject) reminds one of the same analogy applied by Austen Henry Layard when describing the popularity of his book on Nineveh in 1948-49 (Daniel 1981: 75). Even when pundits are not convinced of the value of TV archaeology, they employ the same analogy. As A.A. Gill (a restaurant and TV critic) writes (2002a: 13), "Looking at the past by digging holes in the ground is like making a cookery programme by exclusively examining the washing-up."

[14] In March 2003, for instance, a programme in the Channel 4 archaeological series *Secrets of the Dead* (*Plague on the Western Front*) applied forensic analysis to the Spanish Flu epidemic of 1918 and was highly relevant to a public then having to contend with the worldwide spread of the SARS virus.

[15] One might have expected, however, Welsh or Scottish respondents to assign a kind of nationalist value to studying the past and the importance of heritage.

[16] For instance, between the 7th and 19th March 2002, two episodes of Graham Hancock's series *Underworld: Flooded Kingdoms of the Ice Age* attracted audiences of 2.81 and 2.91 million, as opposed to 4.2 million for a Horizon programme (*Death of the Iceman*), 3.17 and 3.18 million for two episodes of *Time Team*, and 3.8 million for the *Meet the Ancestor*'s programme, *The Chariot Queen* (source: BARB).

CHAPTER FOUR

A SYMBIOTIC RELATIONSHIP? THE MEDIA PERSPECTIVE

Looking at the mediation process through the eyes of media professionals completes my survey of the present state of the relationship that governs the public communication of archaeology. By way of introduction, I first examine some of the current trends in the British press and television industries that have a bearing on archaeological mediation. I then look at how the media function as mediators of information, focusing here mainly on journalists and the press in order to foreground the analyses in Chapters Five and Six (and since television mediation is covered in Chapter Seven). The issues to be discussed include: what is news, how journalists mediate scientific subjects, their relationships to sources and means of delivery, specialist versus generalist reporting, and the rise of 'herd' journalism and homogenous coverage. The media's perception of the public, scientists and archaeologists is discussed in the following section, complementing the analyses presented in Chapters Two and Three. The penultimate section presents my critique of four years (1999-2002) of archaeological documentaries on British television, both as evidence for understanding what specific facets of the subject interest the media and as a springboard for the last section where I analyse why the media currently value and are fascinated by archaeology. The chapter ends with some summary conclusions to the umbrella question about the symbiotic nature of the archaeologist-public-media relationship that has framed Chapters Two, Three and Four.

Current Trends

Of many trends worth investigating, three seem to be most germane to this study, namely, information overload, how the media are coping with a new media landscape and the role that history, science and archaeology are playing in the media's strategies for adjusting to this new media environment.

Making sense of the world when barraged with information coming from a variety of sources is hard for the individual in society and harder still for those media professionals whose task it is to assist the public in this process. Information proliferation clogs up public dissemination systems like publishing, the press, television and the internet, but it also affects specialist ones. For instance, in the 1990s, over 100,000 scientific journals were publishing in the region of six million articles a year (Shermer 1997: 24). Science journalists, editors and producers, as well as scientists, find it increasingly difficult to keep up with the 'glut' of science literature (Gould 1997: 124). The same holds true in archaeology which additionally suffers from an ever growing excess of unpublished or inaccessible reports (Heyworth 2001; Childs 2002: 231), of pure data and of collected artefacts (Hinchliffe 1999: 25; McAdam 1999: 50, 54; Bahn 1996: 14). Is this only a recent phenomenon? Consider the following:

> At present there is a real danger that the indiscriminate amassing of materials will by its sheer dead-weight retard the rate of progress....Already we are beginning to suffer from a surfeit of trifling articles, nine-tenths of which lead nowhere and are...tedious and unnecessary.
>
> Today, when every scientific discovery of importance is almost immediately disseminated all over the globe, multiplied a millionfold in effect by its being chronicled in pictures, film, word, and sound, the excitement of great discoveries has been very much diluted. One publication follows on the heels of the last, always competing for attention, contributing to a process whereby everybody knows a little about something, but nothing in particular.
>
> ...the subject's literature is out of control, a vast multi-headed Hydra with new journals and series of monographs springing up every year, which few can afford and which even libraries are hard-pressed to buy....Nobody can hope to keep up with all the literature on a single period or region or speciality, let alone on the archaeology of a continent, and still less of the whole world.

As these comments from Crawford (1921: 53-54), Ceram (1986 [1951]: 93) and Bahn (1996: 13) respectively attest, information overload has long been endemic in archaeology. Recent expansions in archaeological research and fieldwork and in media outlets in Britain have only exacerbated a perennial problem.

The consequences of this trend, both in the professional and public arenas, are at least fourfold. First, it becomes ever more difficult for people to distinguish the wheat from the chaff, the relevant from the irrelevant, with one result amongst many being a greater burden of responsibility on media professionals who need to

make such distinctions on a daily, if not hourly, basis. Second, as a way of coping with this overload, the media have partitioned subjects into more specialised and thus manageable compartments. 'Narrowcasting', as opposed to 'broadcasting', has become the norm, as sub-specialist journals proliferate, as newspapers hive off whole news domains into separate sections—although notably not for science (Hargreaves and Ferguson 2000: 48)—and as television stations do the same with new channels. Replacing *le menu* with *à la carte* caters to public choice, but everyone ends up knowing more and more about less and less. For television, in particular, this 'ghettoisation' of information heralds the demise of the long-sanctified mixed diet that is public service broadcasting. Third, more specialised coverage necessitates more specialist writers, producers and editors. The BBC's science department, for example, *trebled* in size between 1994 and 1999, when the then Director General, Sir John Birt, named it "department of the year" (Kinnes 1999a). With regard to the press, however, as Hargreaves and Ferguson (2000: 48) remind us, there are only 11 in-house science correspondents currently employed across all the UK's national dailies (compared to 22 on *The New York Times* alone). Despite the wishes of the archaeological community (see Chapter Two), the pattern of using generic rather than field specialists to cover archaeology in the press is unlikely to change. Fourth, information overload could lead to public apathy. Rather than face that, the media have made the above accommodations and have re-framed their expectations, seeing smaller groups of more committed readers or viewers as a positive outcome.

A New Media Landscape

The first signs that the media landscape was changing in Britain came in the 1980s with press ownership changes that created strange stable-mates (like *The Times* and *The Sunday Times* joining *The Sun* in the News International empire in 1981). This decade also witnessed the last of the major management versus labour disputes, as perhaps best epitomised by the 'Wapping War' in the case of the press and the TV-am lock-out with respect to television (see Tunstall 1996: 18-30 and Seymour-Ure 1996: 22-23, 112). These disputes were power struggles that the trade unions, facing the combined will of the Thatcher government and of bosses like Rupert Murdoch and Bruce Gyngell, were doomed to lose. With hindsight it

seems clear that without these battles the media would have been even less well prepared for the changes to come, especially in television.

The launch of Channel 4 in 1982, and in the form campaigned for by programme-makers (i.e. as an 'open' broadcaster commissioning or buying its programmes from outside sources, rather than producing them in-house as the BBC and ITV did), was crucial in creating what was, for Britain, a new media species: the independent producer. A thousand small production companies were formed almost overnight, all of them vying to produce programmes for Channel 4, other nation's broadcasters and soon even the BBC, which was forced by the Tory government to give 'access' to 25% of its programming to independents in the 1990s. Thus was established the commissioning process under which much of British television (including archaeological documentaries) is still being produced. In brief, commissioning editors, each responsible for a certain catchment area of programming, put out tenders to independents to supply particular programmes, series or strands, or commission programmes suggested by independents, or buy existing independently-made productions. The tastes and interests of commissioning editors (and channel 'controllers') are pivotal in this system, as was the case before, but the resulting output is now equally dependent on the enthusiasm, persuasiveness, perseverance and efficiency of independent producers. Accountability is therefore shared, and, with respect to archaeological programmes, it is the independent, not the broadcaster, who is more likely to be archaeologists' main contact or partner in the production process.[1]

Despite the advent of cost-saving video production and editing equipment, rising production costs were to put strains on broadcasters and independents, and this led to another change in the landscape: the increasing reliance on international co-productions. Twenty years ago, a one-off, 50-minute, UK-based archaeological documentary for *Chronicle* cost £25,000 to make, and one shot in a foreign country around £65,000 (Norman 1983: 28). Today, those figures are at least four to five times higher.[2] At the highest end of the scale, the two-part *Neanderthal* (2000) cost £1 million, the largest budget accorded a live-action documentary in Channel 4's history (Pettitt 2001: 466). Since the 1980s, the main solution to rising costs has been to spread the investment by involving other nation's broadcasters in either pre-buying or co-producing with a UK channel in exchange for transmission rights in their home territories. Normally, the 'lead' producer, the independent or

station that invests the most or initiated the project, retains editorial control, but creative and other differences, often dependent on whom one is co-producing with, plague the system (see F. Taylor 2001: 475-476). More to the point, until recently, costs were manageable enough to allow each co-producer to have, if needed, a version of the programme tailor-made for their market (e.g. in their language or re-edited to highlight issues or participants most relevant to that country's audience). This was, for example, the case in the 1996 documentary co-production examined in Chapter Seven. Since the late Nineties, however, economics have been such that often only one version is now made, and this has led to more compromises.

For financial as well as language reasons, Britain's main co-production partner has historically been the United States, either stations in its public broadcasting system (PBS) like WGBH or WNET or cable and satellite networks like Arts and Entertainment, The Learning Channel, Discovery or National Geographic. TV archaeology has benefited from the fact that these channels have a mandate for factual programming. Reliance on American co-producers has, however, resulted in the recent rise of a more formulaic approach to narrative construction. Critic Sally Kinnes (2002), in her preview of an episode of Channel 4's co-produced *Lost Worlds* series and interview with its producer Phillip Day, noted that the film seemed to retell the story again and again. She explained:

> This too is a new trend. Just as archeological programmes have become a staple of the schedules, so is the way they are made. There are new rules that have come from America and, says Day, are set in stone. 'All these archeology programmes you see are coproductions, and they are becoming ever more driven by a formula because they can no longer afford to make versions for each market. My film follows the formula because it has to.' It asks a question every four or five minutes. It has a cliffhanger before each commercial break, and a reprise at the beginning of each part. 'The Americans' expectations of their audience is such that they treat them almost like imbeciles. They assume the audience knows nothing.'

Day's frustration with being locked into a repetitive format is understandable, but his attribution of this to US broadcasters' underestimation of audience knowledge levels misses the real culprit. This formulaic construction is, in fact, their way of holding onto viewers habituated to channel-hopping, to joining programmes at various points in their transmission, usually during commercial breaks. By placing 'cliffhangers' before ad breaks, they are hoping to dissuade viewers from changing channels; by re-telling the 'story so far' after the break, they are hoping to 'hook'

new viewers who have just tuned in. In Britain, where viewers are perhaps more likely to watch programmes from start to finish, and where some of these programmes may be shown without breaks, this kind of programme structure can be irritating, not because the British are 'smarter' viewers, but because they are more 'committed' ones. The increasing use of this rigid formula discredits the more creative work that has been and is still being done, has the potential of turning off British audiences and validates the 'dumbing down' criticisms that pre-date this trend. Some archaeology programmes are therefore *becoming* what they were already (unjustifiably in my opinion) criticised for *being*.

To these changes, one must add two further developments that significantly altered the television environment: new technologies and deregulation. The technological revolution that started with video recorders and has continued with DVD's and now VPR's (recorders that can be programmed to individual tastes and provide viewers with their own daily viewing schedule) paved the way for the breakdown in traditional viewing patterns. The advance of cable, satellite and multi-channel broadcasting had been held back in Britain due to government protection, but this was to change as the government began to open the airways to market forces in the 1980s and 1990s. Deregulation came in waves. First came the granting of cable and satellite licences to broadcasters and narrowcasters like Sky or Discovery and the 'auctioning' to the highest bidder of franchises for the regional companies that comprised the ITV network (franchises being previously awarded on the 'quality' of the bid). Then we had the loosening of media ownership rules which ushered in a series of ITV mergers (culminating in October 2003 with the creation of one ITV company), the advent of a fifth terrestrial channel (Five), and the government-led move into digital television. Of all these changes, it was the expansion in channels that would have the greatest impact on British television, affecting both programme-making and viewing patterns.

The development of 'niche' channels devoted to one particular genre or subject was expected to increase the demand for specialist programming. Although this has happened, programme-makers quickly found that these channels paid considerably less than terrestrial broadcasters. They also tended to be more prescriptive in their programme requirements, and to repeat programmes more often. The launch of BBC4 in 2002, as an even more highbrow version of BBC2, could have been seen by archaeological documentary producers as a prime new

outlet for their productions, but for reasons outlined below, this has not (yet) occurred.

Greater competition and viewer choice has resulted in audience fragmentation, with the brunt of falling audience share being taken by the mainstream channels (see **Table 4.1**). Significantly, BBC2 and Channel 4, the channels that air the most archaeological programmes, were able not only to maintain, but, in BBC2's case, actually increase their portion of the audience (at least through 2002). Current research has shown that "generally, the more choice people are given, the less likely they are to watch what we regard as public-service programming" and that "some of the more serious programmes are shedding three out of four viewers in digital homes" (Clarke 2003: 51). More recent figures that show BBC2 and C4 decreasing in November 2003 to a 7.2 and 6.9 audience share respectively appear to confirm this trend. Dwindling audiences have, of course, reduced advertising revenue as the commercial channels bring fewer viewers to their schedules and led to cost cutting and job losses across the broadcasting system (e.g. at C4 [Wells 2002, O'Donnell 2002] and even at the BBC [Leonard 2004]).

Table 4.1: Audience Share: UK Terrestrial Television (Source: BARB)

	1993	**1998**	**1999**	**2001**	**2002**	**%change**
BBC1	32.6	29.5	28.4	26.9	26.2	-6.4
ITV	41.2	31.7	31.2	26.7	24.1	-17.1
BBC2	9.0	11.3	10.8	11.1	11.4	+2.4
Channel 4	10.6	10.2	10.3	10.0	10.0	-0.6
Channel 5/Five	n/a	4.3	5.4	5.8	6.3	+6.3

Increased competition has thus had an important impact on terrestrial broadcasters, leading them to 're-brand' their image and to resort to adaptations or hybridisations of previously successful programme formats. In the spring of 1999, for instance, BBC2 created on Saturday nights 'The History Zone', a thematic package of factual programmes, fairly short-lived, but one in which archaeology in the shape of *Meet the Ancestors* played a major role. According to one critic (Peretti 1999), 'The History Zone' was "reflective, serious, something for the older, educated Times crossword viewer, with the no-fun packaging of a British version of PBS." This kind of 're-branding' may have contributed to BBC2's growing audience, but it has raised other questions, as Peretti went on to point out:

> As they turn the channels into one-trick ponies, they exorcise the schedules of any contradiction, depth, or elements of chance. In effect, branding turns a channel into a giant focus group, second-guessing the tastes of an imaginary audience profile. Both the BBC and Channel 4 have thus redefined their audience in order to fit a narrowcast future.... But terrestrial TV is being forced to hang onto an identity, any identity, in what are exceedingly uncertain broadcast times.

As BBC2 and C4 subsequently spawned their own digital off-spring (e.g. BBC3, BBC4 and E4), their need to redefine their terrestrial image became even greater.

The strategy of relying on tried-and-tested genres would, in the case of factual programming, lead to schedules dominated by 'reality' programmes or what one producer called "pleasure leisure" series (Kinnes 1999b). The past five years have witnessed an endless stream of relatively cheap-to-make 'survivor' programmes, 'living in the past' and occupation- or setting-based docu-soaps, 'makeover' and gameshow hybrids and 'list' ('the top 100') series. As Corner (1999: 183) points out, "the market need to hybridize across genres [in documentary] in the search for competitively attractive new recipes" has produced some mould-breaking, public-participatory formats, like 'video diaries' and, I would add here, *Time Team*. Known generically (more to media researchers and critics than practitioners) as 'infotainment', these factual plus entertainment hybrids, moreover, tax conventional media analysis, for they "render problematic key terms hitherto standard in discussions of mediatized knowledge" (Livingstone 1999: 94). From my perspective, what is most telling about re-branding and reality-dominated television is the role that history, science and archaeology have played in them.

Relying on History, Science and Archaeology

"Like jealous siblings, different genres of television programme are always trying to elbow each other out of the way," Kinnes (2003a) noted in 2003, adding that "Among the serious stuff at the moment, science and history have grown fat on ratings glory, and between them they have pushed the much-withered arts almost out of the nest." A decade earlier the situation had been very different. As Herman (2003a: 19) says: "At one time in the late 1980s and early 1990s, television arts and culture were in. We never had it so good. Theme nights, long-running strands, hot and cold running culture everywhere you looked. But history on television was languishing." In the early 1990s, historians like Niall Ferguson and Bettany Hughes had had their programme proposals dismissed by TV executives.

Ferguson was told that "the young are not interested in history because it was about 'old things'" (Kinnes 2003b), and Hughes (2002) that "A, nobody watches history and B, we don't want missionaries here." By 1999, Peter Salmon, then BBC1 Controller, would publicly admit that history was "lagging" behind other factual departments (Brooks 1999). Four years later, Ferguson and Hughes had history series on television (*Empire* and both *The Spartans* and *Seven Ages of Britain* respectively). The BBC and C4 had by then so strengthened their history output, paying millions to historian-presenters like Simon Schama and David Starkey (Brown 2002), that historian Ian Kershaw (2003: 16) could write the following:

> In recent years, the number of programmes on historical topics shown on television has grown enormously. The best of these are usually shown on mainstream, terrestrial channels, and draw millions of viewers. Sold on to foreign television companies, reproduced on video (official and home-made), repeated at intervals, used in schools and universities, a critically acclaimed television documentary can reach worldwide audiences of upwards of 50 million people. No history book, however popular, will reach such an audience.

That science was going through a similar upsurge in interest across the media is confirmed by Hargreaves and Ferguson (2000: 33):

> It cannot be denied that the volume of science in the mainstream media has increased. This is quantifiably true in terms of, say, science books in the bestseller lists, but it is also true of simple observation of the pages of our newspapers or the output of the BBC....Even in the pages of the national newspapers, where the charge of a general 'dumbing down' in search of more readers in a diminishing market is easiest to make, the volume of attention paid to issues connected to science is very substantial indeed.

By the late 1990s, historical and scientific documentaries had come to define what factual programming represented for these re-branded channels, earning audience figures that TV executives would describe as "almost inexplicably good" (Kinnes 1999a). What had caused this reversal of fortunes?

It was partly due to the media's recognition of an increase in public interest, as evidenced by the phenomenal success of idiosyncratic best-selling books like *A Brief History of Time* (1988), *Fermat's Last Theorem* (1997) and *Longitude* (1996). It may have also been, as Herman (2003a: 19) suggests, just "a question of fashion." But it was primarily due to a shake-up in the higher echelons of TV management, for as Herman reminds us (*ibid*), "when they say the audience has changed, they actually mean that the television executives have changed."

Long-serving and respected strand editors—like John Lynch of *Horizon* and Laurence Rees of *TimeWatch*—played fundamental roles in the growth of history, science and archaeology programming on BBC2 in the later 1990s. The same role was played by Dan Chambers, first at Channel 4, where he was a commissioning editor for science, and then, in 2001, at Five, where he became Controller of Factual Programmes. It was, however, a series of top management changes that encouraged these editors to prioritise these subjects. Alan Yentob, an 'arts and culture' man, was replaced as Controller of BBC2 by Michael Jackson in 1993 and then in 1996 (when Jackson moved to become Chief Executive of Channel 4) by Mark Thompson, previously the BBC's Head of Factual Programmes. Thompson would then become BBC's Director of Television (2000-2001) before following Jackson as head of C4. It was perhaps less "incidental" than Kinnes (1999a) suggests that the "hugely successful landmark series" on archaeology, like BBC2's *Ice Mummies* (1997) and *Meet the Ancestors* (1998-2003) and Channel 4's *Secrets of the Dead* (1999>) were commissioned or launched while Jackson and Thompson were at the helm of these channels. In 2001, for instance, Thompson had announced that spending on factual (history and science) programmes for BBC1 would increase by 20% (*Current Archaeology*, Issue 176, p. 344). A new breed of high-ranking executives, keen to make their mark on British broadcasting, clearly fostered this significant trend.

From the above, it comes as little surprise that a subject like archaeology, so well placed between history and science, would be in the forefront of this major shift in media interest and investment. Although the increase in media coverage of archaeology in the second half of the 1990s undoubtedly stemmed from the institutional factors described above, there is less evidence that publishing acted as a catalyst. If anything, it appears to be the other way round, with popular archaeological series on television arriving first and then generating press coverage and best-selling tie-in books and magazines. Even though the instructional book *How to Read Egyptian Hieroglyphics* did become the surprise summer best-seller in 1999 (Crace 1999), this was after the production boom had started in television. One could, however, argue that the popular success of 'alternative' archaeology books like Hancock's *Fingerprints of the Gods* (1995) may have had a 'pump-priming' effect. In addition, I have found some intriguing

evidence of an earlier upsurge in the reporting of archaeological stories in *The Daily Telegraph* between October 1994 and December 2000 (see **Figure 4.1**).

This graph demonstrates that articles about archaeological subjects increased *sevenfold* in the 18 months between April 1996 and September 1997 over the previous 18-month period. In one month alone (September 1996), 24 articles appeared in the *Telegraph*, an anomaly that on close inspection proved to be comprised of standard archaeological news, rather than being, as one might expect, the result of extraordinary events or discoveries.[3] Thus, at least one national paper had been augmenting its coverage since 1996, and although the number of articles declined in steps over the next two periods, it still remained in 1999-2000 three times higher than it had been in 1994-1995. While I do not believe the *Telegraph*'s increased archaeological coverage spawned the subsequent expansion in TV archaeology (nor was it due to increased archaeological activity in the UK for the coverage was not confined to UK stories), it was a sign of heightened media interest. Clearly, further research is needed to establish whatever links there may be between press attention and television production.

The major rise in the broadcasting of archaeological documentaries on British terrestrial television occurred in 2000, as can be seen from **Figure 4.2**. In that year, BBC2 and C4 transmitted 139 programmes, a 78% increase over 1999 and more than double the 1998 output.[4] Given the time lag between commissioning and broadcasting, this means that the production boom had actually started in 1998 or earlier. From 2000 onwards, it was not unusual to find 2-3 hours of archaeology scheduled on the same night, with the majority of new series being launched in the winter, rather than during the autumn 'new season'.[5] The next important development came in 2001, when archaeological programming spread from the confines of BBC2 and C4 to the more mainstream BBC1 and ITV, due undoubtedly to the recognition of the genre's audience-pulling power. This contributed to a further 24% rise in transmissions in that year. A similar crossover to the mainstream was repeated in 2002, as the youngest terrestrial broadcaster, Channel 5 (later just 'Five'), caught the archaeology 'bug', and programming went up another 30%.[6] Thus, the overall increase in archaeological documentaries between 1998 and 2002 was 367% (308% if one only counts BBC2 and C4). And, although more programmes mean more possible repeats, this increase was not solely attributable to more repeats, for they went up at the same rate (368%).[7]

Figure 4.1: Archaeology Articles in The Daily Telegraph by month (10/94-9/00)

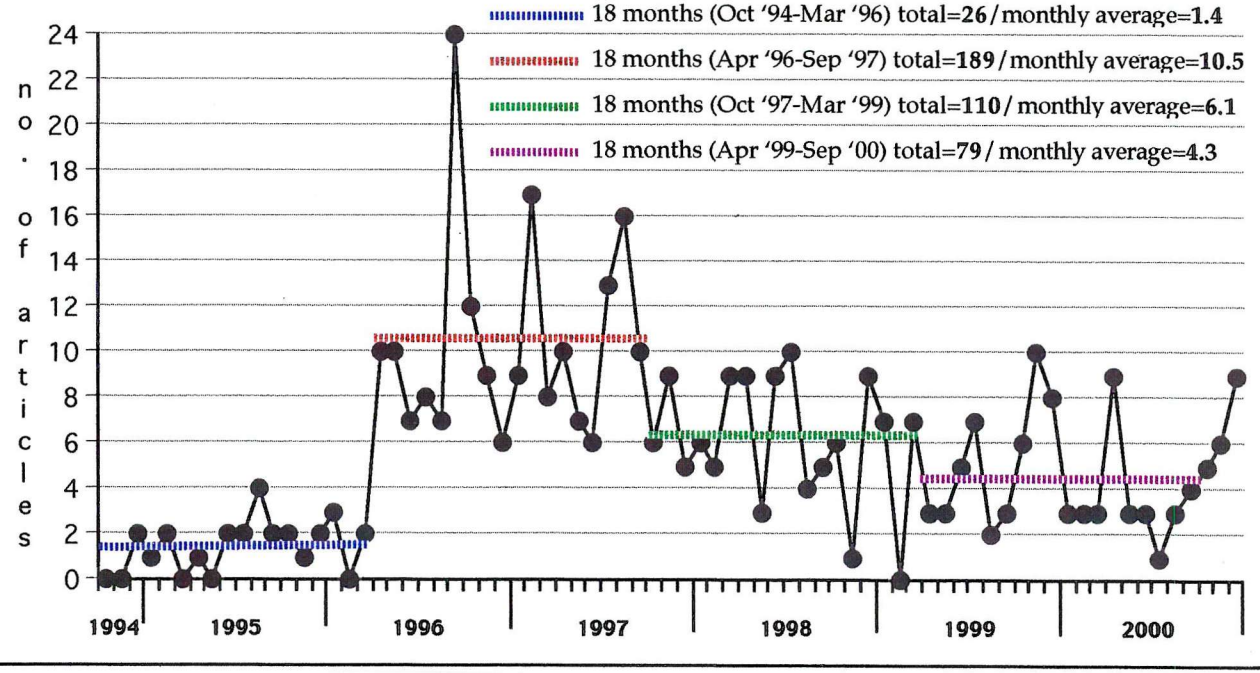
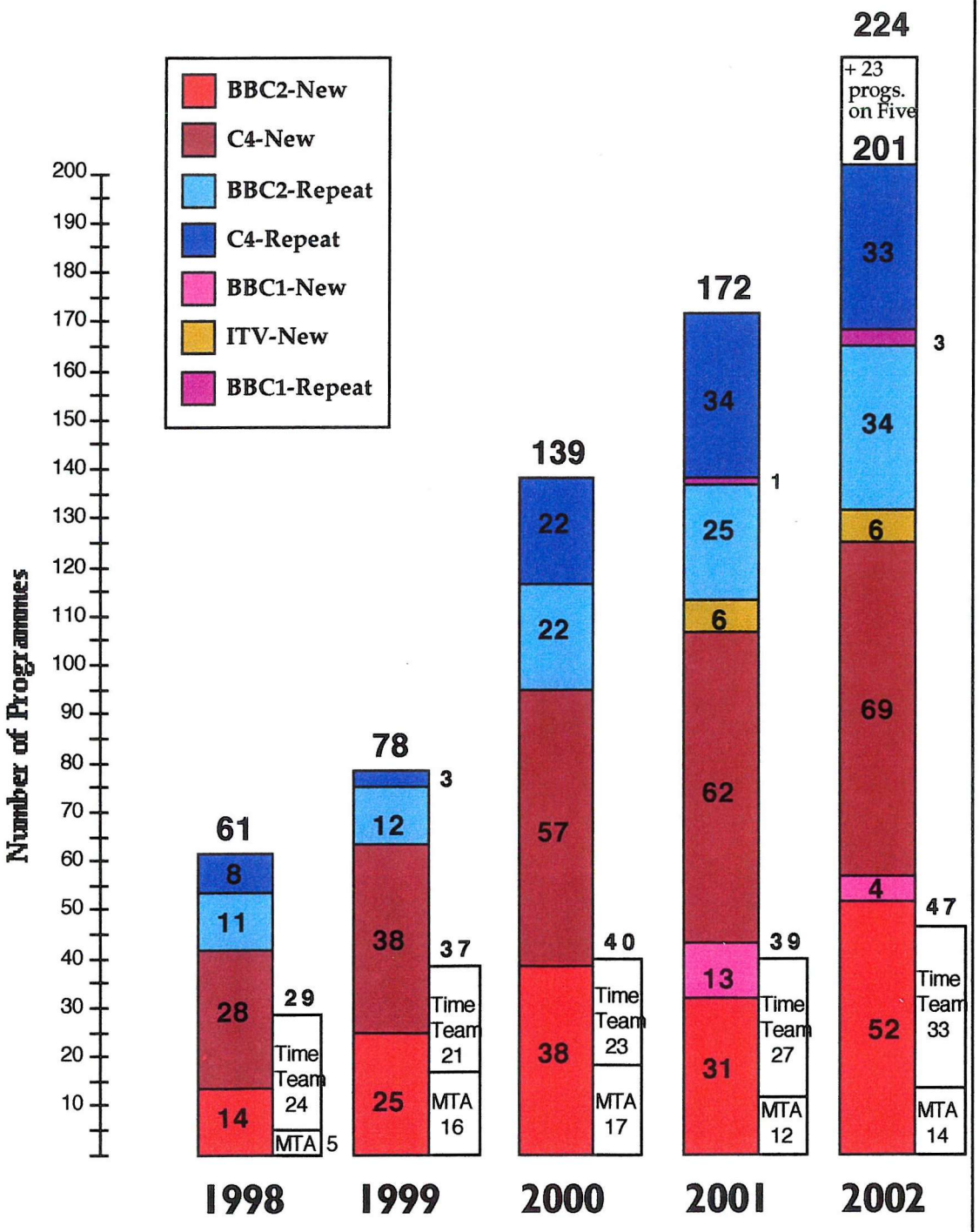


Figure 4.2: Archaeological Documentaries on BBC2, C4, BBC1 and ITV (1998-2002) & Comparison with Annual *Meet the Ancestors* (MTA) and *Time Team* episodes



Altogether, over five years, Britain's four main terrestrial channels broadcast *651* archaeological documentaries, an impressive number of programmes.

It is tempting to date the start of this renaissance in TV archaeology to the appearance of Britain's two longest-running series: C4's *Time Team* in 1994 and BBC2's *Meet the Ancestors* in 1998. From Figure 4.2, it is clear that they were together responsible for almost half (47.5%) of the archaeological programmes in 1998-1999, and thus that they were the groundbreakers in creating an audience habituated to archaeology in a medium where habit-forming is so important. Their core audiences remained quite constant over the years: usually 2.8-3.6 million for *Time Team* and 3.5-4.6 million for *Meet the Ancestors*. Loyal audiences and both series' engaging formats certainly prepared the ground, but I would propose that the breakthrough to an even larger audience was, in fact, BBC2's 1996 *Secrets of Lost Empires* series and its 1997 *Ice Mummies* trilogy.[8] These series broke through the five million mark with audiences of up to 5.44m in the former case and of 5.33, 5.41 and 5.71m in the latter (Source: BARB). This demonstration of the potential size of the archaeological audience was clearly a defining moment in TV archaeology in the 1990s.[9]

By 2002, *Time Team* and *Meet the Ancestors* no longer dominated the archaeological schedules; their share of programming halved to 24%, although their emblematic status remained intact. Audiences rarely reached the five million level again on BBC2 (see Table 3.5), but they doubled to nine and later ten million when BBC1 began to broadcast archaeology programmes. Also by 2002, the formulaic co-production style mentioned above had begun to affect the UK's archaeological output, as had television's search for new hybrid genres. Audiences were now being offered archaeological 'list' programmes (e.g. BBC2's *Our Top Ten Treasures* [2003]), pleasure-leisure crossovers (e.g. gardening plus archaeology equals BBC2's *Hidden Gardens* series [2002-2004]) and, especially, 'reality' shows (e.g. BBC1's *Surviving the Iron Age* [2001], BBC2's *Roman Soldiers to Be* [2001] and Five's *Warrior School* [2002], amongst many others). As one critic (VS 2002) opined about the latter genre, "the current trend for dressing people up as their ancestors is the acceptable face of reality television."[10]

The recent trends outlined above go a long way towards explaining the pragmatic reasons for the British media's take-up of archaeology. The deeper reasons—the special attributes that archaeology offers the media and the kinds of

archaeology that interest them—are dealt with later in this chapter. It is already evident that it is within this context of archaeology flooding the small screen that the current archaeologist-public-media relationship must be viewed. The subject's high visibility has prompted archaeologists to take note of, respond to and criticise media representation in ever more vocal ways (as seen in Chapter Two). Kershaw's (2003: 16) comments about historians and TV seem particularly apt:

> the almost inevitable criticism by professional historians whenever television history is discussed is not just a product of envy. It reflects a real tension between the professional discipline of history, in its central focus on research and teaching, and the popularization of history through the mass media. It even touches on the very purpose of history, and whether—horror of horrors—television might in some ways be serving that purpose better than academic history....Though the tension between popularizers and specialists has always been there...it has been magnified by the present-day centrality of television in our lives, and the ways it can portray history.

Some of television's ways of portraying archaeology have exercised not just academics, but TV executives and critics as well. Many of them have begun to object to the 'gimmicks' and visual over-kill (or style over content) of certain recent series (e.g. Pitts 2001c; Kinnes 2001a: 5; Anon. 2001; Gill 2001: 13; Gill 2002b: 13; Sherwin 2003).[11] With the number of archaeological documentaries in 2003 equalling (though not surpassing) 2002 levels, and with little evidence of efforts to re-invigorate the formats, the real concern, as I see it, is that by saturating the schedules with archaeology, television may be draining the subject and its audiences dry, as it so often does. The prospects therefore increase for archaeology to be hived off in the near future to BBC4 and other niche ghettos, as the arts are now, when fashion (and executives) again change.

The Mass Media as Mediators

In examining how the mass media function as mediators of archaeological information, it is essential to distinguish between the two media under discussion in this dissertation. Although there is overlap between them, news reporting in the press and television documentary production are different practices that, in particular, involve their practitioners in different relationships to their sources. In this section, I will be looking primarily at press mediation, as this is crucial for understanding the structural analysis of communication in Chapter Five and the press case studies in Chapter Six. How television documentary and programme-

makers function as mediators will be addressed in the introduction to the TV case study in Chapter Seven. Here, therefore, I focus on 'news' and the journalist's various tasks, before discussing those aspects of science journalism that are most relevant to understanding archaeological mediation. These include the issues of specialist versus generalist reporting, how science is journalistically 'framed', how science reporters relate to sources and means of delivery and the rise of herd journalism.

News and Journalists

To understand how journalists mediate archaeology, it is useful to begin with what is meant by 'news'. News is not something 'out there' in the world; it is "a manufactured product" (Eldridge 1995b: 17), something that is "created" or "constructed" *by* someone (Price 1996: 327; Benderly 2001). News is a "construction of reality", as explained in Tuchman's (1978) classic text, and all those involved in it are "self-appointed and unaccountable" representatives of the public (Gans 1980: 312), exercising judgements about what information is valuable for society to know and how that information is best framed. They do not make these judgements according to a firm set of rules or as a matter of free choice (Tuchman 1978: 46; Eldridge 1995a: 37). It is, first and foremost, as the Glasgow Media Group has argued (Eldridge 1995a: 87), "the world view of journalists [that] will prestructure what is taken to be important or significant." Their world view prestructures the "character and content" of how the news is framed, and, perhaps more importantly, it sets "general boundaries on where news is looked for" (*ibid*: 87-88). Journalists' world views, their life experiences, their assumptions about society and its interests and their own journalistic history and status are, however, only the starting point. Judgements about what will be reported and how not only involve assessments about the source and quality of the information—and what Gans (1980: 146) calls "substantive", "product" and "competitive" considerations about the story's potential or 'suitability'—but they are also the product of complex negotiations between these considerations and the structure and practices of the news organisation for whom one works. As Manoff (cited in Eldridge 1995a: 37) says, "it is the interaction of these forces that produces the news, and it is their relationship that determines its diversity or uniformity."

News-gathering is normally seen as the primary task of journalists, and how journalists come by their information in the field of science reporting is a complex subject dealt with below. Once a story is assigned or gathered, the tasks of journalists and their editors involve answering in a short space of time a whole series of questions relating both to pragmatic and organisational matters and to content considerations.[12] Given the pace and time pressures of journalism, most of these considerations are internalised or "routinized" as Gans (1980: 78) calls it. Routines smooth out what would otherwise be a cumbersome process if approached each time from scratch. Journalists' autonomy to make these decisions (discussed later) is dependent on the organisational structures and hierarchies under which they work, but, as Shaw (2000a: 29) explains, "Editors and news directors, not reporters, make the ultimate decision on what stories are published and broadcast and how they are played."

The tasks of editors, news directors and journalists have been put under greater strain by the way mass communications are changing the news environment. Summarising "some of the more salient features of what is often called the 'communications revolution'", Hargreaves and Ferguson (2000: 45-46) remind us that news is becoming more competitive, more female, less political, more consumer-oriented, faster, more rumour-prone, more global, more demotic, more in search of added value, restructured economically, multi-media, ubiquitous and subject to pressure from the public relations industry. How science journalism manages to function within this dynamically-changing environment is our next concern.

Science Journalism

As the closest analogue to archaeological reporting in the press, science journalism deserves some close attention. Science news inhabits and struggles for its place within the evolving news domain described above. Science journalists need to answer the same kinds of questions as their generalist colleagues, as well as address a host of additional considerations that are unique to their specialist field. Over time, they, too, have developed their routines for dealing with science news. Science journalism, in fact, appears to be even more codified than generalist news reporting in its practice, in the way its practitioners relate to information and sources and in the manner in which the subject is perceived or framed. Perhaps

its most distinctive feature is that, unlike other press specialisms like business, sports or politics, science journalism is often resourced from material that has already been comprehensively researched, vetted and recorded in reports, conference papers, academic articles and the like. Thus science news frequently arrives at the journalist's desk with much of the early stages of normal journalistic work already undertaken, albeit by others, but by others (i.e. scientists) whose professional credibility is largely respected. As a result, the job of the science journalist is weighted most heavily on the process of *selection*. While this may give the impression that science reporting functions mainly as a translation service for selected pieces of existing science information, this underestimates both its role and its impact. As one science correspondent put it to Hargreaves and Ferguson (2000: 56, their emphasis), *"science journalism should be seen as a field of cultural practice, not as a primarily technical task."*

The selecting of which science news to cover is not a straightforward process, and it is exacerbated, at least in Britain, by the fact that science has to fight for space in the national press. This is because none of the UK's national newspapers "has succeeded in creating a substantial, regular science section as such, at least not on the scale of sections devoted to, say, business or education or the media or, even, the Internet" (*ibid*: 48). This, I would suggest, is largely due to economic reasons.[13] Consequently, with fewer column inches available, science news is subject to more stringent selection criteria, and is more likely to be heavily condensed, than news in general.

The selection process depends primarily on judgements about the relative importance of one piece of science news over another, but, as Gans (1980: 153), has pointed out, 'importance' means different (and conflicting) things to journalists and their editors. "On the one hand," he writes, "section writers try to go along with what the professional leaders, who constitute their major sources [for us, scientists], deem important; on the other hand, editors prefer stories which will have an impact on large numbers of people." An American study of editorial judgements in science reporting "found that editors use different criteria [mainly "color and excitement"] to evaluate science articles from those of either science writers or scientists [who would use "accuracy and significance"]" (Nelkin 1995: 108). These differences must be quickly and convincingly negotiated between journalists (as advocates of the scientist's perspective) and editors (as advocates of

the reader's perspective). "This means," writes Fenton *et al.* (1998: 14), "that certain details which might detract from, or at least not contribute to, [a story's] allure are likely to be ignored." As one science reporter is quoted as saying (Winsten 1985: 9, cited in Fenton *et al.* 1998: 14): "I'm in competition with literally hundreds of stories every day....We have to almost overstate, we have to come as close as we can within the boundaries of the truth to a dramatic, compelling statement. A weak statement will go no place." Although editorial interference seems to concern social science and medical reporters (Fenton *et al.* 1998: 15; Shaw 2000a: 29), this is undoubtedly due to the nature of those sciences' news (their often direct relevance to the public and front-page potential) and how this excites editorial interest. The *kind* of science being reported clearly matters.

Most science correspondents, both in the US and Britain, seem to feel that they operate with a great degree of autonomy, generating their own stories, exercising personal judgements and avoiding heavy subsequent editing (Nelkin 1995: 109; Hargreaves and Ferguson 2000: 57).[14] This may be because editors have insufficient scientific knowledge. As one UK science writer quipped (*ibid*: 49), "the level of awareness of science among...newspaper/programme editors is abysmal." Science journalists cannot afford to be complacent about their autonomy. As Nelkin (1995: 110) points out, "science writers maintain this autonomy by exercising self-restraint. Journalists develop a symbiotic relationship with their editors in which self-censorship limits direct editorial control."

The pivotal role of the selection process in science journalism is clear. It is seen by many as more important than how journalists re-encode information. Fenton *et al.* (1998: 165) concluded from their research "that the transformation of social science knowledge through media representation most significantly occurs at a meta-level, in the sorts of issues and accounts that are given news space over time and those that are significantly absent, rather than in the individual reworking of research to fit media preconceptions." By the mere act of choosing subjects to cover, science journalists exert influence on the discipline of science and how it is professionally and publicly perceived. As Nelkin (1995: 161) says:

> Science writers, in effect, are brokers, framing social reality for their readers and shaping the public consciousness about science-related events. Their selection of news about science and technology sets the agenda for public policy. Their presentation of science news lays the foundation for personal attitudes and public actions.

In Britain, as already pointed out, this important role is played by a very small group of people. There are several factors that turn the selection process into a manageable routine. These include what Nelkin (*ibid*: 9) calls the 'frame' which journalists tend to apply to science news, how news is categorised within newspapers, who does the reporting and where the news is sourced.

In her influential book on the press reporting of science in America, Nelkin (*ibid*: 1, 9) observed that "the style of reporting has been remarkably consistent over time" and that "most articles on a given subject focus on the same issues, use the same sources, and interpret the material in similar terms." This perceived homogeneity, which the case studies in Chapter Six support, led her to conclude that "most science reporting shares a style, an imagery, and a particular world view" (p. 10). Her description of this as a 'frame' (see **Figure 4.3**) has had much impact on science and media research (see Fenton *et al.* 1998: 14-15 and Hargreaves and Ferguson 2000: 11-13). Although journalists in general respect authority figures (Gans 1980: 60), the Nelkin frame shows how science and scientists have, at least until quite recently, been lionised as authoritative voices beyond reproach or criticism. The frame is, in essence, an elaboration of journalists' 'prestructured' world view of science and scientists. As Nelkin (1995: 9) says, "This frame organises the world for journalists, helping them to process large amounts of information, to select what is news, and to present it in an efficient form." As a template that explains much about the mindset of science journalists, Nelkin's frame is valuable. However, it focuses too much attention on the perceptual roots of science coverage's homogeneity, and not enough on how homogeneity is engendered as much, if not more, by the actual processes of how science news is sourced. From my research, as discussed below and in Chapters Five and Six, it is the way that science news reaches journalists that significantly predisposes science coverage towards shared issues, sources and interpretations.

Journalists are aided in selecting news by the different ways that news can be categorised: as either 'hard' news (i.e. breaking stories needing immediate attention) or as a 'soft' news feature (i.e. less urgent or timeless stories). Although the same story can be treated as both (sometimes within the same day's coverage), stories that journalists and editors see as having 'hard' news potential will be responded to more quickly, pushed into earlier news sections of the paper and will usually be circumscribed in length and depth. They will also be, as

Figure 4.3: The Nelkin Frame
(Sources: Nelkin 1995, noted as 'N';
Fenton *et al.* 1998, noted as 'F')

IMAGE OF THE SCIENTIST:

- "remote but superior wizards, culturally isolated from the mainstream of society", "socially removed, above most normal preoccupations", "lonely geniuses whose success reflects their combination of inspiration and dedication to their work" (N: 14, 17)
- "depicted in heroic terms", "selflessly furthering knowledge for the nation and humanity' (F: 14)

but also:

- "a star engaged in a competitive international race for prizes or prestige"(N:30)
- whose personal life is of little news interest (F: 15)
- whose image changed in the post Cold War 1990s in the "search for new and newsworthy villains, scientists among them" (N: 90)

IMAGE OF SCIENCE:

- "idealized as an ultimate authority", "an arcane and incomprehensible subject, far from organized common sense", "an esoteric activity, a separate culture, a profession apart from and above other human endeavours", to be approached with a "sense of awe" (N: 25, 14, 30)
- "science rests on the presumption of honesty in a quest for truth" (N: 29)
- "a series of dramatic events" (N: 6)

WHAT IS NEWSWORTHY IN SCIENCE/HOW IT IS FRAMED:

- "concentration on break-throughs and major discoveries...a focus on competition between research teams" (F: 15); controversies, the humorous or the curious are more newsworthy than routine events (N: 113), focus on "drama, aberrations, and controversy" to be "entertaining" (N: 113)
- "little attention to the substance of science, its slow accumulative process, and the limits of its theories as an adequate explanation of complex human behavior" (N: 25); "theories are seldom newsworthy" (N: 21), neither are "the process, the dead ends, the wrong turns" (N: 162)
- significance is overestimated, events magnified (N: 113)
- "reluctance to cover certain politically-charged subjects and the preference for stories about discoveries with short-term practical applications" (N: 112)
- "imagery often replaces content" (N: 5; F: 14), inheriting from TV a style "rich in visual imagery", "very short profusely illustrated" with "dramatic headlines, graphics, and leads" (N: 114)
- be balanced in presenting conflicting evidence/opinions, but without sufficient analysis to allow the reader to weigh different claims (N: 57,88)

Fenton *et al.* (1998: 160) put it, "governed by a range of mechanistic, narrative conventions that are intended to generate a denotative transparency to inhibit potential [alternative] readings." In this sense, 'hard' news is characterised by a non-discursive, unambiguous and 'closed' discourse. 'Soft news' normally appears in later or feature sections of the paper where it can be treated in greater length and depth and be expressed in a more 'open' and polysemic way. Scientists, archaeologists and, probably, many science writers may be more comfortable with science being handled as soft news, but even twenty years ago, publisher Eric Peters (1981: 200) noted that "where news and features are noticeably separated, archaeology is more often than not treated as 'news'." The absence of special science sections and the limited space generally accorded to science news in UK newspapers put pressures on journalists to select science stories with front-page potential. This helps to explain why "the news media treat incremental scientific advances as touchdowns" (Shaw 2000a: 29). Most science reporters undoubtedly do understand the incremental nature of scientific advances, but promoting them as such decreases the chances that the story will be published. Archaeologists' dissatisfaction with their profession's press coverage stems largely from the fact that much of the discipline's new information is covered as 'hard' news and is focused on major discoveries, especially those that may change our thinking about the past (the journalist's version of an archaeological 'touchdown').

That science reporting is a specialist field does not, of course, mean that every science story will be covered, or would be best covered, by a science correspondent, or by one who specialises in that story's branch of science.[15] A science story emanating from a foreign country, for instance, is more likely to be written by a local freelancer or 'stringer' with little or no science knowledge. Many scientists commend specialist coverage and complain about generalist reporters working on science news (see Fenton *et al.* 1998: 73). Certainly specialists will understand science better, be able to question data and conclusions with more authority and be better equipped to fight for stories to be published. From an editor's perspective, the redeeming feature of generalists is their non-expert status, for it is assumed that they will approach a subject like their readers would (Gans 1980: 138). How much difference does expert knowledge make?

Archaeologists find it reasonable to ask why journalists seem unwilling to learn more about archaeology so that they can cover the debates that matter most to the profession. The answers, inadequate as they may be, are that newspapers cannot afford such sub-specialists (Nelkin 1995: 106), that the few science correspondents that are employed are over-stretched and cannot be expected to learn more about every field they cover and that reporting the news that professional experts deem valuable or relevant is not considered the same as reporting what the non-expert needs to know (see Gans 1980: 137, 307-308). British science journalists themselves seem unconvinced that science qualifications are a necessary prerequisite for doing the job. In Hargreaves and Ferguson's survey (2000: 48), although 84% of the responding science journalists did have such qualifications, only 32% thought that these were "crucial for a science reporter." As one science writer put it (*ibid*: 55): "my response is that it all depends what type of science journalism you are talking about; I consider a science background more important for some types of journalism (eg working on *Nature*) than others (eg working on the *Guardian*)." Another made the point that "there is no great benefit in having a PhD in nuclear physics when you are covering a story about ovarian transplants" (*ibid*: 49).[16] That science knowledge acquired gradually on the job may be more of an asset is evident in the fact, pointed out by Nelkin (1995: 100) and Hargreaves and Ferguson (2000: 49), that science reporters tend to remain in their speciality for many years (rather than switching portfolios). Ultimately, all science journalists are science 'generalists' in relation to the majority of sub-fields within science, and it is their level of *interest* in a particular subject, not their qualifications or expert knowledge, that counts in their selection of one story over another. Whether who covers the story matters in terms of the outcome is one of the questions investigated in Chapter Six.

There is an allied point about expert knowledge that leads us to a major aspect of science journalism: the relationship between reporters and scientists as sources. Editors seem to be concerned that journalists with extensive science training or close affinities with scientists "may adopt the values of science and lose their ability to be critical" (Nelkin 1995: 95). Yet in order to do their job, to keep abreast of and make judgements about developments in science (few of which will be in their primary fields of interest or training), and to achieve credibility, science journalists are obliged to depend heavily on their sources. All reporters, not just

specialists, "tend, over time, to adopt the outlook of the news sources with whom they are associated: they ask the questions appropriate to their sources' world" (Tuchman 1978: 152). As Fenton *et al.* (1998: 19, 15) say, science reporters "strike up relationships of trust with well-respected, reliable scientists on whom they come to rely" and "go to great pains to get their information right in order not to jeopardize those relationships." This close relationship, called "symbiotic" by some (Gans 1980: 133, 137; Fenton *et al.* 1998: 15), has the advantage that science journalists may be able to solicit different kinds of information from their sources, as Gans (1980: 131) claims. But it also further complicates the 'tug of war' between them "over who has the right to decide how science should be portrayed in the mass media" (Fenton *et al.* 1998: 22). This is not just a struggle between journalists and scientists, for, as Fenton *et al.* (*ibid*: 10) remind us, "sources compete with each other for the journalist's ear." Attitudes about who wields the most power in the relationship vary, with some believing that sources tend to define the debates, with journalists substantiating and condensing it. Gans (1980: 116), for instance, describes the relationship between sources and journalists as a "dance": "Although it takes two to tango, either sources or journalists can lead, but more often then not, sources do the leading." Echoing points I raised in Chapter Two, Fenton *et al.* (1998: 20) agrees:

> the generally uncritical approach taken by journalists and their reliance on reputable and trustworthy figures reinforces the position of the scientist in the driving seat. This is not to suggest that well-known horror stories of the treatment of scientists at the hands of journalists are not true....However, a concentration on such striking events may obscure the general pattern among journalists of an uncritical approach to science and its practitioners.

Scientists have increasingly tried to strengthen their position through various strategies, like forcing all communication to go either through professional intermediaries, normally a press office, or through established, peer-review channels (see Nelkin 1995: 148-158).

Given that journalists need "to obtain the most suitable news from the fewest number of sources as quickly and easily as possible, and with the least strain on the [news] organization's budget" (Gans 1980: 128), who, then, are the best sources? According to Gans (*ibid*: 117-131, 282) and Fenton *et al.* (1998: 110-112), good sources are those who are accessible at all times, articulate and jargon-free, perceived as credible, authoritative and reliable, and proven over time to be productive, eager and efficient suppliers of information. Of these, it seems that the

most valued attribute is 'efficiency'. 'Best' sources are viewed as those "best organized to provide facts in a manageable and efficient form", "a form that is predictable and easy to turn into a story—usually experienced public relations people" (*ibid:* 123, 107). Adding these attributes together, it is not surprising that journalists will prefer to listen to "sources in official positions of authority" (Gans 1980: 130), institutions rather than individuals (Tuchman 1978: 93), or, as Fenton *et al.* (1998: 77-79) found in their survey, older males in senior positions. What Gans (1980: 126) calls "peer" sources (i.e. other journalists) should also be included here, for science journalists do form a particularly close-knit 'club' sharing information and sometimes deciding as a group what will be news, especially, for instance, at science conferences.[17] Sources derive their authoritative status from "their institutional power", their "representative standing", or their "claims to expert knowledge" (Schlesinger 1990: 65, cited in Fenton *et al.* 1998: 9). This explains why, in archaeological terms, institutions like English Heritage, trade associations like the Council for British Archaeology and senior (mostly male) academics are often cited as sources and have become primary definers of archaeological news.

As some are quick to point out (Fenton *et al.* 1998: 9, 52-53; Nelkin 1995: 122, 168-169), these 'best' sources are not ideologically neutral, have their own agendas that will influence their pre-selection of news to communicate and are not necessarily representative of a true 'spectrum of opinion'. To the 'tug of war' or 'dance' between sources and journalists, one needs to add the 'love-hate' relationship that science journalists have towards institutions and, in particular, their PR or press departments. These sources understand news practice and constraints and have the financial and organisational resources to employ the most efficient means of delivery, like press releases or conferences. Nevertheless, science journalists appear to resent and mistrust them and their means. As one journalist remarked (Nelkin 1995: 142) about PR lunches, "the quality of the news is inversely proportional to the quality of the lunch." Public relations people may be "marriage brokers", as Nelkin (*ibid*: 141) describes them, "bringing together scientists and science writers, teaching each group how to approach the other", but, as even she goes on to admit, "what journalists gain in efficiency they may lose in reliability." The extent to which the source of information affects the resulting coverage is another feature of archaeological news to be examined in Chapter Six. Here, it is to these 'efficient' means of delivery that we now turn.

Up till now, sources have been discussed in terms of *human* sources, the different informants on whom journalists depend for receiving or verifying science news. I would, however, propose that it is the *material* sources, the formats or means through which informants and reporters exchange information that have an equal, if not greater, bearing on the selection and framing of science news. It is this meaning of 'source' that Fenton *et al.* (1998: 17, my emphasis) are referring to when they say: *"The original source of the story (e.g. a press release) tends in large part to determine the form and message of the story regardless of the medium concerned."* From a science journalist's perspective, each material source has particular advantages and drawbacks, and an informant's choice of material source can greatly increase or decrease his or her chances of receiving adequate, appropriate or any coverage. What are these material sources and to what extent do science journalists rely on them?

In the Hargreaves and Ferguson survey (2000: 58-59), the responses of British science correspondents to the question "which sources matter most" provide us with a fairly clear picture of the relative value of seven different material sources.[18] In ascending order of preference, these were:

The General Press:

In last place, national newspapers apparently matter least to science journalists as sources of science news. That they do not scour the national papers to find science stories to cover is not surprising, but that they pay no attention to what is published in other papers is less so. The intense competition between the national papers does put a premium on being 'first' with the news. While no paper wants to be 'second' with the news, I have found in my research that newspapers do not ignore stories that have been exclusively released by a competitor.[19]

Government:

In sixth place were government and quasi-government officials and institutions as human sources and their official reports as material sources. With respect to archaeology, these would include parliamentary sources such as the Department of Culture, Media and Sport (DCMS) and the All-Party Parliamentary Archaeology Group (APPAG), as well as institutions like the Heritage Lottery Fund and English Heritage. Given the privileged status of such groups as sources, it is perhaps surprising that they feature so low in UK science journalists'

preferences. Their low rating may be due to journalist's general scepticism about the neutrality of political sources. As Fenton *et al.* (1998: 11) affirm, these sources are likely to be taken seriously, but they cannot always depend on being heard and thus have to invest in staging news events specifically for the press. This means that they should also be included in the next material source.

Press Releases and Other Official Announcements:

Press releases appear in the survey as the fifth most important material source for British science journalists. In their UK survey, Fenton *et al.* (1998: 69) found that 65% of the social science stories that received coverage were the result of press releases, 46% being issued by third parties (e.g. press officers) and 19% authored by the social scientists themselves. Science journalists are deluged with press releases; however, many claim to ignore or 'bin' them out of hand (Nelkin 1995: 120-121). The pressures of science journalism are such that press releases are nonetheless effective material sources. In one US study (Sachsman 1976, cited in Nelkin 1995: 121), "over 50 per cent of the published stories could be traced to these [press releases], and in many cases the reporters simply rewrote the release", prompting Sachsman to conclude that science journalism often involves simply "opening the mail". This is, of course, what informants want to hear. By amassing information together in a readable story, by highlighting the most newsworthy angles and by offering illustrations and quotable quotes from experts, informants increase the chances that their news will be selected and that its content will remain more or less intact.

The sheer volume and competitiveness of press releases, however, work against this efficiency, and that is why releases are so often backed up with stage-managed report launches and press conferences. The mere existence of a press conference creates an 'event', and events are inherently newsworthy. The fact that releases and press conferences often place embargoes on when journalists can publish the information heightens the drama and adds urgency to covering the event. The combination of press conferences and news embargoes does ensure that all journalists hear the news at the same time and cannot report on it until the same day. The ubiquity of this system of science news release, further discussed in Chapter Five, accounts for the homogeneity of news content across the media and for the increasing demise of investigative or enterprise reporting in science in

favour of 'herd journalism'. The relative efficiency of press releases versus press conferences in shaping archaeological news and how the press respond to the homogenous content of these sources are two of the central issues examined in Chapter Six.

Conferences:

This fourth-placed source refers to journalists' attendances at science conferences. Until fairly recently, science journalists depended on their visits to science meetings as a way of keeping up to date with developments in the field, although I have no evidence about how many attend UK archaeological meetings.[20] Like press conferences, these are 'events', and they provide journalists with a 'peg' on which to hang stories (see Gans 1980: 168). They may not, however, encourage investigative reporting (with attending journalists often pooling or pre-agreeing which stories to cover [Fenton *et al.* 1998: 99]) or, for that matter, generate any stories at all. As Shaw (2000b: 10) says of the situation in the US, "over the past five or 10 years—in a time of tighter budgets and smaller staffs—most editors and television news directors increasingly see meetings as a luxury they can no longer afford." The general trend towards less reliance on science conferences is likely to continue, with a contributing factor here being the proliferation in science gatherings themselves.

Internet:

Hargreaves and Ferguson (2000: 58) were surprised that the internet featured only as journalists' third most important source. The authors seemed to be focused on how the internet has expanded scientists' interaction via emails, whereas respondents themselves may have been judging the value of the Web and websites. While these may be good sources for *checking* and fleshing out stories, for those able to separate the serious from the fanciful, they have not succeeded in becoming major sources for *finding* news. This may be changing given the development of two portals—AlphaGalileo by the Europeans and Eurekalert by the Americans—that are aimed at giving "professional journalists a factual view of scientific news through access to press releases and other news...as well as the contact particulars of experts in various fields" (Anon. 2002b). The fact that these sites rely on press releases may reduce their value, and journalists using them have, for instance, been cautioned that these are only one of many tools and that

their existence "should not be a reason for failing to follow up on other sources, too" (*ibid*). As Hargreaves and Ferguson (2000: 58) concluded, "Although the Internet is widely observed to have transformed the context in which science communication via learned journals and peer-review processes works, practising science journalists themselves still place very heavy reliance upon traditional sources", namely the top two.

Direct Contact with Experts:

That science journalists rely second-most on direct contact with scientists reinforces the points made earlier about the importance of the journalist-source relationship. Having said that, I would have to add that, regarding archaeological coverage, I have the impression that journalists contact archaeologists more often than the other way round, and that archaeologists are contacted less as possible sources of stories than as experts to adjudicate on stories that have been sourced elsewhere. This impression seems to be confirmed by scientists in other fields (Anon. 2002c: 5). Despite its high placing, many science journalists are concerned about the difficulties in contacting experts directly. Hargreaves and Ferguson (2000: 53) noted that the science journalists they surveyed "clearly find scientists all too often hiding behind the public relations apparatus of the organisations for which they work."

Specialist Science Publications:

Both intraspecialist (i.e. field-specific) journals and interspecialist magazines (like *Science* and *Nature*) came out on top of the survey as science journalists' primary sources of information. On one level, this can be seen as a positive sign that journalists are reading, assimilating and reporting on the latest findings that have been professionally validated through the peer-review process these journals rely on. In this sense, specialist journals are labour-saving devices, offering pre-selected, pre-packaged and pre-vetted scientific news. Journalists may have little choice but to use them, because scientists will be loathe to speak to them directly before their articles are published, as this is seen as breaking the established procedures of scientific communication, as discussed more fully in Chapter Five. On another level, relying unquestioningly on specialist publications raises many issues, two of the more crucial of which are journalists' independence and herd journalism.

As Nelkin (1995: 97, 151-152) admits, science journalists "feel an obligation to report on the latest findings as they appear in these sources" and yet "ironically, the very newsworthiness of [specialist journals] (which, after all, are mailed to reporters before they are sent to subscribers) creates a struggle over the control of scientific communication." It was this struggle that prompted Shaw's (2000a, 2000b) two-day, front-page exposé in the *Los Angeles Times* on the power of American medical journals to "Exercise Clout in News Coverage" (as one headline put it).[21] I do not believe that this is just an American phenomenon, and British science journalists' acknowledgement that specialist publications are their number one source confirms this. In terms of archaeological reporting, it becomes clear when reading the coverage over time that journals such as *British Archaeology*, *Science* and *Nature* are often the sources of the stories. The extent to which science journalists rely on the more specialised archaeological journals is less evident and would require further research.

Ultimately, science journalists' dependence on pre-packaged information, whether from specialist journals, press releases or press conferences, and, for that matter, their close relationship to scientists as sources, all could be seen as compromising their autonomy, making them vulnerable "to those sources who try to shape the news" (Nelkin 1995: 120). Informants' use of embargoed press releases and press conferences and specialist journals' habit of sending advance copies and information to journalists embargoed until the date of the journal's actual publication undoubtedly make the science reporter's job easier, but they have led to the explosion in same-day, homogeneous science coverage. This trend should allay scientists' fears about rogue or unpredictable coverage, and the public, who are unlikely to read more than one paper a day, may be unaware of how the same science news appears across the media at the same time. What, then, is the harm?

The harm lies not in the simultaneity of release, but in the singularity of source and the homogeneity of content. Other than making journalists vulnerable to the charge of a 'feeding frenzy', simultaneous release of information, even on a global scale, does not, on its own, restrict public debate, for the public will interpret or respond to the information in a heterogeneous way (Silverstone 1999: 112). Selecting science stories from the same material sources and reporting their content in similar, if not identical, language does restrict scientific communication

and debate. In simple terms, there are stories that will not be covered, questions that will not be asked, and these media silences do have an impact on science's public agenda. Moreover, since the press are often working from the same 'content', in order to stand out from the herd, newspapers are forced to stamp their individuality on a story through its formal representation or through attempts to find vaguely relevant subsidiary angles to exploit. Another likely consequence is a greater search for 'scoops' that may beat one's rivals to a story, but are likely to be less-well-informed stories, often leaked by people who are only peripherally involved. Finally, I feel that there is something oligarchic or undemocratic about a system of reporting news that is so heavily circumscribed by what a few journal editors have decided is 'news', and I will return to this important subject in Chapter Five.

This analysis of science journalism has highlighted the complexities of the process of mediating science information and the important role that sources, both human and material, play in it. It may have dispelled some misconceptions about the relative power of journalists and scientists to control the news and thus science's public agenda, but it has also underlined some concerns about how the process as it currently functions may not ultimately be in the public's, or scientists', interests. It is unlikely to have eliminated the tensions between the two groups, but then, perhaps that is neither possible nor desirable.

Archaeologists write about the need for both sides to educate themselves better about each other's profession, that "instead of perpetuating a divide, some borrowing is in order" (Finn 2001: 267) or that each should undertake training in the other's field (Arnold 2001: 464). Scholars, like Gripsrud (1999: 51-52), have suggested that alliances need to be forged between them based on their "commonalities of ethos". While agreeing that greater understanding is needed, and possible, I would suggest that rather than trying to minimise or eliminate differences, it should instead be a matter of learning to accept them. "When television producers talk of the need for scientists to be more open about their work or to become more effective communicators," Silverstone (1985: 163) writes, "what they are asking is for them to be other than scientists—at least in the sense that science has defined for itself a way of being, of communicating which is principally dependent on the exchange of written and necessarily specialised information and argument." In a similar vein, Nelkin (1995: 170) concluded that

"Scientists and journalists are negotiating the public meaning of science and technology....the tensions between these two communities are inevitable; indeed maintaining their differences is essential if each community is to fulfill its unique social role."

Media Perceptions about the Public, Scientists and Archaeologists

The assumptions that the media hold about the general public are significant, for they influence the selection, framing and formal presentation of information. Yet journalists, programme-makers and their editors are distanced from the public, receiving little direct feedback from readers or viewers (Nelkin 1995: 112; Silverstone 1985: 104). In television documentary, as Silverstone (*ibid*) admits, it would be "difficult for the audience to be more than a shadowy presence...for the...producer knows little about his or her audience in general, and nothing, until the programme has been transmitted, about it in particular." According to Mark Lawson (1999), "the most crucial question in broadcasting and journalism is how much can the audience be assumed to know?" Where does the answer to this come from? It comes from independent or specifically commissioned market research, which, over time, is used to build up the broadly-drawn readership and viewer profiles referred to in Chapter Three. Even if journalists and producers are sceptical about the value of this research, seeing it as either too broad or too narrow to be of use (Tunstall 1996: 215), audience research and circulation or viewing statistics remain the chief mechanisms for media practitioners to understand their audience. What does this research tell them about the public's level of interest in and knowledge of scientific subjects?

In a survey of the UK public conducted in 1988 (Durant, Evans and Thomas 1989: 12), 82-90% of respondents said they were "very" or "moderately" interested in "new medical discoveries", "new scientific discoveries", and "new inventions and technology", compared to 71% for sports or politics. Although admitting that their results needed to be "treated with caution", the authors concluded from these "relatively high" levels of public interest: "So much...for the myth that most people couldn't care less about science" (p. 11). I find this conclusion unwarranted, for the survey's use of broad categories for some subjects (e.g. 'sports' and 'politics') and of three specific and most relevant alternatives to

represent science was bound to skew results in science's favour. If the word 'science' had defined the sector, it is possible that a different picture might have emerged. That was certainly the case in another survey in 1993-94 about the newspaper items that British readers "specially choose" to read (Tunstall 1996: 217). Here, "science and technology" came close to the bottom, chosen by 6% (joint 13th place) of *Sun* readers, 9% (joint 13th place) of *Daily Mail* readers, 17% (joint 7th place) of *Times* readers. These low placings are, I would suggest, a more accurate reflection of public interest in science and offer less solace to the PUS community. The variance between the three press sectors (downmarket, midmarket and upmarket) also provide newspaper editors with justifications for the amount of coverage that they devote to the subject. In contradiction to this, however, the high viewing figures for scientific programmes on British television, often between 2.5 and 4 million, present a more positive picture. Statistical research in the two media therefore provides conflicting views of the degree of audience interest in science, and it is likely that science documentary producers and science journalists working in the three newspaper sectors will have varying perceptions about public receptivity.

As to the question of "how much science does the general public understand", Durant, Evans and Thomas (1989: 11) were forced to admit "not much". Less than 10% of their survey respondents reported themselves as "very" informed about the science subjects surveyed, with around 50% claiming "moderate" levels of informedness. That 40% of respondents admitted to being totally uninformed about science was later confirmed by the responses in an accompanying questionnaire (*ibid*: 14). Here, 30% thought that the sun revolved around the earth (7% 'didn't know'), and 31.6% agreed with the statement that earliest humans lived at the same time as dinosaurs (22.1% 'didn't know'). How much the media *think* their audiences can be assumed to know (as opposed to how informed they may statistically be) is perhaps the more germane question.

Half of the science journalists in the Hargreaves and Ferguson survey (2000: 54) considered the British public to be more scientifically knowledgeable in 2000 than in 1990, 40% saying the public was equally knowledgeable, and 9% saying less. This perceived improvement is important, although, given the public's responses in 1988, it comes as no surprise that science journalists still complain about the public's "low" understanding of science, both here (*ibid*: 49) and in America.[22] An

increase in the public's "general level of knowledge" has been noted by television producers like Forbes Taylor (2001: 469). But whether this is true across the full spectrum of viewers, or only relevant to a certain 'niche' audience is still in question. As Kinnes (2002) remarks, TV commissioning editors "have discovered that beyond the audience that wants froth like Popstars, there is another type of viewer. Solid as sedimentary rock, he or she is 45 or over, and watches loyally and at length. These viewers don't want fluff, they want substance." Apparently, even audiences who prefer 'fluff' like it coated with a veneer of 'substance'. As the creative director of Endemol, Britain's largest producer of 'pleasure-leisure' TV series, has been quoted as saying (Kinnes 1999c): "we're also trying to give people information because it can't be 100% entertainment. People feel guilty about watching television, so it helps if you can get some practical information out of watching. Because they're learning something, people feel better about themselves." In general, the British public's relationship to science seems to be perceived by the media as 'caring without understanding', a perception that mirrors the findings about public attitudes towards archaeology discussed in Chapter Three. This means that the media understand that public interest exists and needs to be activated and engaged, but that basic scientific knowledge cannot be taken for granted.

The media's perceptions about scientists heavily influence their relationship with them as informants and how they will represent them. The media's tendency to picture scientists as powerful but remote figures has earlier been explored in the discussion of the 'Nelkin frame'. Despite this idealised image, there does seem to be evidence that, as Fenton *et al.* (1998: 15) put it, "As a body, scientists are probably not highly regarded by journalists." Scientists have been characterised by journalists as "supercilious, uncooperative, manipulative, and conceited" (*ibid*) and as "grumpy and inarticulate" and "elusive" (Hargreaves and Ferguson 2000: 63, 53). Nelkin (1995: 8) quotes science writer William Burrows as saying, "Most ordinary reporters would practically cross the street to avoid running into an expert since they consider scientists to be unemotional, uncommunicative, unintelligible creatures who are apt to use differential equations and logarithms against them the way Yankee pitchers use inside fast balls and breaking curves." Above all, it seems that it is scientists' own "frequent efforts to avoid reporters" (Nelkin 1995: 143), their lack of media savvy and their inability to communicate in

'normal' discourse that most upset the media. 73% of the science writers surveyed by Hargreaves and Ferguson (2000: 52) thought that scientists did not understand the media well, 14% saying they "haven't a clue." The frustration this causes is clear from one British broadsheet journalist's testimony (Fenton *et al.* 1998: 106):

> A lot of scientists just don't want to communicate with the media or they can't. They can't string two words together to make an interesting common-sense sentence. A lot of scientists just talk in complete psychobabble....a lot of them have [such] a condescending attitude that a journalist couldn't possibly understand what they were saying. And also they're so used to communicating with their peers that they haven't the faintest idea how what they're saying...appears to the average human being who is a newspaper reader.

Having idealised scientists for too long and refusing to treat them with sufficient scepticism, as *The Express*'s science editor Michael Hanlon has claimed (Hargreaves and Ferguson 2000: 47-48), the media are partly responsible for leaving scientists unchallenged. Importantly, their negative attitudes towards scientists' communication skills mean that the media approach their encounters with them with the same trepidation that scientists do.

Turning to the media's attitudes towards archaeologists, we have seen in Chapter Two how archaeologists think the media sees them, and their assumptions are largely correct. TV critic A.A. Gill (1998: 30), for instance, described archaeologists as "a loose freemasonry of hobbits who would have been stamp collectors and Steeleye Span fans if they'd had the necessary sense of style." The major difference between the picture painted above of scientists and the media's perception of archaeologists is that archaeologists tend to be allowed two different personalities, roughly equivalent to the divide between field and academic archaeologists. The first type is normally seen as an enthusiastic, instinctual and communicative individual, and it is only the latter that conforms to the incommunicative scientist stereotype. In describing the archaeologists involved in 'The Dorak Affair', the two journalist-authors, Pearson and Connor (1967: 15), portrayed excavation director James Mellaart as amusing, urbane and expansive, "using none of the qualifications that apply the brake to the lectures of so many indecisive academics" and not allowing "his instincts to be disfigured by equivocation." Seton Lloyd, then head of the British School of Archaeology in Ankara, was described as the epitome of the "elderly English academic.... easily cast as a diplomat...never fired by a restless ambitious drive...to be seen as a

painstaking assembler of facts, filling in, jigsaw fashion, pictures of prehistory" (*ibid*: 19). In the forty years since 'Dorak', archaeologists and journalists' perceptions of them have changed, but vestiges of the two personalities remain, as these passages from American journalist Roger Downey's (2000) account of the Kennewick Man dispute demonstrate:

> Serious archeologists today are no longer pith-helmeted adventurers supervising a mob of sweating native day-laborers, but are, rather, chief executives of a diverse team of highly trained, opinionated specialists.(p.22) ...Archeologists are not, on the whole, highly sociable human beings. Archeology's grand old men... tended to be on the crusty, intemperate side, far more comfortable in the field issuing orders to toiling 'natives' or grad students than around the committee table trying to appear interested in the views of others. Many of the older school have found it difficult to adapt to the contemporary realities of the profession, in which governmental bodies make the rules for their once free-wheeling profession, and ends are to be attained only through endless consultation. At first sight, Frank McManamon [the archaeologist put in charge by the US government to resolve the dispute] would be no one's idea of ideal casting for Indiana Jones. His voice, posture, dress, and demeanor suggest rather the role of assistant professor or law librarian....his manner seems remarkably mild. But so, one remembers...was Clark Kent's. (p. 138)

The Indiana Jones reference requires some comment. Ever since Spielberg's film hero appeared in 1981, he has been used by the media as the one icon that the public will understand and against which real-life archaeologists are often, favourably or unfavourably, compared. The fact that Dr Jones represents both sides of the archaeologist's media persona, as university lecturer and field archaeologist, is often forgotten. Jones is a Clark Kent figure, and that the media prefer the superhero over the mild-mannered academic is understandable and mirrors, I would suggest, their preference for field archaeologists over academics both as interlocutors and story subjects. What is less immediately clear is why the media have such an abiding interest in archaeological stories.

Why the Media Is Fascinated by Archaeology

The reasons for the current high visibility of archaeology in the British media, especially television, have been examined at the start of this chapter, but they do not fully explain the phenomenon. Archaeology's value to the media goes beyond its usefulness in audience-pulling and scheduling strategies, and it is these deeper-seated reasons that will be explored here, primarily, but not exclusively, in relation to archaeology on television. In order to understand archaeology's inherent

worthiness as a media subject, we need to distinguish first exactly *which* archaeology we are talking about. To do this, to ascertain which aspects of archaeology are of most interest to the media (and ostensibly to the public), I have examined in detail the 590 archaeological documentaries broadcast on Britain's main terrestrial channels between 1999 and 2002. TV archaeology is, as Kinnes (2002) has noted, a "flexible form"; it encompasses a wide range of *geographic locations, time frames, televisual formats* and *subjects*. It is these four aspects that I focused on in my research, in order to discover the geographic, temporal and subject spread and prioritisation, as well as the various styles of formal presentation, that are evidenced in these programmes. The results of these content and form analyses are shown in annual breakdowns for 1999, 2000, 2001 and 2002 (in Figures 4.4-4.7) and then in summaries of each aspect's trajectory over the four-year period (in Figures 4.8-4.11).

As to methodology, I believe that the time frame of four years, the number of programmes and the restriction to terrestrial channels represent an adequate sampling of the field for the purpose of discerning trends.[23] I have watched once and more often twice all but a handful of these documentaries, and for the few unseen, I have used their reviews or previews, as well as their sister programmes if episodes of a series, to ascertain their content and form. In determining the categories in each aspect, I have had to make choices and am aware that another researcher using different parameters is likely to come to different conclusions. My own parameters and caveats about them are these.

With respect to the geographic focus that a programme covered, I have used broadly speaking continental divisions. The exceptions are: separating Britain from Europe (essential in examining the Britishness of the coverage), treating Egypt as a distinct location rather than as part of the Middle East or Africa (to reveal the extent of Egyptology's coverage and to avoid skewing the Middle Eastern and African results) and incorporating a 'various' category for those programmes that deal evenly with more than one geographic area. Regarding time periods, I have tried to conform to archaeologically distinct ranges. I do, however, accept that, for instance, treating the modern eras in one rather than, as I have, three categories (17th and 18th centuries together, and 19th and 20th centuries apart) would have produced a different outcome (but one in which, as it turned out, the 19th century's poor coverage would have become invisible). Where more

than one time period is covered, I have counted those programmes within a 'various' category. The choices I have made in the area of archaeological subjects covered are, of course, the most arbitrary. I have used categories that evolved over the course of my research, with some categories (like 'new discoveries') being ultimately dropped because they consumed huge numbers of programmes without telling me anything about the real subjects of those documentaries. I was also mindful of the subjects that archaeologists themselves consider defining of TV archaeology. This was why, for instance, I added the categories of 'mummies' (as distinct from 'bodies') and 'cannibalism'.

As to the televisual formats used, over these six years I have experimented with different typologies, but eventually honed the list down to six distinct representational styles:

Backstage documentaries are those that follow a contemporary excavation or research project through some of its various stages, offering a 'behind-the-scenes' look at the process of archaeology in progress. Since results cannot be predicted, these programmes cannot be fully scripted in advance and consequently exhibit a more free-wheeling narrative style. The best-known exponents of this format are *Time Team* and *Meet the Ancestors*.

Detective documentaries are heavily-scripted programmes about current or past archaeological subjects that use the narrative construction of a detective story: posing questions about an unsolved problem, weighing different evidence and then coming to a conclusion. As Silverstone (1985: 171) has noted, "the detective story [is] a major form in television science." BBC2's *The Mystery of the Persian Mummy* (2001) and C4's *The Riddle of Pompeii* (2001) are good representatives of this drama-led genre.

Expository documentaries are programmes that take an educational approach to a subject, providing a distanced overview or 'lesson' about established archaeological stories. These are always scripted and normally utilise interviews with experts as well as an omniscient commentary. A classic example of this format was the two-part S4C production, *The Celts* (2001).

Essay documentaries are similar to expository ones, the primary distinction being in their emphasis on one person's 'vision' and on thematic rather than linear construction. Here an on-screen presenter (often also the writer) takes the audience on a metaphorical or real voyage around a subject. The quintessential

archaeological essayist is John Romer, especially here his series on the history of archaeology called *Great Excavations* (2000).

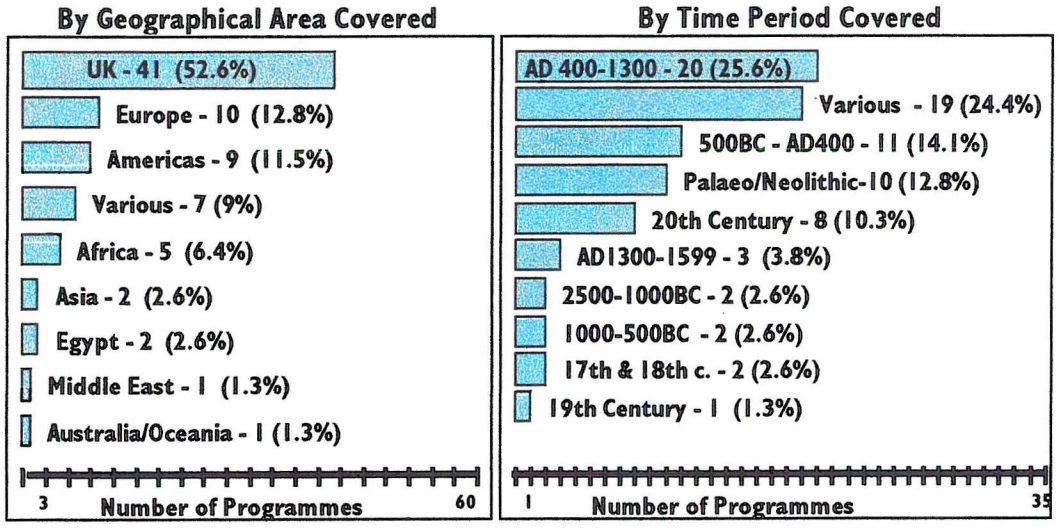
How-to documentaries are 'backstage' programmes totally devoted to archaeological experiments: reconstructing an object or building from the past, examining how a structure was transported or recreating how past lives were lived, using historical and archaeological sources. This category embraces series like BBC2's *Secrets of the Ancients* (1999) and *Building the Impossible* (2002), C4's *Mysteries of Lost Empires* (2000), and BBC1's *Surviving the Iron Age* (2001).

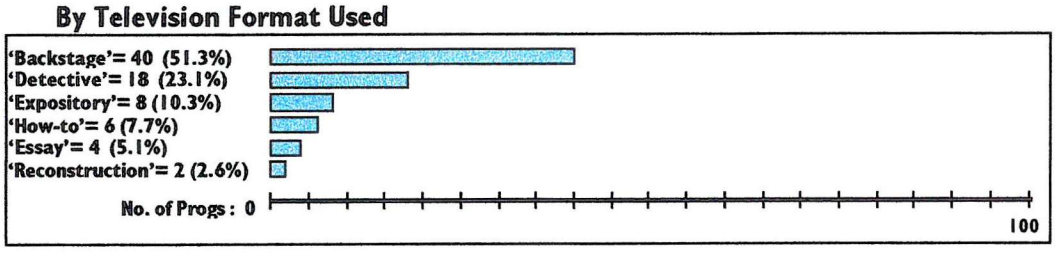
Reconstruction documentaries, the last of my categories, refer to whole programmes (not parts of programmes) that dramatically reconstruct some episode(s) from the prehistoric or historic past based on archaeological evidence and interpretations. C4's *Neanderthal* (2000) and *Oetzi the Iceman* (1999) best describe this category of highly speculative and expensive productions.

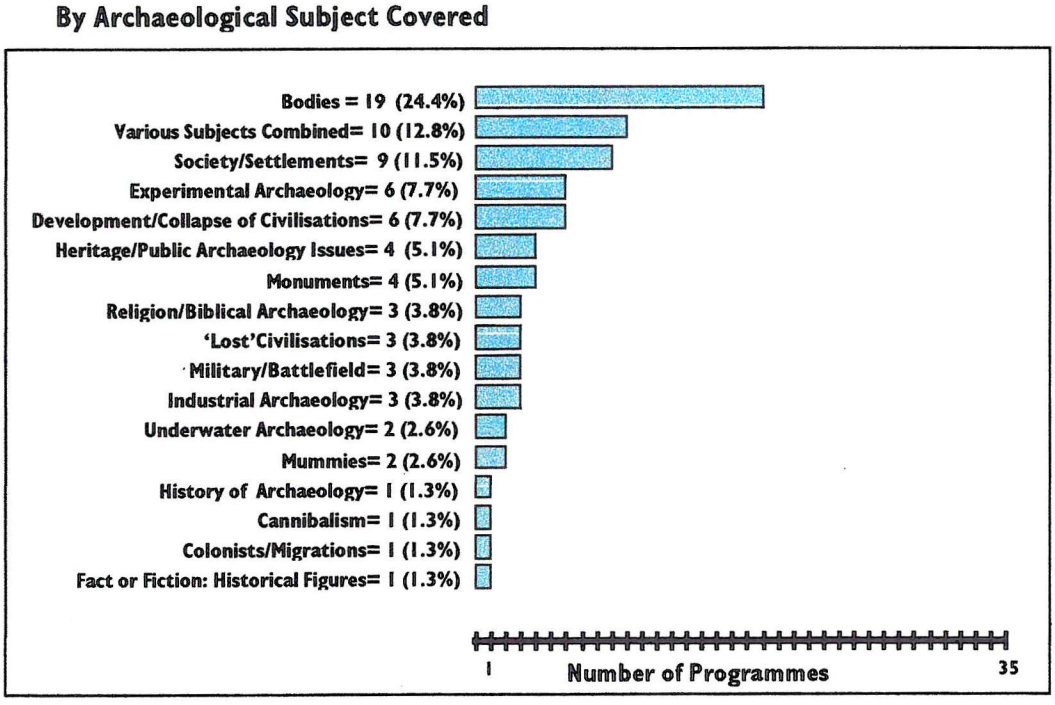
Although many programmes utilise more than one format within their structure, I have preferred to attempt to discern the predominant format, rather than offer a 'various' category in order to make distinctions stand out, rather than disappear. With these explanations and disclaimers in place, I will begin with a few general remarks about each year's coverage, leaving the wider reflections until the four-year summaries.

The 78 documentaries broadcast on BBC2 and C4 in 1999 are analysed in **Figure 4.4**. This was the lowest year in terms of output, and the resulting picture is heavily dominated by what C4's *Time Team* and BBC2's *Meet the Ancestors* produced that year, for they accounted for 47% of the output. For those unfamiliar with these series, *Meet the Ancestors* is almost always about identifying and tracking down the history of recently-excavated human remains, and *Time Team* follows a three-day excavation of a site that is likely to produce evidence of human occupation, structures, objects or bodies. Therefore, that 'backstage' dominates the formats, that the UK overwhelms the geography, and that 'bodies', 'society/settlements' and 'various' (in this instance bodies and society/settlements combined) top the subject list (with a combined 48.7%) is not surprising. The high placing of 'various' time periods is due to *Time Team*, for 13 of their programmes were about multi-period sites. Only the dominance of the AD400-1300 time period is not attributable to these series (who together made five

Figure 4.4: Breakdown of the 78 Archaeology Programmes Aired in 1999 on BBC2 and Channel 4







programmes on it): it was rather a number of programmes about the Vikings and Mesoamerican civilisations that accounted for its taking pole position.

In 2000 (**Figure 4.5**), 139 archaeological documentaries were broadcast by these two channels. Since the output from *Time Team* and *Meet the Ancestors* remained much the same, their percentage of the total fell to less than 29%. Thus, there are notable changes in the overall picture as the weight of other types of programmes and series could be felt. Although the number of UK-based programmes increased by 44% to 59, Britain's domination of the archaeological geography actually fell by 10%, with the number of programmes combining various locations increasing threefold and those centred on the Americas, Europe and Egypt showing significant gains. Multi-period documentaries topped, but did not dominate, a more evenly spread number of time periods, in which only the 19th and 20th centuries and 1000-500BC were underrepresented. The essay format showed the biggest leap in this year, with its numbers going up sixfold. This was due to programmes like the above Romer series, archaeological essays from three Davids (Attenborough, Keys, and Rohl), and three-part series on the Stone Age (Richard Rudgley) and lost civilisations (Graham Hancock). These programmes and increases in how-to (up threefold) and detective (doubling) documentaries meant that backstage productions fell by 14%. Similarly, 'bodies' lead over other subjects fell by 10%, thanks to the explosion that year in experimental (e.g. C4's *Mysteries of Lost Empires* and BBC2's *Secrets of the Ancients*) and underwater (e.g. BBC2's *Journeys to the Bottom of the Sea*) archaeology, together responsible for 20% of the output. As with time periods and formats, there was a healthy spread of archaeological subjects, all three aspects benefiting from the upturn in production.

As mentioned earlier, 2001 saw the spread of archaeological programming onto the two mainstream channels (ITV and BBC1) which helped to bump up the number of programmes to 172. The main distinction of this year (see **Figure 4.6**) was that programmes became more location- and time-specific, as both multi-country and multi-period productions (the 'various' categories) decreased by around 10%. The fall in multiple-site programming was taken up by a threefold increase in documentaries about the Middle East and a 40% increase in UK-based programmes. For the first time, the Roman period, which one might have thought always dominated the schedules, was highly represented (with almost 21% of output), but prehistory was the greatest beneficiary in 2001. If one were to add

Figure 4.5: Breakdown of the 139 Archaeology Programmes Aired in 2000 on BBC2 and Channel 4

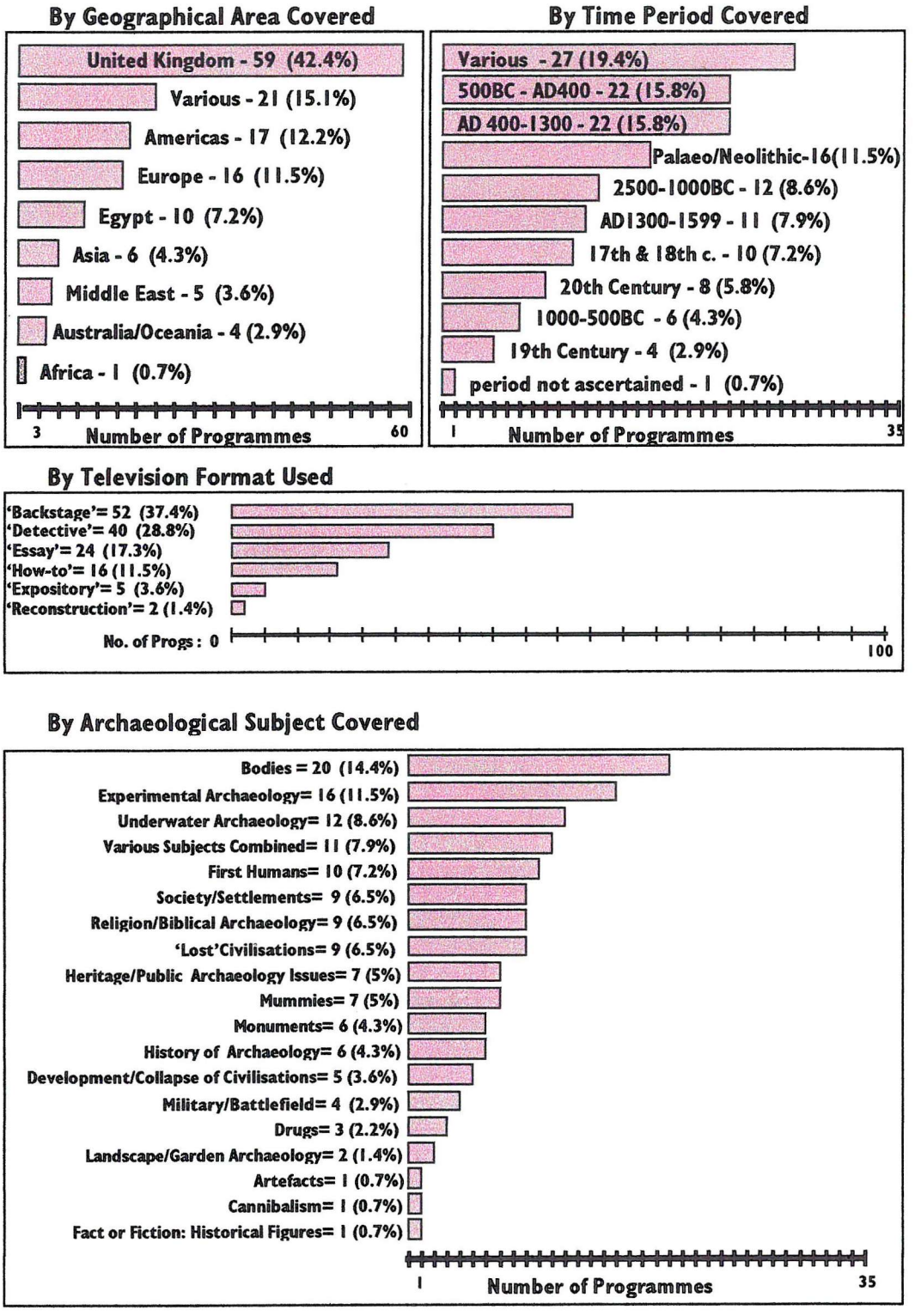
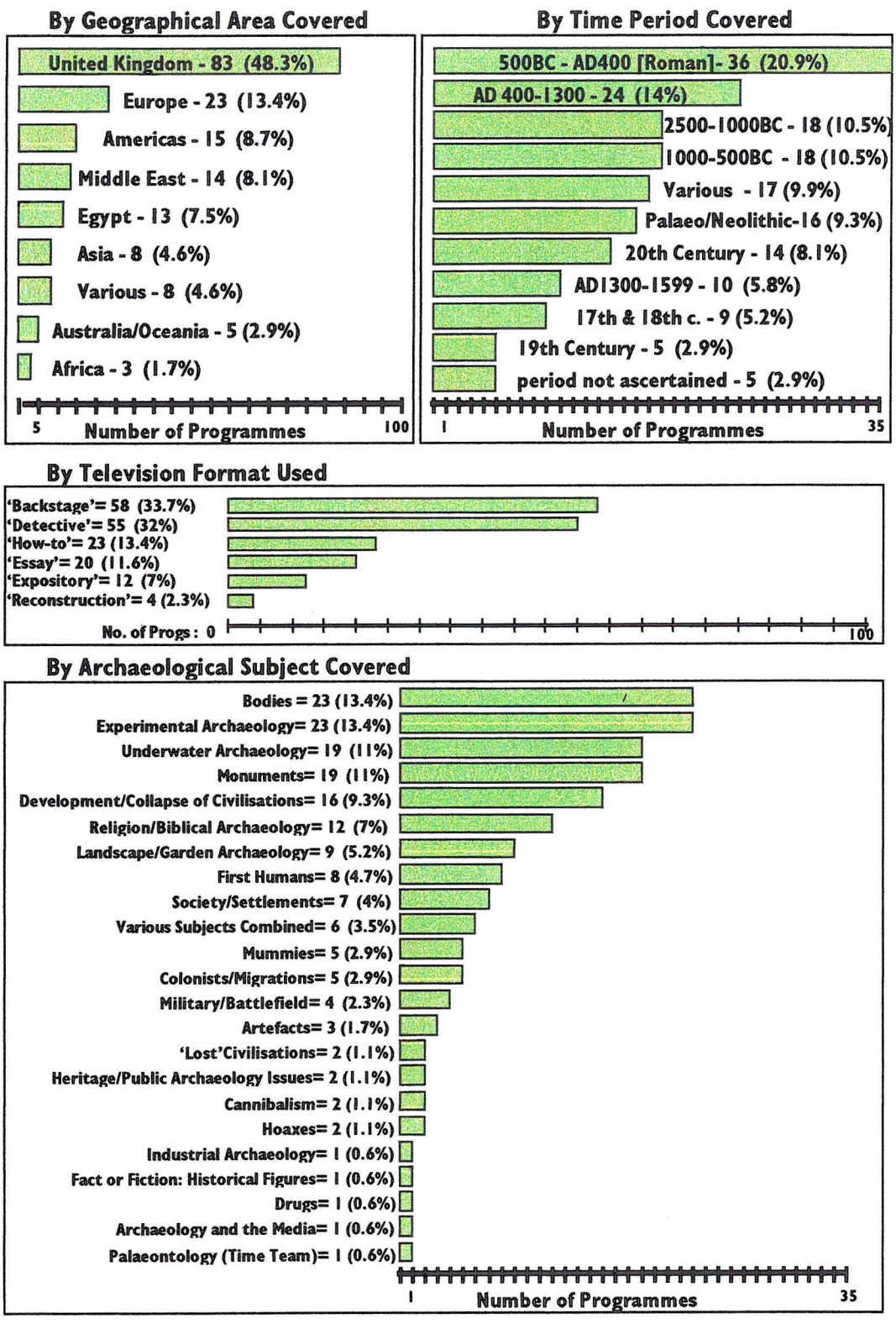


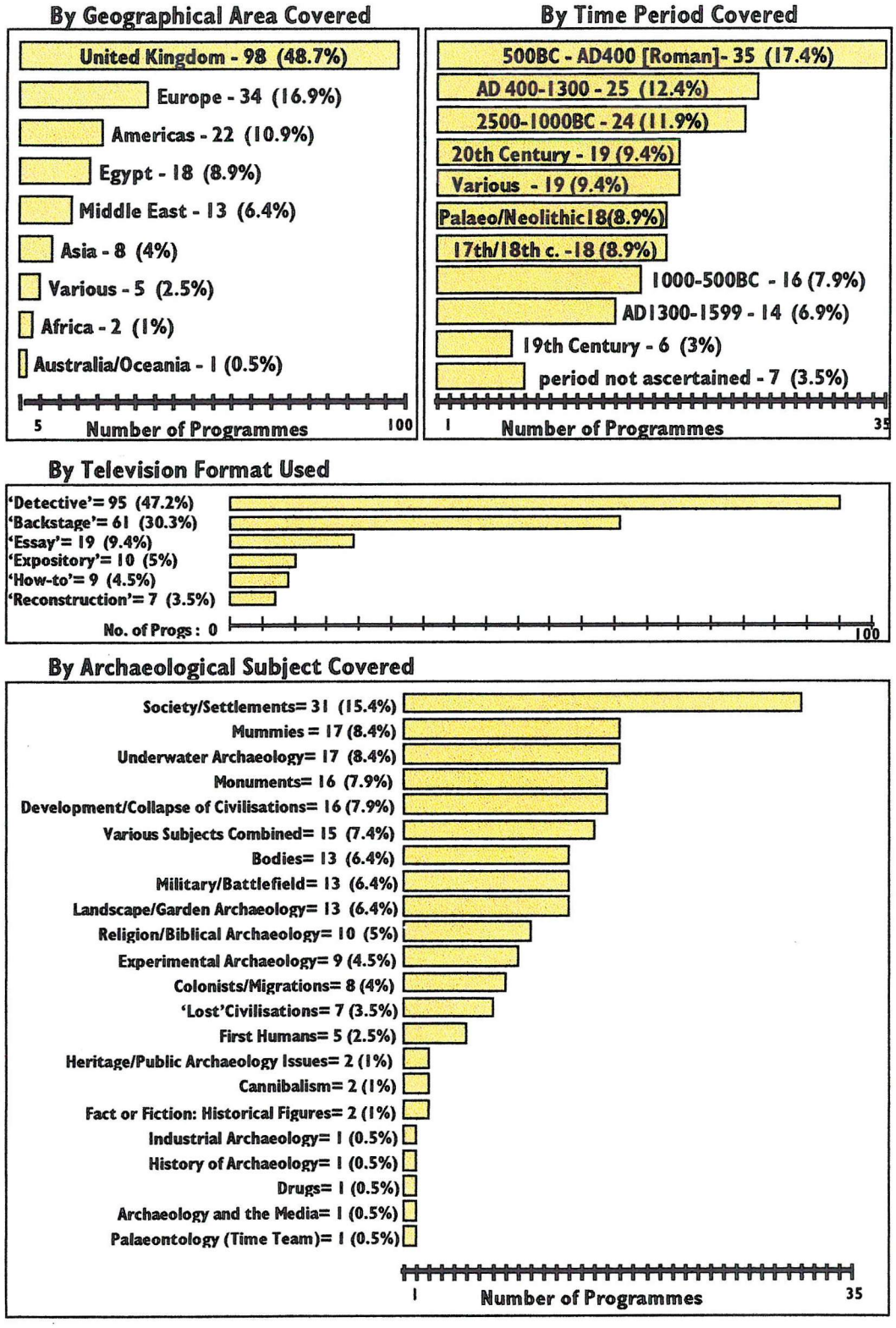
Figure 4.6: Breakdown of the 172 Archaeology Programmes Aired in 2001 on BBC1, BBC2, ITV and Channel 4



together the three earliest time periods, they would have overtaken the Roman period in the list with 52 programmes, over 30% of total output. Prehistory figured in a diverse ensemble of series like BBC2's *Talking Landscapes* and BBC1's *Surviving the Iron Age*, as well as in episodes about 'first humans' in BBC1's *Walking with Beasts*. For the third-year running, backstage productions came first in the format list, offering further proof of how embedded this format is in British TV archaeology. The steady increase in detective-formatted programmes (23.1% to 28.8% to 32% in 2001) was, however, significant and would presage its expansion in 2002. For the first time, 'bodies' was only in joint first place as subject matter, its position having been gradually eroded in 2000 and 2001. The trend for experimental and underwater documentaries continued in strength (together 24.4% of output). But equally notable were the threefold increases in programmes about 'monuments' (like C4's series *Empires of Stone*) and about the 'development and collapse of civilisations' (such as BBC2's *Ancient Apocalypse* and C4's *Great Civilisations*), both these subject areas hugely benefiting from producers' exploitation of CGI technology.

In 2002, archaeological documentaries continued to expand in numbers on the four major terrestrial channels, up almost 18% to 201 programmes. In **Figure 4.7,** we can see a growing consolidation in the top five geographic locations, with the UK again dominating the top spot and with order-shifting only between Egypt and the Middle East. A similar consolidation is apparent in the top three time periods, but there is a very noticeable homogeneity between the next six time periods, the top and bottom of this group being a difference in only five programmes. This clearly demonstrates that a broad spectrum of time periods was being exploited in 2002. With regard to formats, although the number of backstage documentaries increased marginally, they were for the first time overtaken by the 73% rise in the more formulaic detective-styled productions. Channel 4—with American co-produced series like *Lost Worlds* and bought-in series like *The Mummy Road Show* (made by National Geographic)—was responsible for a large portion of this. But even BBC2's six-part *Time Flyers* series preferred to show archaeologist-detectives rushing around in helicopters rather than digging in the earth. Moreover, these programmes only bumped up into greater visibility a format that had, in fact, always been utilised by most of the archaeological programmes in BBC2's *Horizon* and *TimeWatch* and C4's *Secrets of*

Figure 4.7: Breakdown of the 201 Archaeology Programmes Aired in 2002 on BBC1, BBC2, ITV and Channel 4

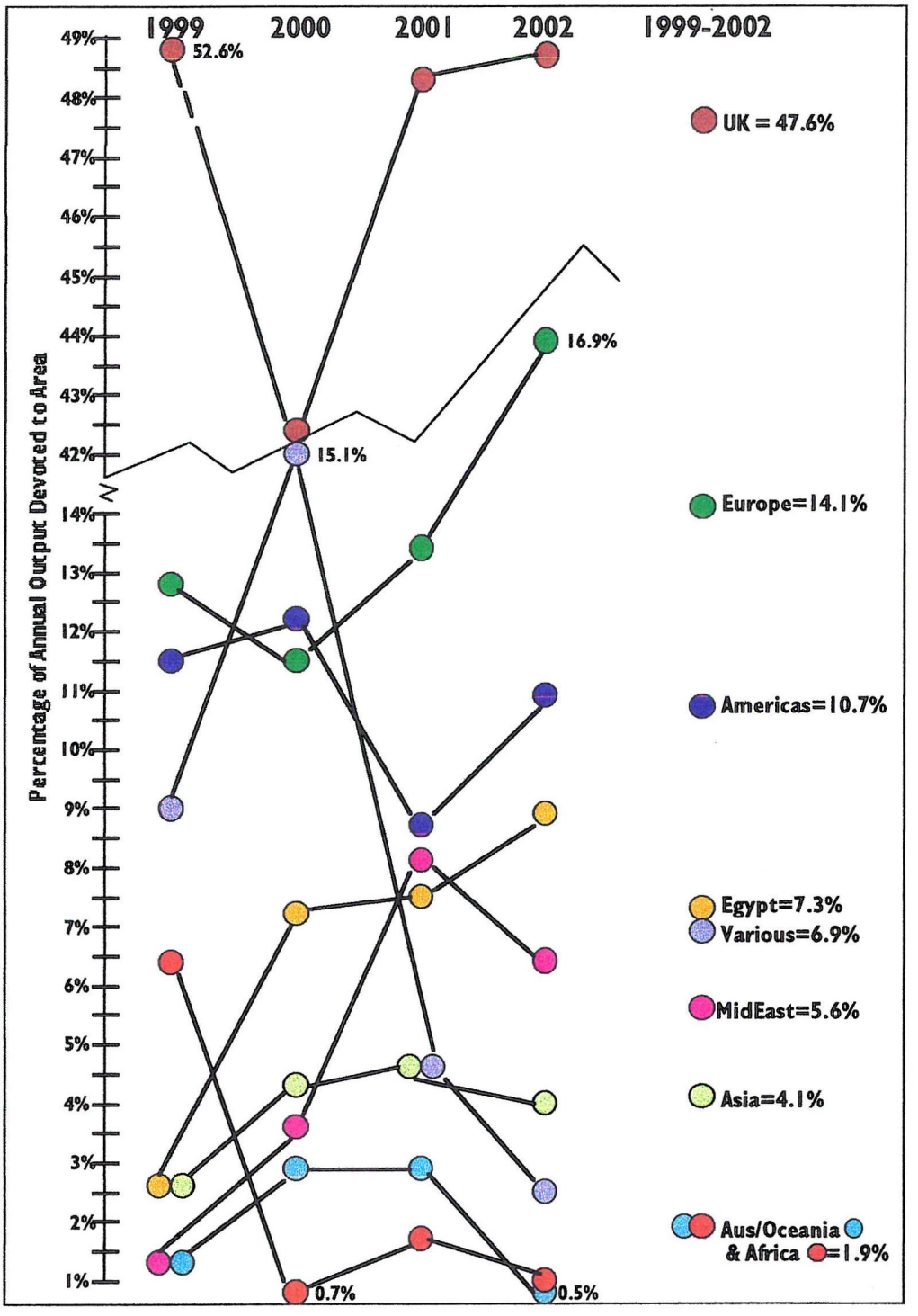


the Dead strands. A dozen of these strands' archaeological output in 2002 were detective documentaries, as were four *Meet the Ancestor* episodes as the series tried to break out of the confines of its backstage mould. Similarly significant, in subjects covered, was the plummet of 'bodies' to joint fifth position, alongside the rising 'military/ battlefield' and 'landcape/garden' categories (e.g. BBC2's *Two Men in a Trench* and *Hidden Gardens*), and the sudden appearance of 'society/settlements' in first position (up from 7th place in 2001) and 'mummies' in joint second (up from joint 9th). These latter shifts were, again, largely due to Channel 4. It aired most of the 'mummy' programmes, and although 15 *Time Team* episodes were, not surprisingly, devoted to 'society/settlements', the broadcaster also transmitted several programmes probing past societies' social mores (e.g. the *Sex BC* series and the under-rated gem that was *The Private Life of Pompeii*). Whereas underwater archaeology continued in strength, as did 'monuments' and 'development/collapse of civilisations', experimental archaeology was finally losing ground in the schedules, dropping from joint first to 7th place. What can we glean from an overview of these four years?

The next four graphs illustrate the four-year trajectory of each category's annual percentage of output, with the right-hand column providing the category's performance over the period as a whole. **Figure 4.8** offers an overview of the geographic spread of these 590 documentaries, confirming the obvious and hardly contentious point that the UK was the predominant archaeological location for programmes aimed at British audiences. What is not obvious is the uncanny congruency between the overall placings in 1999-2002 and where they appeared in Norman's (1983: 30-32) account of 40 *Chronicle* documentaries produced over a 4-5 year period in the early 1980s. From his descriptions, I have calculated that the UK still dominated the list (42.5%), Europe again came second (17.5%), Egypt (at 12.5%) and the Americas (10%) swapped places, Asia and the Middle East were equal at 7.5%, and Africa and Australasia/Oceania came bottom (with 2.5% and 'none' respectively). The verisimilitude here is striking and proves the inherent conservatism of TV archaeology and, perhaps, archaeology in general.

What has also become clearer from this graph is a 'Western' bias or ethnocentricity, for adding Europe and the Americas to the UK brings the figure up to 72.4%. This geographic imbalance, in which the rest of the world is covered in less than 28% of programmes, is greater in television than either Scarre (1994:

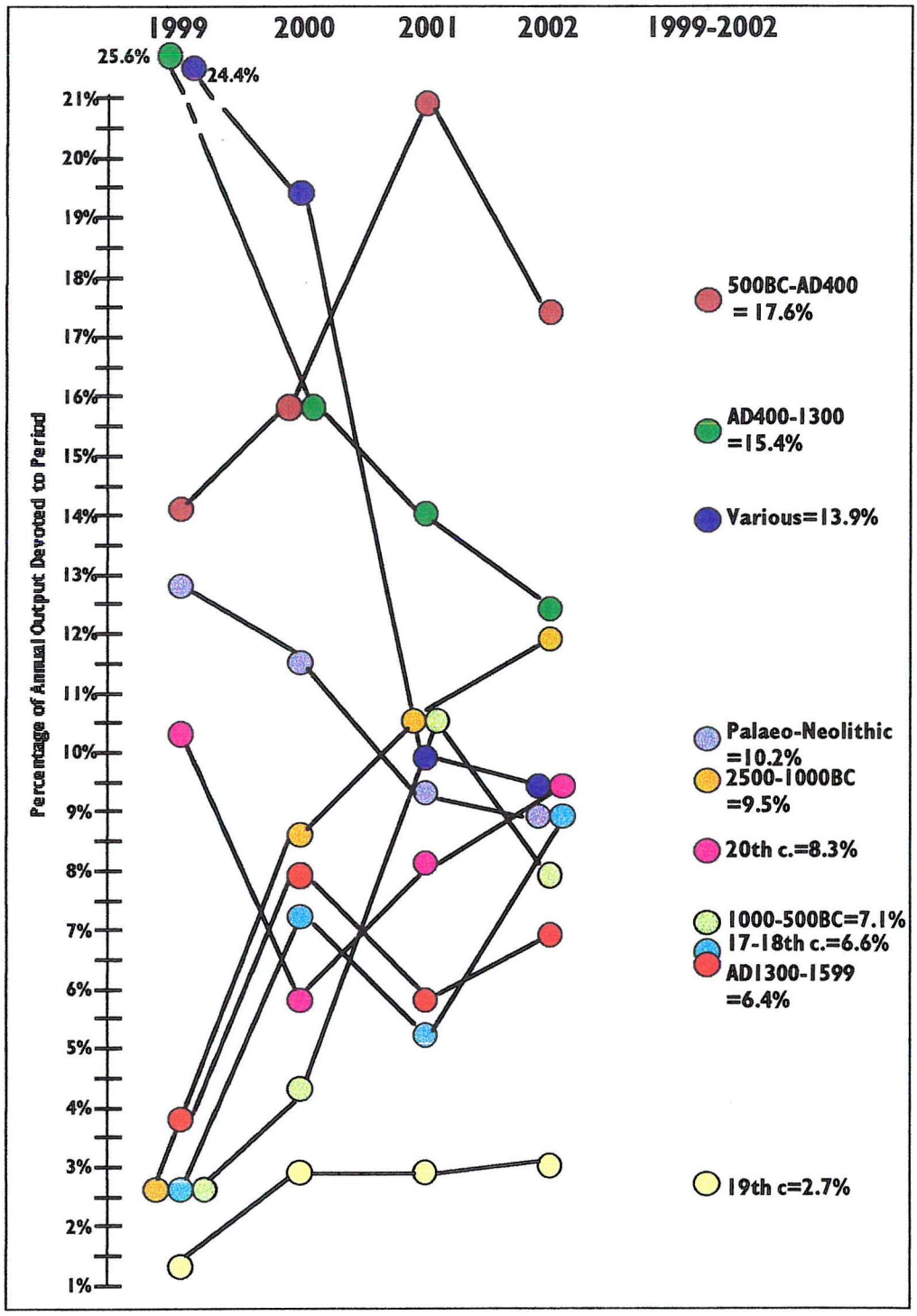
Figure 4.8: Breakdown of the Geographic Areas Covered in the 590 Archaeological Programmes Shown on BBC1, BBC2, ITV and Channel 4 (1999-2002)



14) or Gero and Root (1994: 33) found in their analyses of archaeological atlases and *National Geographic* respectively. Both these studies noted less a Europe-Americas domination than a European-Near/Middle Eastern-Egyptian one. Their points about the media's acceptance of the role that the Middle East and Egypt have as the 'cradle' of Western civilisation is confirmed by the trend in 2001 and 2002 for Egypt and the Middle East to move up into the top five geographic areas covered. The strength of the Americas-Europe-UK axis in television undoubtedly relates to the concern of executives and producers to focus on continents where their potential audiences live, or, put another way, where their programmes can be co-produced or sold. I find the relatively low placing of Egypt surprising, for there has often been the assumption that the media (and audiences) were overly obsessed with Egyptology (see Roth 1998). The dramatic fall in programmes that cover more than one geographic area is also worth mentioning. Although this may be the random result of which programme ideas had surfaced, or a more conscious trend towards commissioning more location-specific productions, it is interesting to speculate whether it might also have had something to do with reducing production costs. Seen as a whole, there is no doubt that the British media prefer an archaeology that is West-oriented, or that British audiences received in these years an imbalanced picture of world archaeology.

The summary of time periods covered in **Figure 4.9** shows Roman, post-Roman/Anglo-Saxon, and multi-period programmes topping the list. That the highest figure (for the Roman period) was only 17.6% is proof, however, that no one category dominated the epochs the way that Britain dominated the geography. The fact that so many periods 'cluster' between 6.4% (which, after all, represents 38 programmes) and 10.2% (i.e. 60 programmes) does substantiate a conclusion that there was a breadth of period coverage in these four years. The only anomaly here is the poor performance of the 19th century. I can only put this down to that century's lack of televisual 'allure'—too close to us to be ancient and too far away to be recently relevant. Over the four years, there is a demonstrable decline in post-Roman/Anglo Saxon programmes and a rise in Bronze Age ones, which may simply reflect an increase or decrease in good programme ideas or editorial decisions about periods overdone or underrepresented. There is also the notable nose-dive in the production of cross-period documentaries. This may be unintentional, due to the vagaries of commissioning, or it may suggest that

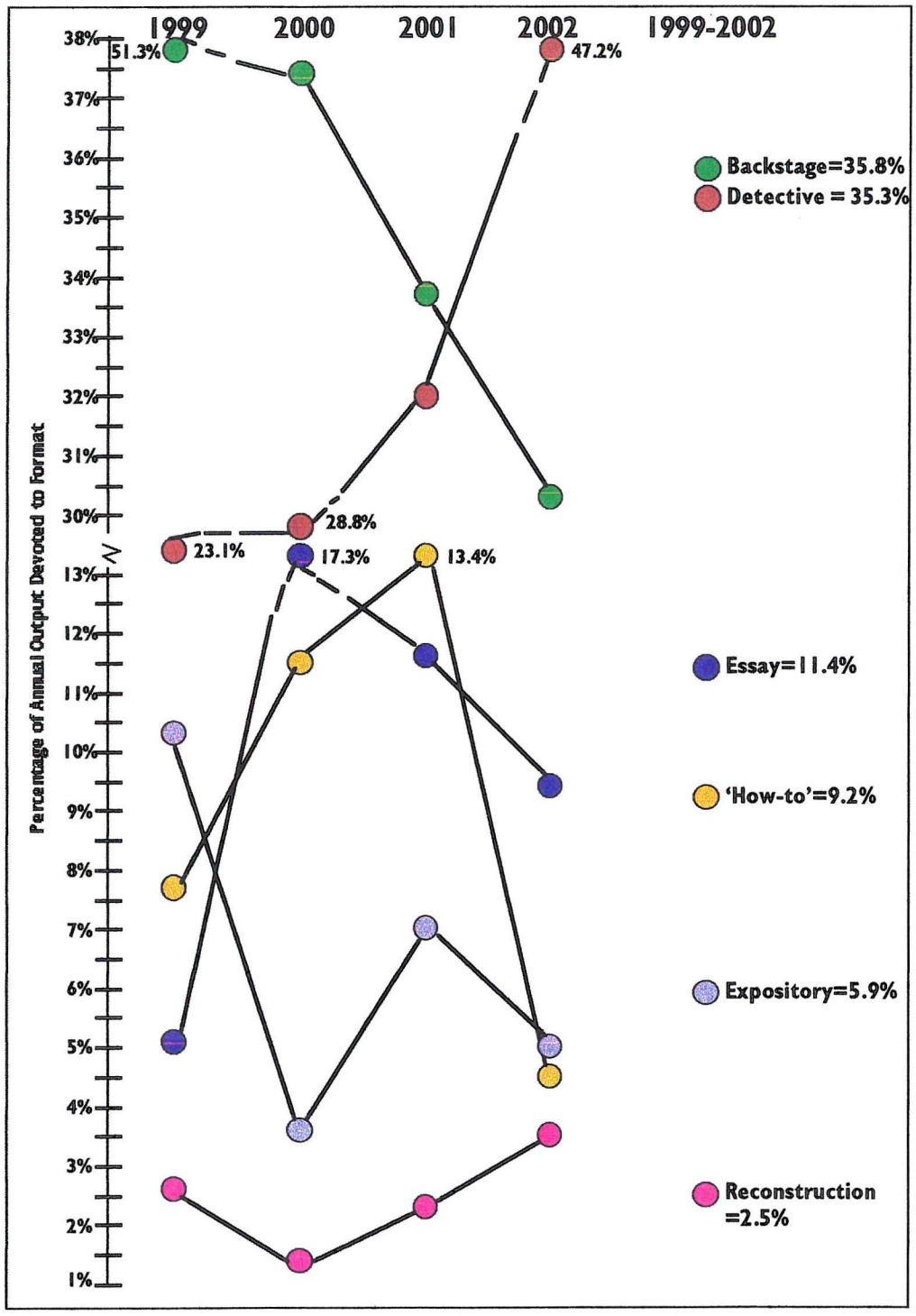
Figure 4.9: Breakdown of the Time Periods Covered in the 590 Archaeological Programmes Shown on BBC1, BBC2, ITV and Channel 4 (1999-2002)



executives and producers were increasingly being drawn to time-specific archaeology, for a programme focused on one time period will be easier to explain to audiences than a multi-period one. In drawing conclusions about time period choices, one needs to remember that the nature of archaeology is such that what started as one period often turns out to encompass others and that editors and series producers will want to provide variety in their programming.

Looking at the overview of televisual formats in **Figure 4.10**, one needs first to remember that all of these formats had their origins in the earliest TV documentaries made in the 1950s. Thus, none of them are truly 'new' or innovative. It is still encouraging that formats like the 'backstage' and 'how-to' ones are well represented in these years, accounting together for 45% of the total output. These formats take time to produce, cannot guarantee results in advance, eschew conventional narrative hooks and are primarily concerned with demonstrating archaeological processes and with producing 'new' knowledge (as opposed to regurgitating established knowledge). Advances in media technology have made them easier to produce today, and their makers have tended to compensate for a lack of narrative drive by focusing on participants' involvement and enthusiasm or by grafting on a competitive element. Nonetheless, these are less conventional formats whose pre-eminence is largely due to their audience appeal, as first registered in the mid-1990s with series like *Time Team*, *Meet the Ancestors* and *Secrets of Lost Empires* that re-introduced these formats to a new generation. That 'reconstruction' and 'expository' programmes feature so low on the list is not surprising, given the expense of producing the former and the less-engaging, information-heavy and 'dated' style of the latter.[24] That the archaeological 'essay' has performed well does seem to prove that the medium and its audiences are not shy of informational programmes; they just prefer an on-screen, charismatic presenter to lead them through it. The rising fortune of the 'detective' format is the other notable feature of the graph. As mentioned above, this format has long been exploited in TV archaeology, as it had earlier been in archaeological novels and films, for the parallels between the two professions make them eminently compatible for the retelling of an archaeological story. It is the shoe-horning of so many stories, appropriate or not, into this stylised and predictable dramatic mould that causes concerns amongst both archaeologists and producers. Despite 50 years of archaeology on British television, it seems that there

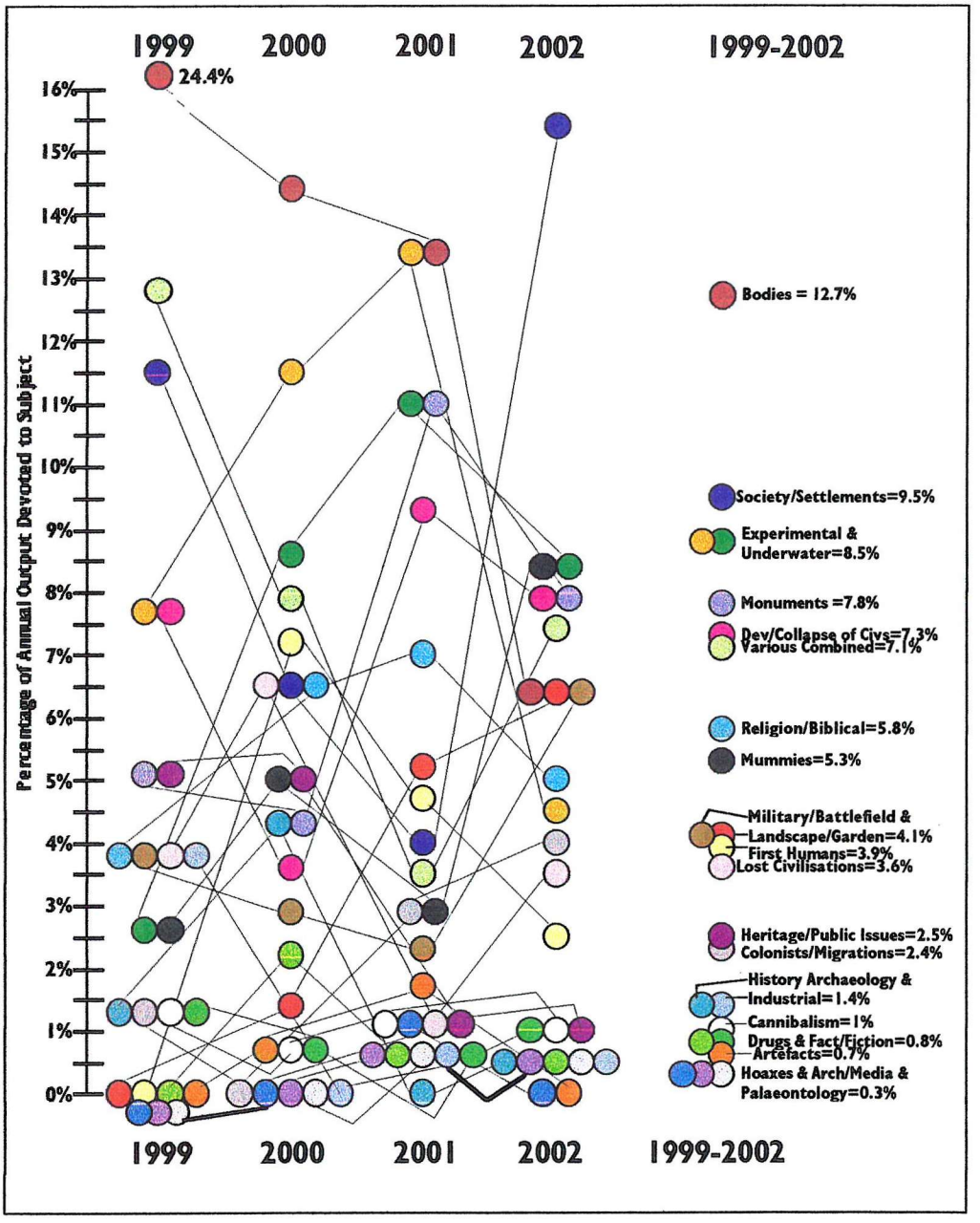
Figure 4.10: Breakdown of the TV Formats Used in the 590 Archaeological Programmes Shown on BBC1, BBC2, ITV and Channel 4 (1999-2002)



has been little impetus to develop new TV formats; the innovations that have taken place, like the use of CGI, have so far been utilised to re-invigorate existing formats rather than explore new ones.

Turning to the breakdown of archaeological subjects covered in this period (**Figure 4.11**), it will come as no surprise that human remains ('bodies') have been the premiere topic in TV archaeology. Moreover, if one adds the 'mummies' category to 'bodies', they together represent 18% of all programmes. While some may consider this an over-emphasis or a reflection of public and media fascination with the more 'ghoulish' aspects of archaeology, it is undeniable that it is the 'human' connection that matters to the public. That television should recognise and exploit this is understandable. More surprising perhaps is the overall placement of 'society and settlements'. As already explained, this is partly due to the subject choices of the *Time Team* producers, but it is, after all, a major subject in archaeology and offers a strong audience-friendly alternative to skeletons and cemeteries. In joint third place, experimental and underwater programmes were staple subjects throughout these years, exposing audiences to two of the more challenging and televisual aspects of the archaeological process. The strong showing of 'monuments' would have been more impressive, except for the fact that a fifth of these were about Stonehenge or the Pyramids. As we shall see in Chapter Six, these are perhaps the only archaeological monuments that the media expect the public to know about. The 'development and collapse of civilisations' category figured high on the list, and would have, in fact, come second to 'bodies' (at 10.9%) if these programmes had been grouped together with the 'lost' civilisation category (which I had tracked separately as they often dealt with contentious claims). Their emergence as a popular TV subject owed much to the medium's new ways of depicting the rise and fall of ancient civilisations through computer graphics. They also, it must be said, allowed TV archaeology to go beyond the confines of its 'Western' geographical bias with programmes on, for instance, China and India. Although television's fixation on human remains as the quintessential archaeology subject cannot be denied, the 'clustering' of subjects between 7.1% and 9.5% (i.e. 42-56 programmes) and between 3.6% and 5.8% (i.e. 21-34 programmes) do suggest a catholicity in the medium's choice of subjects during this period. As discussed in Chapter Three, television was, in fact, offering viewers a broader perspective on archaeology than a slavish adherence to

Figure 4.11: Breakdown of Archaeological Subjects Covered in the 590 Archaeological Programmes Shown on BBC1, BBC2, ITV and Channel 4 (1999-2002)



audience ratings would have produced. As to the bottom of the chart, I would note that, contrary to some archaeologists' claims, 'cannibalism' and 'drugs' were rarely chosen as subjects, although, more problematically, so were 'first humans', 'artefacts', 'heritage issues' and 'industrial archaeology'. The low ranking of the first two of this latter group is, I would suggest, a 'blip', for both were to feature in greater strength in 2003. The lack of programmes about heritage/public archaeology and industrial subjects is perhaps, like the 19th century in periods, a more systemic problem.[25]

Unfortunately, Norman's (1983: 31-32) *Chronicle* list is catalogued too differently to offer comparisons to my subject categories. One can say, however, that his fanciful description of the ideal programme for 1980s audiences ("the discovery of an Egyptian mummy with gold teeth on a submerged wreck off an island in the Caribbean" [*ibid*: 29]) bears no relationship to either the *Chronicle* output then, or to TV archaeology today. The answer to the question of which archaeology current British television is interested in is altogether more prosaic: a British or, at least, 'West-oriented' location, a 'time-specific' period, preferably Roman or Anglo-Saxon, and a 'human' story about our ancestors or how they lived. Television has preferred to frame these documentaries in a 'process-oriented' style of presentation for certain, mainly contemporary, subjects and in a 'detective' format for older ones. Contrary to many archaeologists' assumptions about how their discipline is represented in the media, this is a very *un-sensationalised* account of archaeology. During this period, some subjects, periods and locations did appear to be off-limits, and if one were to continue this research for another four years, one might find that the trend towards consolidation rather than innovation, already seen in geography, might begin to be felt in other aspects. But that assumes that TV archaeology will continue at its present strength, which, given the saturation level already reached, is unlikely to be the case.

What is it about archaeology that encourages journalists to cover it and makes broadcasters devote so many programmes to it? I would suggest that archaeology's value to the factual mass media has little to do with conventional notions of 'newsworthiness'. This is obvious in TV documentary where newsworthiness is not as important as it is for the press. Yet even in print journalism, archaeology does not naturally fit the definition of 'news', primarily because its news is not of great, immediate relevance to the public at large. This

has not, however, hindered the press from regularly treating archaeological stories not as soft, feature material, but as 'hard news'. It is insufficient to see this just as a result of there being little feature space and no substantial specialist sections within which archaeological news could otherwise appear. It is rather the result of an impressive number of special attributes that archaeological stories are seen to possess. These attributes make archaeology a media subject that, although only indirectly applicable to people's lives, satisfies other basic needs sought by the public from news and information, needs which journalists, editors and producers, both as professionals and as members of the public, understand.

First and foremost, the media recognise in archaeology the same attributes that fascinate the public: its *human focus*, its *accessibility* and *authenticity*, and its ability to *provide meaning, orientation, reassurance, cultural counterbalance, pleasure and escape*. But archaeology has more to offer. It offers the media a way to plug into the public's current interest in history and science, but it is a *flexible and malleable* subject that can be used as an impetus or complement to a variety of media genres beyond the scientific or historical. On one extreme, it can generate or provide focus for travel stories in feature sections or TV strands; on the other extreme it can be the source of political stories about national or international disputes. *Conflict* in general is another attribute of archaeological stories, especially in the field of 'public archaeology' (e.g. ownership rights, looting and the antiquities market, site rescues and debates about site preservation and presentation). I would, however, argue that disputes are less exploited in Britain than elsewhere and that it is, rather, archaeology's ability to supply *positive stories* that do not normally threaten or produce anxiety amongst the public that is appreciated and capitalised on by the British media. Archaeology is also rich in a number of aspects that make it especially suitable for media exploitation. It is *rich in data* in an information-hungry age; it is *rich in aesthetic and valuable artefacts* in a consumer-oriented age; it is *rich in technological gadgetry* in a hi-tech age; and, perhaps above all, it is *rich in narratives, myths and enigmas, superlatives, and heroes* in an age where so few good stories, mysteries, claims to excellence and heroes exist. In addition, it is exceedingly *rich in illustrative potential* for media that are dependent on visual representation. Maps, time lines, photographs or footage of finds and finders, and graphic or computer-generated reconstructions of artefacts, cities, monuments, houses, people and the like offer a wealth of visual elements to exploit. And

finally, archaeology *earns its keep*, justifying the media's investment in it by rewarding them in circulation, viewing figures and revenue. Putting an archaeological or anthropological picture on the cover of *US News and World Report* is a guarantee, as one of its journalists remarked (Fishman 2001), that the issue will "sell well". Even spending $700,000 on an archaeological documentary, the Discovery Channel expects to make a $500,000 profit from programme sales and the educational and video markets (Lazio 1996: 6). With this panoply of attributes, is it any wonder that the media are drawn to archaeology?

Conclusion

In looking at the media's perspective on archaeology, it becomes clear that the subject has offered the media a lifeline at a time of immense changes in the industry and its landscape. Journalists, perhaps more than programme-makers, still face an uphill struggle to find space for archaeological stories, and this explains their emphasis on 'hard news' stories like new discoveries. These professionals are rarely archaeological specialists, and because of this, they rely heavily on archaeologists, their specialist journals and stage-managed media events as their information sources. This means that their mediation of archaeology is more controlled by the archaeological profession than that profession has up till now acknowledged. The tendency for the media to accept and re-broadcast rather than criticise or fully investigate archaeological news may, in theory, ease archaeologists' fears, although whether the public (and the professions) ultimately gain from the kind of homogenous coverage discussed here and examined further in Chapter Six is a moot point.

This chapter has also revealed that the media's relationship to archaeologists and the public is just as complex and frustrating as is the archaeologist's relationship to the media and the public. Establishing a dialogue is essential, but, as recently pointed out (Anon. 2002c: 6), "dialogue between journalists and scientists must be based on mutual knowledge and respect." The analyses offered here of TV archaeology at a particularly fecund and seminal point in its trajectory should go some ways towards building this knowledge and respect. TV archaeology may be neither as sensationalised as archaeologists think nor as innovative as media practitioners would like, but it is abundant, equally if not more concerned with the

archaeological process than its results and, if not comprehensive, at least reasonably broad and representative. If archaeologists had been more proactive with the media earlier, if they had better understood just how valued archaeology was by the media and why, it might have been more representative and perhaps even more challenging. Where does this leave us in relation to the concerns about public understanding and to the specific question about the symbiotic nature of the archaeologist-public-media relationship?

The 'public understanding of science' community, scientists and archaeologists have for too long framed the discussion around the question: 'if the public don't understand the scientific or archaeological messages they receive from the media, then who's to blame'? At a debate staged to launch the Hargreaves and Ferguson (2000) report, some of the scientists present, according to Hargreaves' own later account (2000: 14-15), seemed to feel that the commercialisation of science had created an environment where science was being "conducted by megaphone", with scientists who shout the loudest gaining the most influence. Some took exception to this, arguing, for instance, that it was "hard to believe that there are Max Cliffords in the scientific world plotting to get prions onto the front page of the Sun." It seems to me that having started by blaming the messenger (i.e. the media are unequal to the task), and then the public (i.e. the public are too ignorant to understand), the PUS fraternity has now moved on to blaming the sender. This perpetuates what Hargreaves (*ibid*) calls "the enduring fallacy that scientists can or should be able to control the terms on which the public gets information about science." Even if the 'blame game' were a worthy avenue to pursue, this account ignores the roles that other intermediaries (like employers or science journals) play in the mediation process, as will be examined in Chapter Five. I would, however, suggest that 'blame-shifting' is itself the problem. This is because it side-steps the wider points: that the 'sender-media-receiver' model is out-dated in a world where the media is "instant, ubiquitous and inter-active"(*ibid*); that "all parties to the science-media-public network are producers of culture" involved in the construction of scientific meaning and knowledge (Hargreaves and Ferguson 2000: 60); and therefore that "power is exercised by all participants in the transmittal of information" (Gans 1980: 81). As Hargreaves and Ferguson (2000: 65) concluded in their report:

> To the question 'Who's misunderstanding whom?' we answer that all the players in this particular drama have too long a history of misunderstanding each other. Unless we can do better, we will weaken our ability to make wise judgements about science and our ability as a society to make progress. Nothing less is at stake.

How can we "do better"? We can do better by re-conceptualising communication as a collaborative process, by acknowledging each partner's particular role in it and allowing them to play it, by seeing each partner's strengths and weaknesses as constituent elements in the process not as barriers, and by listening to each other, creating an open dialogue in which fears can be raised, views can be canvassed and greater trust between the partners can be established. As the PUS advocates have come to understand, this cannot be a unilateral endeavour. Returning to the acronyms, we need PUS, PUM, SUM, SUP, MUS, and MUP. Nothing less will do.

And finally, what of the question that has framed these last three chapters: is the archaeologist-media-public relationship a symbiotic one? Yes and no. Looking at the last half of the 1990s and the first years of the new millennium, I think there is ample justification for saying that all three partners mutually benefited from each other during these years. The media, especially television, as we have seen here, found in archaeology a subject that allowed them to weather a difficult transitional period. The public embraced the media's investment in archaeology and found in the subject itself a way of dealing with millennialist angst. And archaeologists, whether happy to admit it or not, benefited from the media's exposure of and the public's engagement with their profession. Yet, seen outside this time frame, the relationship is not an inherently symbiotic one, for the media and the public *could* survive without archaeology. If their current fascination with the subject were to disappear tomorrow, only archaeology would be the loser, for the British press, television and public would find other attractive subjects to focus on to answer their needs, as they have done in the past.

Notes to Chapter Four

[1] By 2003, it was estimated that these independent companies were competing for around £800 million that was annually being allocated by UK broadcasters for outside commissions (Freedman 2003: 11).
[2] An "average" 52-minute science documentary co-production between the BBC and Discovery is said to cost around £368,500 (Anon. 2002a: 16).
[3] Of the 24 articles, there were four about the Arab-Israeli conflict over a tunnel built at the Wailing Wall to allow more tourist access to the archaeological site. The other 20 were, however, a mixture of news about site excavations and finds (7), about research and dating (6), about museums (4), and other issues: the educational uses of archaeology (1), illegal amateur digging (1), and the sale of artefacts from a shipwreck salvage (1).
[4] In these statistics, I have counted each episode of a series as one programme, primarily because counting series of anywhere from 2 to 13 or more episodes as one entity disguises the pervasiveness of these programmes in the schedules.
[5] This timing can be explained by the need to maximise summertime filming (when most excavations take place, academic experts are more available and the weather is better), but it is also perhaps due to executives' perceptions that outdoors archaeology makes good wintertime fare. The ratings seem to back this up. For instance, during the week of 18-25 February 2002, three archaeological documentaries made the 'Top Ten' list in audience ratings: *Meet the Ancestor's* Chariot Queen episode (3.8m viewers and number 6 for BBC2), *Time Team's* High Arkle Hall episode (3.37m and number 2 for C4), and the second episode of Graham Hancock's *Underworld* series (2.81m and number 5 for C4) (Source: BARB).
[6] Having been criticised by the broadcasting authority responsible for granting and overseeing its licence for the downmarket nature of its programming, Five was under pressure at this time to produce more 'serious' programming. Its move into archaeology was therefore a useful strategy to silence critics with fare that would not lose them audiences. Five's audience share, in fact, increased between 2001 and 2002 (see Table 4.1), with the channel, according to one reporter, benefiting "from scheduling of arts and documentary programmes in peak times" (Wells 2002). As a *Sunday Times* critic (Anon. 2003) put it, "Five might not have the most rarefied reputation in broadcasting, but its recent popular-history output has been undeniably impressive....Five's surprising reliance on sturdy historical programming bolsters its public service credentials."
[7] In a multi-channel environment, repeats may have less of a stigma attached to them than previously, as more viewers may miss the original transmission (or be recording a different programme at the time). An indicator of this is the high audiences (2.78-3.19 million) generated by the second transmissions of series like BBC2's *Journeys to the Bottom of the Sea* (Source: BARB).
[8] Interestingly, Laurence Rees (Kinnes 2001a: 4) also dates the breakthrough to a larger audience for history programmes to 1997 and his BBC2 series *The Nazis: A Warning from History*.
[9] I would suggest that another defining moment came in 2001, when contrary to predictions made by Norman (1983: 32) and Stone (1989: 200)—that archaeological programmes would never beat snooker coverage in the ratings—two 30-minute archaeological documentaries (episodes of BBC2's *Talking Landscapes* series), with audiences of 3.11 and 3.28 million, beat in the ratings every transmission of the two-week-long World Snooker Championship, except the final (3.87 million) (Source: BARB). Of course, this may have had more to do with a decline in audience interest in snooker, something neither Norman nor Stone could have imagined in the 1980s.
[10] Many of these 'recent' genres were, in fact, developed much earlier. The 'dressing up as ancestors' goes back to the Fifties (as a part of a programme) and to the Seventies (as a whole series, like BBC's *Living in the Past*). In the Nineties, we also had similar popular history series like *The 1900s House* and *The 1940s House*. The longevity of this format seems to be assured, as in the spring of 2003, the independent production company, Lion

Television, was trolling university archaeology departments looking for volunteers to live for a year as 17th century farmers for an up-coming series.

[11] According to Pitts (2001c), David Liddiment, the head of the ITV network, speaking at the Edinburgh TV Festival in August 2001, chastised the BBC (and C4) for their "relentless quest for viewers", noting "the current overkill...on uncovering the mysterious, apocalyptic history of all things ancient on BBC2 and Channel 4." Kinnes (2001a: 5) found a "gaping void" in BBC1's *Son of God* series which used CGI to reconstruct an archaeologically 'sound' picture of Jesus's life: "the programme's makers have clearly been at pains to be as historically accurate as possible. But no amount of technology or detail can make up for the lack of analysis." Another critic (Anon. 2001) struck out at the gimmicks in Five's *The History of Britain from the Air*: "Hire a helicopter, fly over a few ruins and get Derek Jacobi to provide the voice-over gravitas: it is a concept, and a cheap one at that...Yes, they have a helicopter and they know how to use it, but a bit of academic rigour might have been nice." A.A. Gill (2001:13) had little better to say about C4's programme *The Great Plague*: "[it] was like reading parish records. Interminably long, it mixed a plodding, slightly chippy schools-module script with a lot of extras dressed up in appalling wigs...It was all the worst bits of historical drama and social-archeology documentary." Sherwin (2003) reported that BBC presenter, Adam Hart-Davis, had "complained that the corporation had ruined its science and history programmes through gimmicks that patronise viewers." Interestingly enough, one year earlier, Gill (2002b: 13) wrote the following critique of Hart-Davis's *What the Tudors Did for Us*: "This confused and exhausting programme was, indeed, perfect proof that information isn't necessarily the same as knowledge. It was a collection of quiz-book factoids without context, plot or apparent relevance...The format cashed in on the current fad for history and science, and made nonsense of both, reducing the English Renaissance to a game of Trivial Pursuits."

[12] These questions include some or all of the following. As to pragmatic matters, is it a front-page, 'hard news' story or a 'soft news' feature story? The answer to this is key as it will determine the story's placement, length and depth, as well as who is deemed best to cover it. Does it fit within a particular department's brief, and can it be 'sold' to one's editor? Are other media likely to cover it? Will it 'play' to the paper's profiled readership? Is there a budget sufficient to cover it properly? Can it make today's deadline? As to content considerations, is the story novel, interesting or important enough? Who is the source of the information, and is the source credible? Does the story need corroboration or balance, and if so, by whom? Does it need contextualisation or background, and if so, in what depth? Has it been covered before and how? Can it be framed as a narrative with an angle that will hook or anchor the reader? Does it need illustration or additional research?

[13] Hargreaves and Ferguson (2000: 48) attribute this partly to the strength of the popular science magazine *New Scientist* (whose circulation is 130,000 a week). This implies that science is deemed by newspaper editors to be of interest to enthusiasts who will seek out their own sources (rather than expect science to be covered in the press) and not to be of interest to general readers. More to the point, however, is their supplementary comment (*ibid*) that the *New Scientist*'s "commanding position in the classified advertising of jobs in science" is such that no UK paper has been able to compete with it. The conclusion here is that newspapers' decision not to launch science as a section in its own right has more to do with the likelihood that such a section would generate sufficient advertising revenue to defray the costs involved. Certainly in America, according to Nelkin (1995: 115, my emphasis), "it was the decline in advertising revenue, *not a loss of reader interest*, that led to the demise of several science magazines...in 1986 and to the decline in newspaper science sections in the 1990s."

[14] In their survey of 31 UK science journalists, Hargreaves and Ferguson (2000: 57) found that the vast majority (77%) said that their work was either not changed at all by editors or that only minor changes were made, with which they had no complaints.

[15] In writing about the Kennewick Man controversy in the US, Downey (2000: 175-176), a journalist himself, apportions some of the blame for why the story became over-heated on the fact that science writers, not generalists, covered it and asked too few critical

questions. As he says, "few of the journalists...were reporters, professionally habituated to extracting nuggets of facts from recalcitrant sources. Science writing, feature writing, and editorial writing are all honourable branches of the trade, but they do not require or even reward the kind of devotion to the accumulation of possibly irrelevant detail that distinguishes their colleagues on the sports, city hall, and police beats."

[16] I would, however, suggest that some types of scientific background are likely to be more useful than others. For example, five US science writers I encountered at a conference in 2001 all felt that their degrees in anthropology had well prepared them for their work as science journalists.

[17] Fenton *et al.* (1998: 99) found that "At the conferences we studied journalists spent much of their time conferring with each other and exchanging information so that everyone had the same material. At one of the conferences several of the journalists travelled there together, ate together and picked out the stories they would focus on before the conference began." Given this kind of interaction, it is not surprising that science coverage appears homogenous.

[18] The picture would have been a great deal clearer if the graph used to illustrate their responses (Hargreaves and Ferguson 2000: 58) had corresponded to the authors' verbal summary. Sadly the wrong graph seems to have been published.

[19] Although not mentioned at all in the survey, one should also include here the 24-hour wire services like the Associated Press (AP), United Press International (UPI) and Reuters. Wire services date from the middle of the 19th century (Nelkin 1995: 85). They were set up to centralise news-gathering for members of newspaper syndicates who could not afford their own international network of reporters. They produce a continuous news 'feed' of already researched and composed news stories. One can literally rip the stories off the wire machines, re-order, rewrite and read or reproduce them. Press stories so derived are identifiable, because papers are obliged to carry the by-line of the wire service being used. These agencies have expanded and accelerated the way that stories circulate world-wide, but journalists' reliance on them does seem to be more prevalent in the US than in the UK. Certainly, very few of the archaeological stories in the British press that I have researched were derived from wire service feeds, although they have sometimes used wire service photographs to illustrate them.

[20] Certainly none were included as such on the delegates list at the Annual IFA Conference I attended in the UK in April 2001, although many attended, were on panels and were offered press room facilities at the American Association of Anthropologists' Annual Conference in November 2001.

[21] Although focused on medical journals' influence on American press coverage of medical issues, Shaw's reports (2000a, 2000b) offer valuable insights into how science journalism works today and about the dangers of relying on specialist publications. He began his second report (2000b: 1) on the front page of the *LA Times* in these words: "Every week, the most prestigious medical and scientific journals in the world send advance information on their newest research findings to general interest news organizations in cities large and small. Most of the journals also send along press releases, touting the most important of their findings and hoping to see the names of their publications on the evening TV news, on Page 1 of major newspapers, and in cover stories in the national newsmagazines. They get their wish with startling regularity. While political writers provide firsthand coverage of campaigns, speeches, debates, votes and elections, and sportswriters provide firsthand coverage of games, races and matches, medical writers get the vast majority of their stories about medical breakthroughs, real or exaggerated, secondhand—not from visiting research laboratories or by interviewing scientists or attending scientific meetings, but from reading such publications as the New England Journal of Medicine, the Journal of the American Medical Assn., Nature, Science, Lancet and the British Medical Journal." As he later concludes, medical correspondents "don't just regurgitate or rewrite the journals. They interview authorities in the field to help them evaluate the validity, significance and newsworthiness of the newly published studies before doing their stories. Still, the stating point for—and basic thrust of—most mainstream stories...comes from the journals, not from an individual reporter's curiosity,

enterprise or imagination....There is nothing intrinsically wrong with covering what the journals publish, of course, just as there is nothing inherently good about individual enterprise reporting. The journals generally publish solid science from reputable researchers on subjects that are often of interest and value to the public. But good, experienced medical reporters pursuing stories independently can often bring greater breadth, context and immediacy to material for their own lay readers, and critics say an over-reliance on the journals prevents many from doing this" (*ibid*: 10).

[22] American surveys have suggested that 5% of the public is "truly scientifically literate", 25% are "informed or interested", and 70% are "not well-informed" about science (McManamon 2000: 12). Yet even with, at 30%, a potential audience as large as the total population of Great Britain, the editor of the US popular science magazine, *Science Digest*, shortly before its demise, characterised Americans' view of science as "some cerebral, lofty intellectual endeavor practiced by ivory tower eggheads in white coats", "a required course that ruined your grade-point average and made you feel stupid!"(cited in Nelkin 1995: 112).

[23] As in Figure 4.2, the surveys in Figures 4.4-4.11 take each episode of a series as an individual programme and include repeats, each programme in a live transmission and specials.

[24] It was only by showing an extract of an 'expository' documentary (*The Celts [2001]*) to an audience of students that I became aware of the degree of attention that this kind of programme requires. Well-crafted and photogenic as the programme was, it could only be understood if one listened to, understood and followed every word of the narrator or the numerous interviewees. Current audiences are bound to find this level of concentration impossible to achieve in the normal home-viewing environment.

[25] Interestingly, in the week I first drafted this sentence *Time Team* devoted an episode in its 2003 series to 19th century industrial archaeology.

CHAPTER FIVE
THE PROCESS OF ARCHAEOLOGICAL MEDIATION

To understand fully how archaeologists, the media and the public interact, it is necessary to step back from the current relationship, as outlined in the previous chapters, in order to examine how the process of communication, especially of scientific information, determines the way that the relationship is played out. This involves a move into the domains of media, cultural and sociological studies. Media and cultural studies have been criticised for being "linguistically opaque" and "relativistic" and for having "blinkered preoccupations" (Hargreaves and Ferguson 2000: 29-30), namely about the effects on the public of media representations of subjects like violence, gender and race. More problematically, theoretical schisms in media studies have been responsible for a piecemeal rather than holistic approach to communication in which single components of the process (e.g. the text, the audience) have been researched in isolation from each other (Fenton *et al.* 1998: vii-viii). Both fields have contributed to science-media research through their work on the construction of 'meaning', although they have tended to steer clear of scientific communication *per se* (Hargreaves and Ferguson 2000: 29). Sociological research has paid more attention to the communication of science, questioning, for instance, the authority of the 'expert' and the supposed objectivity of scientific truth (*ibid*: 23-27). Yet it has been primarily focused on internal communication, on the scientist's point of view and on issues like 'accuracy' (Fenton *et al.* 1998: 18-19). How can these fields of study help us to understand how science communication 'works' in a more holistic sense, and, specifically, what can they tell us about archaeological mediation?

Media, cultural and sociological research has provided us with a series of models or maps of the communication process. When put together, these frameworks allow us to see communication from a variety of vantage points of relevance to this dissertation. Comparing the process of archaeology to looking through different-coloured lenses at "those pictures made up of thousands of multicolored dots", Praetzellis (2000: 152), in his novel about archaeological theory, encapsulates both the limitations and merits of theoretical frameworks:

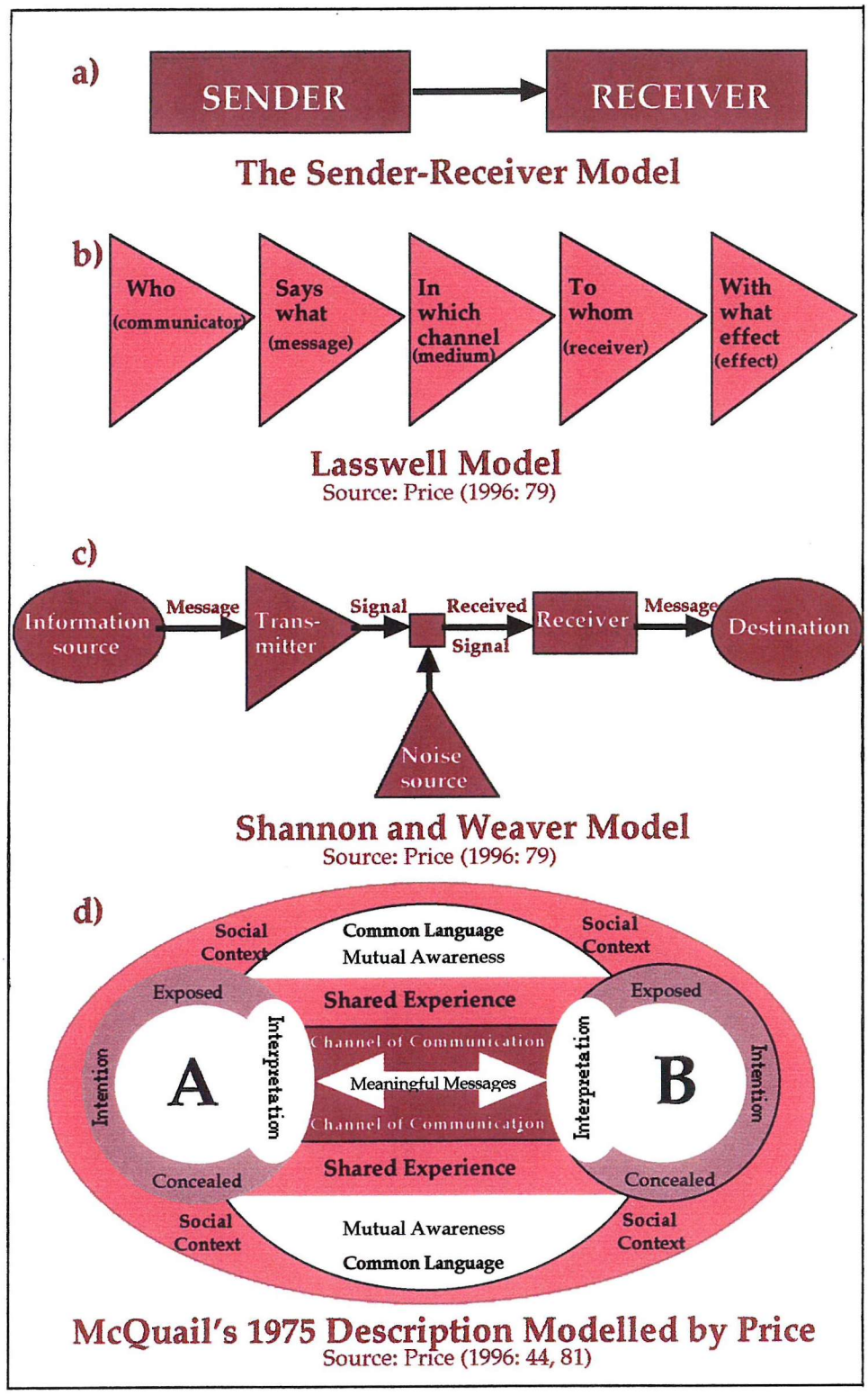
> Theoretical models are like these colored lenses, for they help us to see patterns in the archaeological record that would otherwise be invisible. Different lenses are useful for seeing the various elements of the image. None shows all of them, and it is up to the observer to decide which image is the most revealing for his or her purpose.

In this chapter, I begin by examining the existing 'lenses' which various authors have developed in order to see more clearly certain elements of the communication 'image'. The fact that these models did not reveal or clarify the patterns of archaeological mediation most pertinent to my research inspired me to create several new 'lenses' through which these patterns become visible. Focusing on the media options available to archaeologists when they want to communicate with their publics, my models chart the interactions of the various players, media and means of delivery implicated in archaeological communication. They graphically illustrate the 'costs and benefits' of archaeologists' preferred communication strategies as outlined in Chapter Two. But they push us beyond the archaeologist's perspective towards a more detached exposition of the relative efficacy of different communication pathways and of the amount and types of control that different mediators exercise within these pathways.

Maps of Communication; Maps of Scientific Communication

Most attempts to illustrate the process of communication have evolved from the perceived inadequacies of previous models and the posing of more sophisticated questions. Most of the maps reproduced here have taken as their departure point versions of the simplest conceptualisation, the 'sender-receiver' model (see **Figure 5.1a**), in which a message is constructed or 'encoded' by the sender and read or 'decoded' by the receiver. This hardly suffices as an explanation of even, say, a conversation, where gestures and facial expressions, for instance, often accompany and affect the 'meaning' of the message, and it assumes that communication is unproblematic, like a football passed from one player to another. The Lasswell model (**Figure 5.1b**), devised to demonstrate the effects of political messages (Price 1996: 79), is an improvement as it takes into account the message content, the medium of expression and the response elicited. Similarly, Shannon and Weaver's diagram (**Figure 5.1c**), designed to elaborate in a more scientific way the potential problems in transmission, allows for messages to be sent and received differently due to outside influences ('noise') that may interfere with the message

Figure 5.1: Maps of the Communication Process



(*ibid*). By presenting the process as unidirectional, these early models fail to see communication as an *exchange* and fail to account for the motivations or intentions, conscious or unconscious, of both sender and receiver and for the shared social context, experience and language which make communication between them *meaningful*. These issues are dealt with in Price's (*ibid*: 44, 81) schematic rendering of McQuail's description of the process (**Figure 5.1d**). This map encompasses similar conclusions arrived at by others (e.g. Hall 1997: 2-3; Silverstone 1999: 34-35) about the central importance in successful communication of shared conceptual space, systems of representation, and verbal and visual language. This evolution in thinking about communication underscores the points made earlier about the socio-economic homogeneity of archaeologists, media professionals and their core publics, and how this, in theory at least, should make communication between them more productive. But the communication of science or archaeological news raises additional problems, both for internal and public communication.

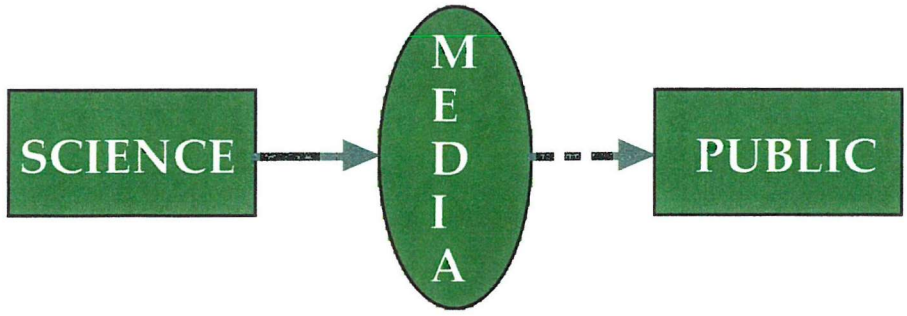
As the maps in **Figure 5.2** demonstrate, theoreticians examining the communication relationship between science, the public and the media have constructed different frameworks to explain how science communication works. The starting point for most of them has been Shapin's simple model (**Figure 5.2a**) which he termed the "canonical account" (Bucchi 1998: 3-5, 149). According to Bucchi (*ibid*: 3), the assumptions behind this map, in which the media function primarily as *translators* from scientific to vernacular discourse, are that:

> The scientific enterprise has become too much specialized and complicated to be understood by the general public....Therefore, a form of mediation is needed in order to make scientific achievements more suitable and accessible for the public. This mediation requires the intervention of a new professional figure: a 'third person' (in general, the science journalist) who can manage to bridge the gap between scientists and the non-scientific audience, by understanding the former and communicating their ideas to the latter....As a sort of interpreter, the 'third person' should simply accomplish the task of reformulating scientific discourse in more simple words. From this point of view, the problem of communicating science to the public, then, is reduced to a mere matter of linguistic competence.

The flaws in this model are manifold. It is, as Bucchi (p. 4) admits, "idealized", "science-centred, paternalistic, and pedagogic." It assumes that science communication is unidirectional and unproblematic, although the dotted line to the public implies that not all messages are received or that some kind of transformation has occurred in the message. It treats all three components as if they were only one entity, thus ignoring the diversity of media, publics and

Figure 5.2: Science Communication Models

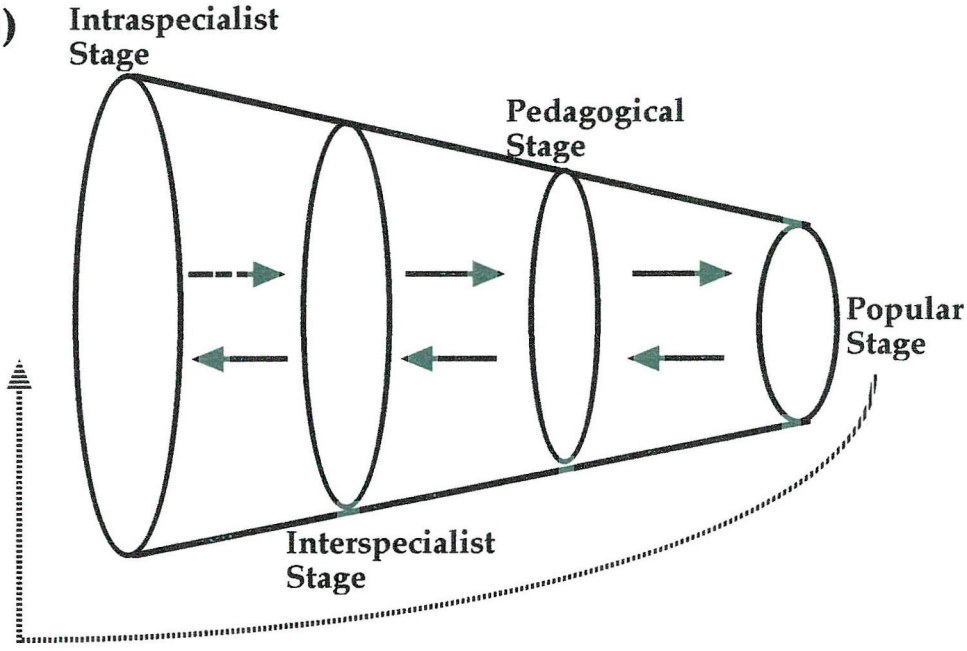
a)



Shapin's Canonical Account

Source: Bucchi (1998: 5)

b)



Shinn and Whitley's Communication Continuum

Source: Bucchi (1998: 5),
from Shinn and Whitley 1985 and Hilgartner 1990

sciences. Moreover, it distances science and scientists from responsibility for message outcome, allowing the blame for misunderstanding to be put on the 'messenger' (limited by media practices) or the public (limited by scientific ignorance). Despite its faults, and the number of models that have subsequently emerged, the 'canonical' model—called by Hargreaves and Ferguson (2000: 8) "the map of the flat-earthers"—has nonetheless become a scientific paradigm. Like many paradigms, it refuses to be dislodged, reappearing thinly-disguised in other, newer models, including, admittedly, my own. Why is this crude map so resilient? Perhaps because of the inherent difficulties in achieving a more complex, but equally persuasive two-dimensional alternative. Perhaps because it offers validation of the authority of science and the key role of media professionals. And perhaps because it accurately reflects how science communication has been perceived and conducted since the Enlightenment. That it is well-past its 'sell-by' date is clear; what will replace it is not.

The communication 'continuum' model proposed by Shinn and Whitley (**Figure 5.2b**) is little more than a description of the various stages in scientific publication: from specialist articles for professional colleagues, through articles for generalist journals read by scientists in other fields and textbooks for the academic community, to coverage in the mass media for the public. It tackles the concepts of different audiences and media and shows some multidirectional flow between them, but it misrepresents the issue of time, for science news may take years to reach the 'pedagogical stage' and yet may burst onto the public arena overnight and without having first gone through academia. Its funnel shape shows science communication as a *filtering* rather than translation process, in which both selection and transformation of information occurs. But its shape also implies that messages are automatically reduced as they proceed to the public, becoming, as Cooter and Pumfrey (1994, cited in Bucchi 1998: 7) decried in their defence of public knowledge of science, "a diminished simulacrum, simpler, weaker or distorted in proportion to the distance between the learned and the lay communities." It therefore takes no account of the way that messages can become amplified when they reach the public arena, as happened, in the case of archaeology, over the lifting of the Seahenge timbers in 1999 and the 'looting' of antiquities in Iraq in 2003. By suggesting that all messages go sequentially and successfully through all four hoops, this model leaves no room for information

that gets stopped at or skips stages, or that is more successful in or appropriate to one arena over others. Bucchi (1998: 19) seems to think that "there is no privileged stage at which the communication of science must start....In most cases...communication occurs simultaneously at different levels which continuously exert reciprocal influence on each other." Although agreeing with his notion of the interaction between levels and the *apparent* simultaneity of release, I do not share his view that there is no 'privileged' starting point. As discussed in previous chapters and illustrated in my models here, there *is* an established, preferred route for where scientific communication should begin.

The primary problems with both these models are that they are science-centred and linear. The media and the public are each unified and marginalised. The distance, and thus the differences, between them and the source of information is overly exaggerated, and the direction of communication and the outcome appear predetermined. They do not deal with the media practices discussed in Chapter Four that govern whether and how communication proceeds, with the different motivations that influence an informant's choice of media strategy, nor with why and how the public engages with the communicated message. Their biggest failing is how they diminish the importance of the popular arena and this public engagement. As Bucchi (1998: 21) puts it,

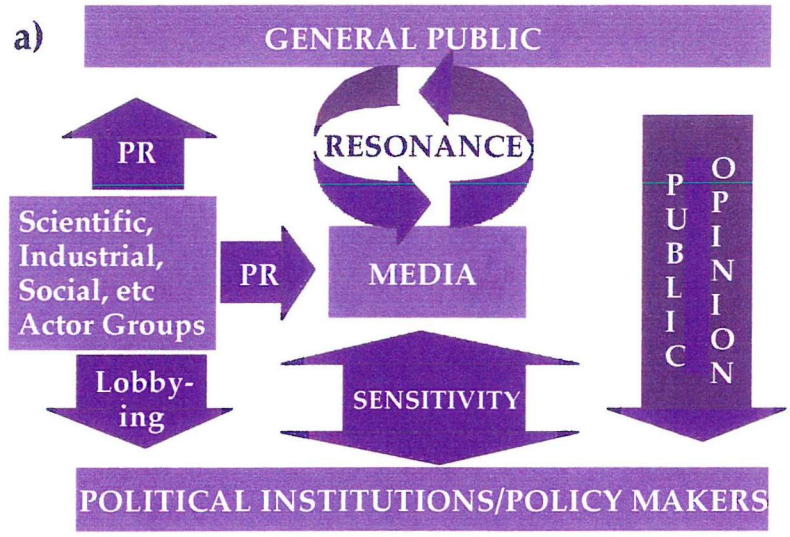
> communication of science at the popular level may influence core scientific practice in many more different and subtle ways than simple support and reinforcement....The popular stage can...provide an open space where stimuli, ideas and information are merged and exchanged among different actors and across disciplinary fields, in the absence of the constraints and conventions which bind scientific work and communication at the specialist level.

Given the recent growth in means of communication, as well as the glut of information, these models are clearly incapable of explaining scientific communication in the 21st century.

Gathering information for a report on 'Science and Society' in 1999-2000, the House of Lords Select Committee on Science and Technology received submissions from the PUS community that offered some new models more attuned to the times (see **Figure 5.3**). Professor John Durant, a leading figure in the PUS movement, proposed one (**Figure 5.3a**) as a way of explaining what had happened during the heated encounter between science, the media and the public over GM foods in 1999 (Hargreaves and Ferguson 2000: 10-11). Under scrutiny was the reflexivity of communication and how the debate escalated once in the

Figure 5.3: Recent Science Communication Models

a)



The Durant Model
Source: Hargreaves and Ferguson (2000: 11)

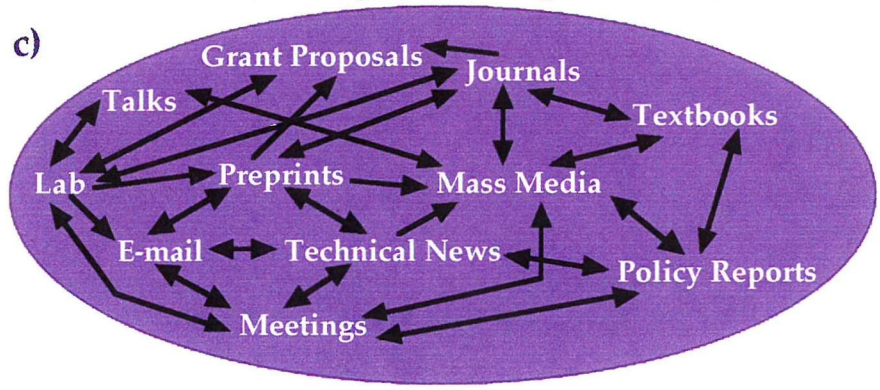
b) THE ENLIGHTENMENT MODEL:
'...dating from the late 17th century, which involved exploiting knowledge assets, followed by "diffusion to the elite and trickle down to others".'

THE ECONOMIC MODEL:
'where knowledge assets are created and public understanding of science programmes "bring in wider publics as potential supporters of science budgets or [to counteract] brakes on progress".'

THE DEMOCRATIC MODEL:
'An emerging [model], involving ideas of socially, economically and environmentally sustainable development and "based largely on participatory processes in which publics (as citizens and consumers) predominate".'

Irwin and Healey Three Models
Source: Hargreaves and Ferguson (2000: 11)

c)



Lewenstein's 'Web of Science Communications Contexts'
Source: Hargreaves and Ferguson (2000: 15)

public sphere, what Bucchi (1998: 75) calls the "turbulence of public discourse." Thus the public and the media figure prominently, as does the 'resonance' between them and the effect of public opinion on the political establishment. Communication becomes, more appropriately, non-linear, even circular, and scientists become only one of many voices or 'actor groups' with something to say, very pointedly referred to as 'PR'. As a guide to how publicly volatile scientific or archaeological news rebounds in the public arena, the Durant model is exemplary. Although avoiding many of the pitfalls of other models, it does not, however, represent the 'normal flow' of scientific communication.

Alan Irwin and Peter Healey, responsible for the Economic and Social Research Council's PUS programme, presented to the Select Committee a descriptive account which looks at science communication from a wider perspective in order to delineate "the relationship between government, industry, academia and their publics" (Hargreaves and Ferguson 2000: 11). Their models (**Figure 5.3b**) show three versions of the relationship. In the first, scientific knowledge is controlled by the few who feel an Enlightenment-inspired obligation to allow it to percolate down to the many in a gradual, *ad hoc* fashion without benefit to themselves. In the second, knowledge is more of a commodity, its more regulated diffusion 'traded' to a wider public in exchange for their support. In the final account, it is no longer knowledge alone that is being shared, but knowledge *creation*, as what was monologue and feedback becomes dialogue. Although they may have evolved in the order described (and the last model is still evolving), these models do not supersede each other, for, as their authors claim, all three are currently "co-existing and competing in contemporary Britain" (Irwin and Healey 2000, cited in Hargreaves and Ferguson 2000: 11). This particular 'lens' on science communication helps to explain why scientists (and archaeologists) can hold variant notions about the value and 'point' of public outreach, for they may simply be working from different conceptual maps. It also, however, reminds us of how prevalent the first two models still are, and why British scientists seem to be "not yet well adapted to the fact that they are working in the age of the Democratic Model" (*ibid*: 18).

In 1995, Professor Bruce Lewenstein, editor of *Public Understanding of Science*, contributed a more media-centred 'lens' to the debate (see **Figure 5.3c**), derived from his study of the dispute over cold fusion.[1] Some features of this controversy

struck Lewenstein as being indicative of changes in science communication occasioned in part by the increase in channels through which information circulates. Elaborating these channels, he produced his "Web of Science Communication Contexts". Although primarily concerned with internal communication, this map expands our understanding of what constitutes a medium of communication. That all kinds of media need to be included in a discussion of science communication today is, as Hargreaves and Ferguson (*ibid*: 62) point out, "not only a semantic point." They go on: "the fact that the media, or these processes of mediation, are increasingly pervasive, ubiquitous and convergent represents a very significant and fundamental alteration of the conditions in which science communication takes place." Lewenstein's Web illustrates the interactions of these media, reinforcing the picture of information overload described in Chapter Four. For scientists, the media and the public alike, this plethora of competing media sources creates information instability, a phenomenon in which it is hard for people to know what to believe, and even to remember where the information came from (*ibid*: 14).

Lewenstein's analysis of the cold fusion case is, however, even more relevant here than his Web. This episode was one of the more notable examples of a trend where scientists go directly to the mass media to announce their findings, thus by-passing the conventional route of first submitting papers to peer-reviewed specialist journals (what I call, despite Bucchi, the 'privileged starting point' of scientific communication). As Hargreaves and Ferguson (*ibid*: 14-16) have noted, the 'mass-media-first' scenario has consequences for all parties in the transmission of scientific news, for releasing information to the media and public before it has been professionally scrutinised means, for instance:

- that journalists, with or without adequate qualifications (as we saw in Chapter Four), are forced to take on the additional role of scientific adjudicator, evaluating the validity and credibility of findings, not just deciding whether or how to report them, thus increasing their obligations and influence as mediators;
- that specialist journals, whose power to control scientific communication is being undermined, and whose 'rules' often preclude publishing material that has been released first elsewhere, have little scope and less motivation to respond to matters already in the public sphere;

• that scientists may feel compelled to couch their future communications in more media- and public-friendly discourse and may have to question (at the very least) the efficacy of the peer-review system itself; and
• that the public may become more sceptical of all scientific news, as both validated and unvalidated information circulates indiscriminately around them.

Not all of these consequences are unpropitious. The expansion in science communication pathways has pushed specialist publishers into developing the potential of the electronic media and, most importantly, may well improve "the transparency and even democratisation of science process and communication" (*ibid*: 15). As Weingart (1998, cited in Hargreaves and Ferguson 2000: 16, my emphasis) has judiciously said:

> To the degree that the media gain in importance, the monopoly of science in judging representational adequacy may be weakened. Science's abstract criterion of truth is now being confronted by the media's criterion of public acclaim. The reliability of information (for example, as represented by the prestige of a scientific journal) now competes with level of diffusion (represented by the circulation figure of the newspaper or the number of viewers of a TV broadcast). *The validation criteria of science are not replaced but are supplemented by others.*

All of these maps of science communication, like Praetzellis's 'lenses', only illuminate parts of the overall picture. It is not surprising that analysts like Lewenstein, Bucchi, and Hargreaves and Ferguson are in common accord on what lenses are still needed. "Only by understanding the way that different sorts of media interact with each other and with different sorts of public," Hargreaves and Ferguson (*ibid*: 9) suggest, "can we possibly progress towards understanding the ways in which different publics acquire knowledge and form opinions about science, or indeed any other subject." Partly to take on this challenge, partly to resolve some of the inherent problems with the above maps, and partly to answer other questions I had about archaeological mediation, I embarked on some communication modelling of my own.

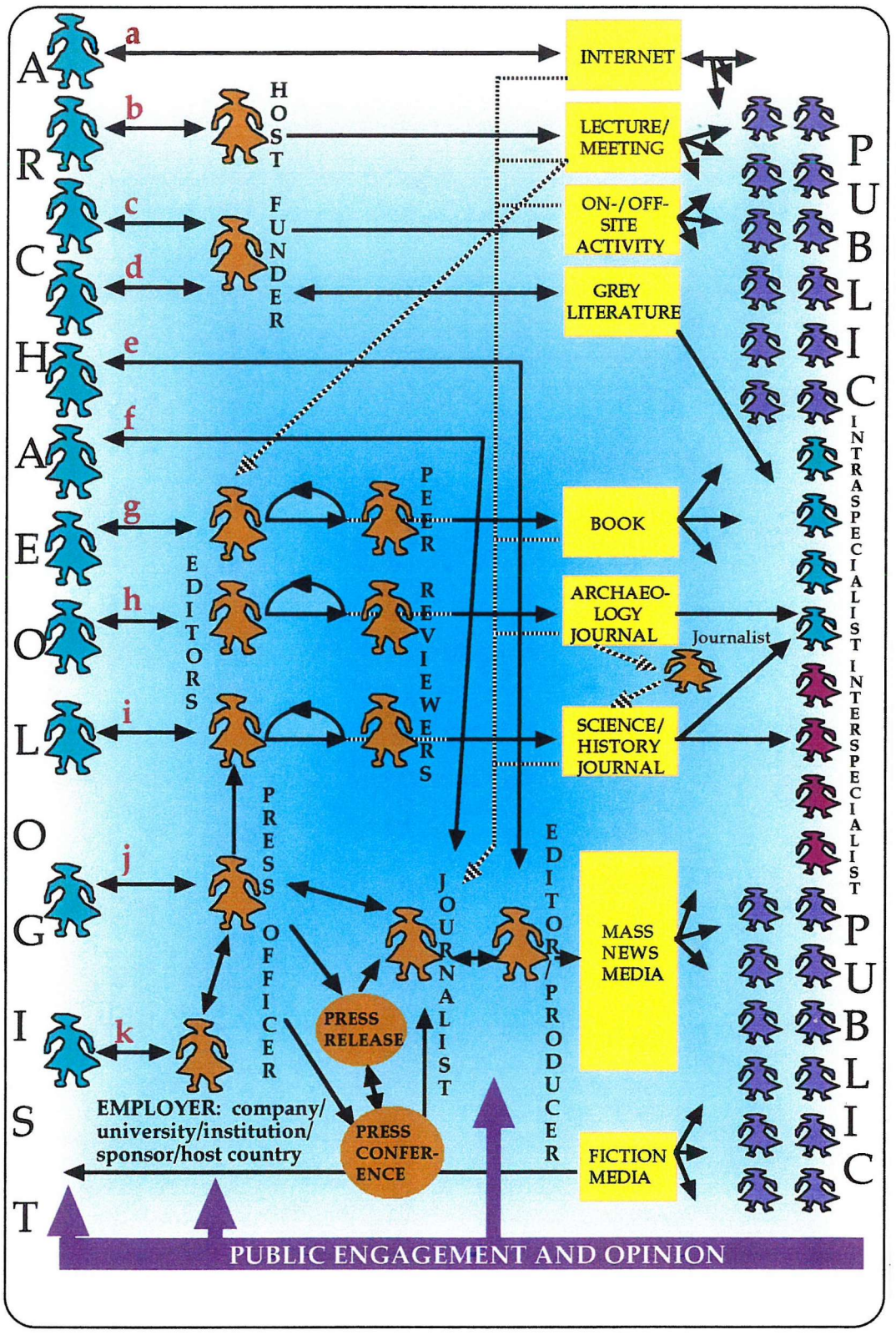
Maps of Archaeological Mediation

In trying to apply the foregoing models to how archaeology is mediated, I came to several conclusions, beyond those already mentioned, about what these 'lenses' obscured rather than illuminated. It was clear that they did not differentiate the different publics that archaeologists communicate with, nor, bar Lewenstein's

Web, the different media options available to both the public and archaeologists. Wanting to understand why archaeologists privilege certain media over others, why certain communication pathways are more 'acceptable' than others, I felt it was important to look more closely at the means of diffusion open to them, the intermediaries encountered, and the interactions between media and mediators. This led to another conclusion: that existing models all diminished the fact that mediators are physical, real people (not geometric shapes), each with his or her own views, biases and agendas. Furthermore, it seemed to me that not all mediators play the same role in the mediation process and that distinctions between different kinds of mediation work were lacking. From these reflections, I developed a series of new models that do not purport to resolve every question about archaeological mediation nor every flaw in other models,[2] but that do address some of these issues.

The first of these models (**Figure 5.4**) illustrates the different communication pathways that archaeologists can follow, either singly or in a variety of combinations as elements in an overall media strategy. It shows the other mediators implicated in each pathway and the directions and interactions within the information flow. Archaeologists as informants or 'first mediators' are the left-hand figures coloured in aqua. The diverse group of 'second mediators' and the material sources they use are coloured orange, and the different media yellow. For simplicity, the archaeological publics are divided here into three, with 'intraspecialists' (one's archaeological colleagues) in aqua and 'interspecialists' (colleagues in related fields) in red, being separate but part of the 'general public' in purple. The people involved are represented as human figures as a reminder of the individual and subjective contributions that they make to the mediation process. Solid lines denote the primary information flow through each pathway, and broken lines represent where the main flow may break down (for instance, when peer reviewers do not recommend publication) or where secondary flow may occur (such as when journalists pick up information from other media). Although the arrows illustrate the direction of flow, they also indicate where the impetus for communicating may be collaborative or two-directional. Thus, for example, in the case of book publishing, the original proposal may come from archaeologists, editors or from discussions between the two. Arrows also show whether the chosen medium is accessible to one, two or all three publics. The

Figure 5.4: Archaeologists' Communication Pathways



circularity or reflexivity of the process is represented at the bottom by the public's engagement with and feedback to archaeologists and other mediators.

Eleven pathways (lettered 'a' to 'k') are elaborated and placed in order of the degree of mediation encountered. Those at the top (paths 'a' to 'f') involve the fewest intermediaries and thus offer archaeologists the most individual control over their communications. Those in the middle (paths 'g' to 'i') involve at least two intermediaries (editors and peer reviewers). Those at the bottom (paths 'j' and 'k') involve the most second mediators and are pathways where the most mediation takes place. These routes are explained as follows:

Pathway 'a': The internet offers archaeologists the most direct and least mediated route to all three publics. Archaeologists' growing reliance on websites was noted in Chapter Two, and these can be personal ones, or ones created in collaboration with funders to transmit information about specific archaeological sites or work (see path 'c'). In either case, website construction may involve graphic and computer designers as mediators of the form, and thus the accessibility, of the information. The level of public engagement with websites and the ability to identify who users are and how deeply they have engaged with the information are currently difficult to assess, although this may change as internet penetration increases and more sophisticated systems of viewer identification and feedback are developed. The sheer volume of material on the internet means that publishing science papers on the web is seen by some "as a purely academic exercise"(Anon. 2002d: 7). Shown here by a broken line, the internet can also provide secondary information flow to mass media journalists, for, as discussed in Chapter Four, the internet is the third most important material source for British science journalists. Both from professional and public perspectives, however, there are no quality controls in this pathway.

Pathway 'b': Giving lectures or making presentations at conferences or meetings will always involve at least one intermediary—the institutional or organisational representative or committee (called 'host' here)—who defines the agenda or engages the archaeologist's contribution. This route may not be accessible to all publics or be reported on by mass media journalists (as discussed in Chapter Four). Conference proceedings have long been an important source of material for journal and book editors, this inter-media relationship, marked here with a broken line, bringing further mediators to the secondary flow of this pathway. This route

is one of only two pathways ('on-site activity' being the other) that involve archaeologists in physical contact with their publics.

Pathways 'c' and 'd': These pathways are particularly relevant to field archaeologists working on excavation sites. Path 'c' encompasses public outreach through 'on-site' activities (e.g. exhibitions, display boards, leaflets, tours and open days) and 'off-site' ones (e.g. websites or local press, TV and radio coverage). The companies or organisations that have financed the work, here noted as 'funder', are the intermediaries with or for whom archaeologists plan or design these communications, assisted by exhibition and graphic designers. The local public living in proximity to the site is the target audience of path 'c', and, as pointed out in Chapter Two, this pathway is currently archaeologists' favoured route for communicating with this public about site-specific work. Path 'd' represents the detailed excavation and research reports that archaeologists write primarily for their funders (as well as their professional colleagues). The vast majority of these reports (called 'grey literature' here) do not circulate widely and thus are unlikely to generate any secondary flow, as is possible with path 'c'. I would include here the reporting of information to the Historic Environment Records (formerly the Sites and Monuments Records), which is supposed to be aimed at making data publicly available, but is not sufficiently utilised or promoted as such.[3]

Pathways 'e' and 'f': Here archaeologists engage directly with the mass news media by writing commissioned or 'on spec' articles for newspaper editors or by working with television producers on TV programmes (path 'e'). This path allows archaeologists the greatest freedom to frame a news story or contribute to TV programmes in their own words, although subject to subsequent mediation by editors and programme-makers. In path 'f', archaeologists contact journalists directly by phone or self-authored press releases, or, more often, are contacted by journalists. Here, it is the journalist who is then responsible for writing the story. These are the only avenues in which archaeologists' communications directly address the wider, national public, although, as mentioned before, they can also be coded ways of broadcasting news quickly to one's colleagues. However, if pursued alone or in advance of other routes, these pathways, in which the media receive the news first, are seen to breach professional 'rules' of communication.

Pathways 'g', 'h', and 'i': These three pathways (writing a book or a specialist article about one's findings) embody the most professionally-approved channels of scientific or archaeological communication. This is primarily because the text submitted to an editor will be vetted by anonymous experts drawn from the profession who will scrutinise the data, methods and conclusions and recommend (or not) whether the work merits publication or requires amendments. These scrutineers or 'Peer Reviewers' are the safeguards of the system, guaranteeing that 'correct' science/archaeology is being communicated both internally and externally. Whereas book publishing can encompass both generalist and specialist texts (and thus reach all three publics), the primary audience for intraspecialist (here an archaeological journal) and interspecialist (like *Science* and *Nature*) publications are one's professional colleagues. In all three cases, the information can, however, be picked up and secondarily transmitted by journalists to the general public. As noted in Chapter Four, specialist publications are key in this secondary flow as they are British science journalists' number one source for science news.

Pathways 'j' and 'k': In the preceding pathways, the emphasis has largely been on the messages that archaeologists want to communicate. In these last two routes, the archaeologist's employer and the employer's press office or PR consultants (and the messages that they want to communicate) are of equal importance. The 'Press Officer' is the pivotal agent in these pathways, liaising between employers, media professionals and archaeologists and responsible for implementing media strategies (e.g. fielding requests for information from journalists, negotiating publication with specialist journals, sending out press releases or organising press conferences). The difference between the two paths is the level of involvement of the employer in the process, employer being defined here as the company, university, institution, sponsor or host country one works for. Since the flow here involves anywhere from three to six mediators beyond the archaeologist, control over communication is shared in these highly mediated routes.

The starting premiss of Figure 5.4 is that archaeologists are the 'first mediators' of archaeological information. 'First mediation', as I use the term, does not necessarily mean 'initiation', for, as just stated, archaeologists are not always in sole control of the dissemination of their information and of which routing it will take. In fact, in all paths except 'a', communication is most likely to be at least co-

initiated with others, as indicated by the two-directional arrows between archaeologists and second mediators. While there seems to be no research on the issue of initiation in archaeological communication, one British survey (Fenton *et al.* 1998: 68) found that 58% of social scientists claimed to have 'initiated' their own media coverage, yet only 11% of these released the communication themselves with 47% admitting that the news had been released by a "third party" (presumably a press office). It is clearly difficult to ascertain and apportion individual responsibility for the initiation of communication.

Whether self-initiating communication or providing information to others who will initiate it on your behalf, archaeologists are 'first mediators' because, even before the communication act takes place, they need to address a number of important questions, similar in many ways to those faced by journalists:

1. What needs to be said and why does it need to be said?
2. When does it need to be said, or by when does it need to be heard?
3. Who needs to hear it, and who needs to hear it *first*?
4. Which medium is most likely to engage that audience and produce the desired outcome?
5. How best can the attention of that medium be attracted?
6. What type of discourse is appropriate for that audience and medium?
7. How much information, background and context should be included?
8. Does it need to be illustrated and how?
9. Can one afford the time and money both to produce and follow up the communication? And
10. Who else needs to be involved in or alerted to the communication?

'First mediation' thus involves practical and logistical as well as intellectual and representational considerations, some of which can only be answered by the archaeologist. That archaeologists may not see this as mediation, assuming that these questions do not concern them or that mediation is only what happens after the message is released, does not alter the fact that it is. There is, however, a further question that archaeologists will need to address: what will the profession consider to be the most 'acceptable' way of communicating this information?

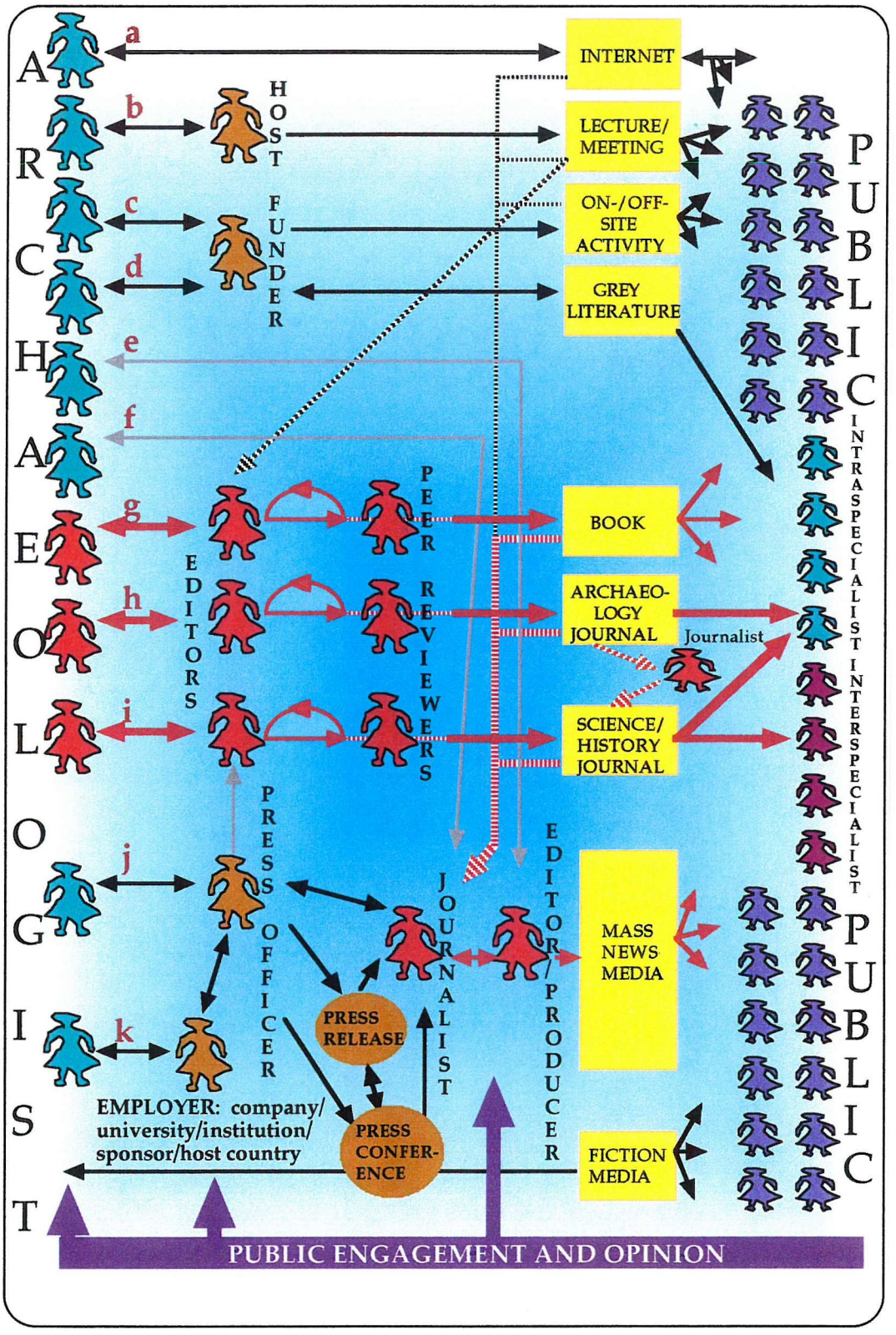
Many of the media in Figure 5.4 have been available to archaeologists for a century or more, and certain ones have been utilised more than others at different periods in the discipline's history (see Chapter One). Nevertheless, the traditional

starting points for scientific communication have long been the pathways that involve the peer review system (see **Figure 5.5**). These pathways ('g' and especially 'h' and 'i') and their secondary flow to the mass media correspond to Irwin and Healey's 'Enlightenment Model', where the priority question is 'Who needs to hear it *first*?' (answer: the profession) and where public communication is marginalised, left to the *ad hoc* nature of the 'trickle down' effect. Insisting on the profession being notified first about one's findings is not (just) a professional courtesy, for the hold that these pathways have over scientific communication is based on the perceived necessity of peer review, of a professional vetting of all new information before it is released.

Peer review is seen as essential to proper scientific communication because it provides all parties with an insurance policy. From the archaeologists' perspective, it offers them the reassurance that their work will be re-examined by qualified experts, and it ensures that the profession is seen to be self-regulatory, capable of maintaining standards without outside interference. From the media perspective, peer review offers journal and book editors both an ostensibly objective way of dealing with the large number of submissions that they receive and a guarantee that the credibility and reputation of editors and their publications will not be jeopardised by substandard or flawed material. Furthermore, as discussed in Chapter Four, science journalists rely on peer-reviewed information as a guarantee that what they report on has already been validated by those with more expert knowledge of the field. Even a public unaware of how the system functions will have a sense that what they read about in specialist journals, or in media accounts taken from those journals, carries a stamp of authority, and will feel deceived if reputable publications are revealed to print erroneous information.[4]

There is, however, a price to pay for this insurance. Peer review is a time-consuming process that adds many months to the communication of new information. The tendency of peer-reviewed journals to place embargoes on information to be published in up-coming issues until the issue appears, so that other media do not pre-empt their news, adds further delays to the system. This is why these pathways are inappropriate ones for archaeological news that needs to be heard quickly, such as in cases where sites are under immediate threat (see Pitts and Roberts [1998: 121-123]). In addition, specialist journals insistence on

Figure 5.5: Traditional Pathways (in red)



exclusivity, in particular their habit of only publishing material that has not appeared anywhere else (a practice enshrined in the 'Ingelfinger Rule'[5]), reinforces their stranglehold over scientific communication, blocking other pathways and silencing scientists and journalists alike. Such rules are seen by media journalists as a violation of the "public's right to know" (Nelkin 1995: 151). Although meant primarily as a quantity and quality filter, peer review can also entail a major mediation of the content of articles and books, as authors revise material in the light of peer reviewers' comments and criticisms.[6] Moreover, successful passage through peer review does not necessarily guarantee publication.

The problems with peer review, however, go deeper. Peer review is seen by some as "an intrinsically conservative process" (Jones Finer 2000), less free from personal interests than is claimed, and one that has "a built-in bias that tends to maintain the status quo and suppress new theories", as Peter Rothwell, author of a study on the subject, has said (Farrar 2000). Neil Faulkner (2002) found that in *Britannia*, the specialist journal for Romano-British archaeology, "only two or three articles—out of 166 published over fifteen years—presented new ideas challenging the conventional wisdom on a major issue" and that this was not because "challenging articles are not submitted." "The problem," he continues, "is that they are rejected, as if some sort of Old Guard is determined to keep out any dangerous novelties cooked up by independent Young Turks." As he admits, the consequence is that "the big debates in Roman Britain studies do not feature in the leading journal." There is additional concern that peer review produces random results. In Rothwell's study (Farrar 2000), for instance, the "incidence of agreement" between peer reviewers over what decision should be taken "was not statistically significant." This led him to opine that "If you gave two chimpanzees pins and got them to stick them into one paper or another, they'd agree about half the time as well."

As more peer-reviewed sub-specialist journals appear, often "the products of a fruitful agreement between groups of enterprising academics and compliant publishers (or vice versa)" (Jones Finer 2000), the problems increase. As Jones Finer, an editor herself, goes on to say, "the emphasis has for some time been tilting away from the interests of readers to those of contributors", who are pressurised by the present assessment system to publish or (academically) perish. A more vociferous critic, Dr Lawrence Altman, medical correspondent for the *New*

York Times, told Shaw (2000b: 11) that he considers peer review "overstated and overrated." He feels that this is partly due to doubts about how reviewers are chosen ("for their political connections and friendships rather than for their skills as reviewers"), and partly because the system does not give reviewers access to the original data nor expect them to repeat experiments and thus truly test methods and conclusions. "Any contention," Altman (*ibid*) says, "that peer review is a purely, or even largely, scientific process is nonsense." Even as peer-reviewed publications begin to appear on the internet, many would agree with Hargreaves and Ferguson (2000: 18) that "in an age of instant, global mass communication" peer review procedures are clearly "ineffective".

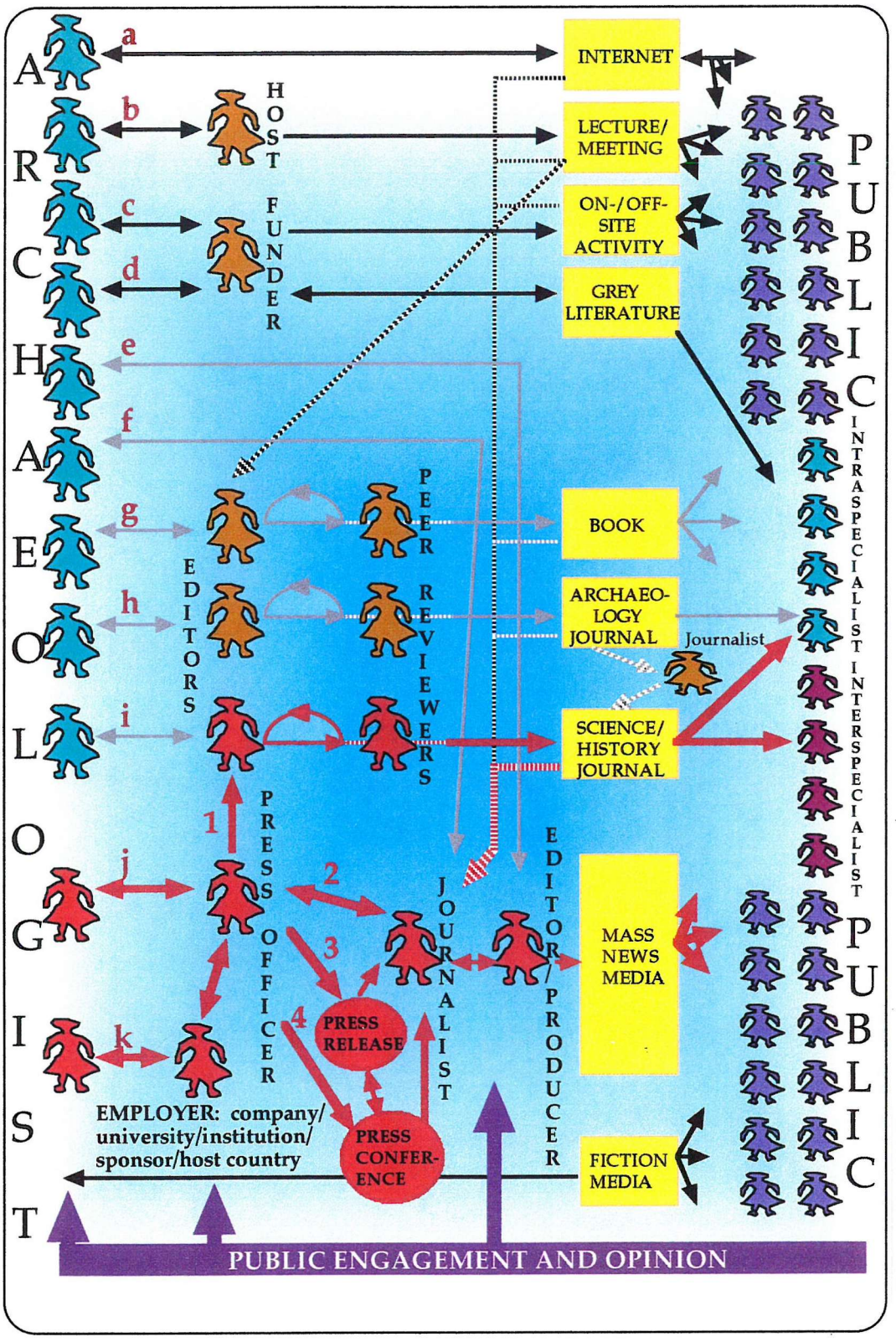
Qualms over peer review inevitably cast doubts over the inviolability of these traditional pathways, but there are other problems inherent in these routes. By conferring privileged status on specialist publications, these paths encourage the misconception that such journals are apart from and operating on different parameters (more 'objective', less 'commercial') than other media. Specialist journals have, in fact, developed ways of stage-managing the 'trickle down' of information (e.g. sending abstracts, press releases and advance copies of issues to media journalists and editors) in order to ensure that the name of the journal appears in subsequent reports as the source of the story, thus increasing their reputation and circulation (see Fagan 2001: 459). Such source attribution is, according to Robert Lee Hotz, science writer at the *Los Angeles Times* (cited in Shaw 2000b: 10), "often buried [within the article] because a lot of reporters don't want their editors to know they spend all their time reading the journals." Yet reporters will often acknowledge their specialist sources, both for the credibility they confer and as *quid pro quo*. Natalie Angier, the *New York Times'* medical correspondent, explained to Shaw (*ibid*) that some journals are now "so hungry for publicity that they really bump up their papers to an astonishing degree", adding that "the abstracts they send to journalists are really over-hyped." As further evidence of how commercial pressures affect specialist journals, Gould (1997: 226) has pointed out that "When a staid and distinguished British journal [*Nature*] uses the premiere of an American blockbuster film [*Jurassic Park*] to set the sequencing of its own articles, then we have reached an ultimate integration" of the popular and professional domains.

Allied to peer review conservatism is the issue of publication bias, in particular the fact that journals accept more articles that show positive rather than negative results (*ibid*: 124-126). The value of negative findings, especially in science, "cannot be overemphasized" says Shermer (1997: 53), for "most of the time failures are how we get closer to truth." The emphasis on positive findings means that "the available literature may present a strongly biased impression of efficacy and achieved understanding" (Gould 1997: 124).[7] Although Gould suggests that this publication bias "only acts as a guard at the party door" who "at least...can see all the people and make his unfair decision" (p.127), what about those who do not go to the party because they are sure of being turned away?[8] That self-censorship plagues these pathways is largely confirmed by some journals' defence that fewer negative result stories are submitted to them (Shaw 2000b: 11). Perhaps the most disturbing feature of specialist journals' stage-management of the flow of scientific news is the fact that it further exacerbates the trend towards herd or 'whoosh' journalism (Gould 1997: 141), where news hits all the mass media the day after journal issues appear, as discussed in Chapter Four. This is the sense in which "the [specialist] journal system is destructive of good reporting", as one science editor told Shaw (2000b: 10). Ultimately, these traditional pathways not only slow down the release of information, but they also make a mockery of the 'professionals-should-know-first' scenario by often giving them little more than a one-day advantage over the public.

The slowness, conservatism and oligarchic nature of these procedures mean that these traditional pathways are increasingly out of step with current trends in communication. Nonetheless, they have provided a serviceable system for many years, one that protects all parties from the alternative: a deregulated, relativistic information 'free for all' in which it is difficult to distinguish the valid from the invalid. It is therefore not surprising that as other pathways have increasingly overtaken paths 'h' and 'i' as the established routes for the public communication of archaeology, the basic principles of peer review and 'trickle down' have continued to be observed.

The shift towards these 'new' pathways (see **Figure 5.6**) has been a gradual trend that started in the academic sector, as universities established press offices to exploit the academic 'capital' generated by their staff. The centralisation of archaeological responsibility in national institutions in the 1980s and the

Figure 5.6: Current Preferred Pathways (in red)



commercialisation of archaeological activity in the 1990s increased the number of employers and PR people with vested interests in controlling the release of archaeological information. Since many employers are concerned about professional as well as public acclaim and credibility, the standard practice for announcing major findings or discoveries has today become a four-step process. The publication of the official report in a peer-reviewed specialist journal, preferably interspecialist ones with wider circulations, like *Nature* or *Science*, is first arranged in advance (path 'j/k1'). The press office will then field in-coming media queries (path 'j/k2'), prepare an embargoed press release (path 'j/k3') and/or organise a press conference (path 'j/k4') to back up the journal's own communiqués and advance copies to media correspondents. This means that journalists and editors may be approached up to four or five times over the same news, each approach being controlled by the informants or specialist editors and being framed in the way that they want to see the information reproduced in the coverage. This superfluity is seen as necessary in order to ensure both that the news stands out from the flood of material that inundates journalists and that the 'trickle down' is extensive and predictable.

Of course, not all archaeological news is accorded such attention from employers and their press offices. News that is not considered worth this investment will struggle to become a priority, and news that could be potentially damaging or counterproductive to employers' interests may be effectively buried. Equally, not every press office is as adept as it should be in handling these strategies (see Pitts and Roberts [1998: 55-57, 239-240] on English Heritage's mistakes in publicising the discoveries at Boxgrove in the 1980s). Even the most carefully stage-managed campaign can never expunge unpredictability from public communication, for there is no way of controlling what other news will be released at the same time (and possibly sideline one's story) or what other angles journalists may feel obliged to pursue in order to make their coverage appear distinct from the homogenised accounts provided by informants, as we shall discover in Chapter Six. Above all, the greater number of mediators and material sources involved in these pathways means that, like in the game of Chinese Whispers, the chances of errors occurring at different stages in the process are increased.

No matter how well established the above routes are, there are still times when, for reasons outlined in Chapter Two, archaeologists will intentionally or

unintentionally depart from accepted practice. In theory, any pathway that by-passes peer review could be seen as, using Bucchi's term (1998: 10), "deviational". But equally, it is clear that some routes that by-pass professional scrutiny, like lectures or on-site activities, are not deemed to be outside of convention. In practice, as discussed above, deviational pathways are those like 'e' and 'f' whereby information is released first to the media. Going straight to the media may accelerate and broaden diffusion, but it does not ensure better coverage. As Bucchi says, with deviation "it is not possible to determine a priori what the outcome...will be or which interests will be best served" (*ibid*: 14). Mass-media-first coverage may also pre-empt one's access to specialist journals, forcing any subsequent debate also to be played out in the public, rather than specialist, arena. It is also likely to incur the opprobrium of the professional community. Consequently, these pathways are most often either chosen in extreme circumstances (when, for instance, a site is under threat), fallen into inadvertently (such as when a journalist's mistranslation caused an avalanche of inaccurate media reports of Murray's Actium 'finds' [Murray 1999]), or the result of precipitous announcements made by over-eager colleagues (as happened in 1939 over the Sutton Hoo discovery [see Phillips 1987: 74-75]). Bucchi (1998: 14) claims that scientists are increasingly using deviational routes, but there is little evidence, with the notable exception of rescue campaigns, that this is the case with archaeologists. Whether due to innate conservatism or distrust of the media, most archaeological communication tends to follow the traditional pathways.

This discussion of how the process of archaeological mediation works has so far underscored a number of key points, namely:

- that archaeologists choose their communication strategies from a wide variety of options,
- that these options are, however, circumscribed by the professional endorsement of certain routes and the greater degrees of individual control offered by others,
- that communication primarily intended for one medium and audience can be picked up by other media and reach other audiences through secondary flow, and
- that the mediation of archaeological information does not function on the source-media-public axis alone, but involves a number of other people who enter at different stages of the process.

It is this final point that prompted me to examine the kinds of mediation work that these others perform within the process, for it seemed apparent that not all 'second mediators' interacted with archaeological information in the same way. Using my template, I produced one final model focused on the 'Roles of Archaeological Mediators' (**Figure 5.7**).

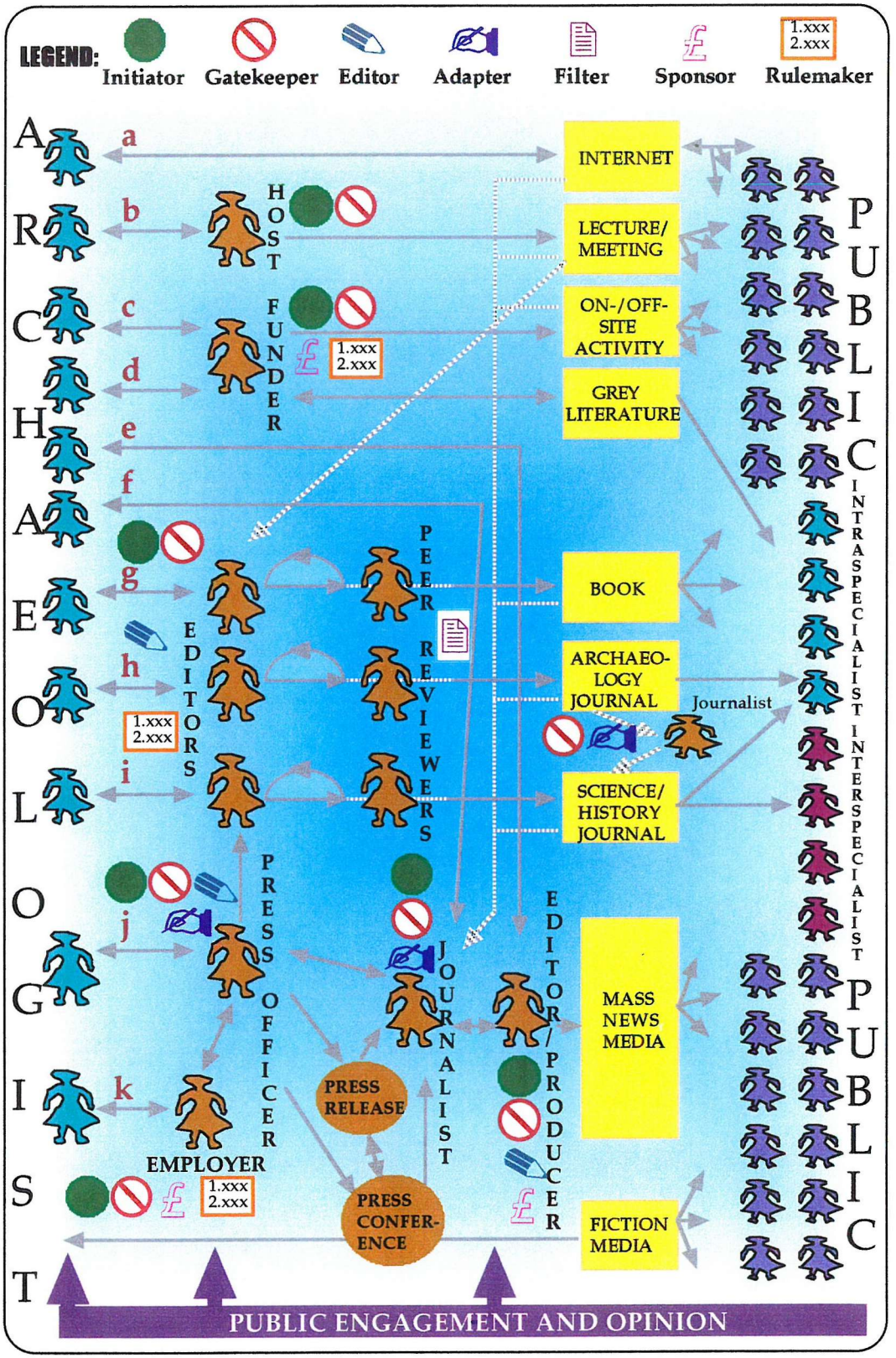
This model identifies seven different roles that characterise the interventions made by 'second mediators' in the process of archaeological mediation, listed here in roughly the order in which they evolved:

1. The *Gatekeeper* is a guardian who judges whether communication passes through the pathway on academic, commercial or 'newsworthiness' criteria, but who is not involved in changing the communication.
2. The *Editor* suggests amendments to the content and form of the communication, based either on individual judgements or the responses of peer reviewers (in the case of specialist editors), and supervises its re-formatting to different media.
3. The *Adapter* selectively re-encodes the communication's content and form, according to the audience, specificities and practices of his/her medium.
4. The *Initiator* sets the communication act in motion, usually in collaboration with the archaeologist, deciding the framing, audience, timing and medium.
5. The *Sponsor* encourages communication in recompense for funding and can influence its framing, timing, and the media and audiences targeted.
6. The *Filter* passes judgement on the quality of the communication's data, methods, interpretations and conclusions, influencing gatekeepers' decisions and editors' amendments.
7. The *Rulemaker* establishes procedures for 'proper' communication.

Examining the development of these roles within the historical framework provided in Chapter One is a useful way of demonstrating how these roles emerged and, more importantly, how control over the mediation process is exerted in different ways and has shifted over time.

Before the 20th century (my phases I and II), antiquarians and archaeologists addressed their peers and the general public through lectures and the print media (paths 'b', 'e', and 'f', and 'g', 'h' and 'i' without peer review). Second mediators

Figure 5.7: Roles of Archaeological Mediators



were consequently few (normally only one other person being involved in each pathway), and their primary roles were those of gatekeepers, editors or adapters. Importantly, half of these mediators were encountered late in the process, for books and articles were normally submitted, rather than being commissioned (and many books were, in any case, self-published). During the 19th century, newspaper editors responded to public appetite and press competition by seeking out exclusive archaeological stories. They thus became both initiators of communication (sending out correspondents to report on archaeological sites and discoveries) and, in a more limited way, sponsors of archaeological activity (like the *Daily Telegraph*'s sponsoring of the 1873 Nineveh expedition). By the beginning of the 20th century, five of the seven mediator roles had been established, although they were played by a fairly limited number of actors. Archaeologists remained, by and large, in charge of their own communication.

During the 20th century (my phases III and IV), the number of second mediators increased dramatically due to the growth in specialist publishing and the advent of new media like newsreels, radio and television. More mediators joined the press either as sponsors of archaeological work or as initiators or commissioners of archaeological communication. Significantly, the increasing professionalisation of archaeology and its specialist channels of communication brought issues of credibility and accountability to the fore, and so the roles of filters and rulemakers were added to mediators' repertoire, as editors began to rely on the peer review system and to establish 'rules' over communication. Thus, in this period, the number of outlets, mediators and roles expanded, and there was a marked increase in interventions taking place earlier in the process. Archaeological mediation became more complex and more collaborative with control being shared between archaeologists and second mediators.

A shift in this balance occurred in the 1990s (my phase V) as a result of the changes in the media and archaeological professions referred to in earlier chapters. More new outlets, more mediators and the dominance of archaeologists' various employers—acting as early mediators of public communication—together tipped the balance in favour of second mediators. Performing every mediation function except that of filter, today's employers and their press officers are the major players in archaeological mediation. They can encourage or discourage, start or stop public communication, amend or re-write archaeological messages, and,

through contracts and practice, lay down rules and procedures about communication that archaeologists must adhere to. It is the nature of the employer's business, the employer's ambitions and agendas, and the audiences that are perceived as being of greatest importance to the employer that decide how the questions about what needs to be said, to whom, when and how will be answered. Universities and institutions may perhaps answer some, if not all, of these questions in similar ways to archaeologists, but the same cannot be said of, for instance, commercial sponsors. Even with so much power, employers' attempts to control communication will not always be successful. From my research, this seems to be because they cannot afford to alienate the media by being too manipulative, because it is impossible to control all the people around a story or who will cover it, or because even their best efforts can be overtaken by other news, re-framed in unexpected ways in order to make stories appear distinctive, or simply ignored. Most poignantly, there is little contesting of their pre-emption of archaeological communication because they are the paymasters and because, as we have seen in Chapter Two, few archaeologists are interested in wresting control back from them.

These new models or 'lenses' have revealed archaeological mediation to be much more complicated than the simple maps of science communication would suggest. Archaeologists and all second mediators exert different forms of control over the process, but, given the complexities and interactions of the different pathways, it is small wonder that archaeologists prefer to focus on the smaller-scale, local outreach routes that afford them greater independence of action, or to rely on the well-established traditional routes through specialist journals, leaving the national media and public to be serviced either by secondary pathways or their employers. Looking at these models, it is easy to see how 'the journalist' could be seen as the central figure, the person to whom so many paths lead, and to conclude that this is where any or all problems arise. In this view, the media "hold all the aces" (Fenton *et al.* 1998: 163, 167; Silverstone 1985: 163). But the point I have made here is that communication is well mediated by archaeologists, editors, peer reviewers, employers and press officers before it gets to journalists, if, in fact, it ever does.

It is not just the relationship between archaeologists and media professionals that is problematic; it is their relationship with all these other mediators. Second mediators approach communication with different goals. Many seek to heighten

their own reputations or control the public agenda of their discipline; others want to achieve commercial objectives. Archaeologists may share the first of these goals, but not necessarily the latter, although even this is now changing. Such conflicts of interest and objectives are bound to create tension and mistrust between them. In the end, trying to answer the question of who is most in control of archaeological mediation misses the point, for communication today is simply too complex and multidirectional, too mediated, for any one answer to be convincing. The more pertinent question, to be addressed in the case studies that follow, is does it matter? To what extent does the source of information and the means used to obtain coverage affect the immediate outcome, the coverage itself, or the long-term prospects for the public communication of archaeology?

Notes to Chapter Five

[1] In 1989, two chemists, Stanley Pons and Martin Fleischmann, announced *first* to the world's media that they had produced "nuclear energy at room temperature in a small jar" (Hargreaves and Ferguson 2000: 14). Leapt on by the media as a breakthrough in creating energy safely and cheaply, their claim caused a furore among scientists as many rushed to reproduce their findings, with no success. Much of the subsequent opprobrium directed at Pons and Fleischmann centred not just on their erroneous findings, but on their deviation from the rules of scientific communication by going to the public without having first published their work in specialist publications where their methods and results could have been vetted. See Hargreaves and Ferguson (2000: 14-15) and Bucchi (1998: 36-81).

[2] In my 'process-oriented' models, I was, for instance, unable to challenge the way that all existing maps focused on message 'content' and left message 'form'—often more important in successful as well as unsuccessful communication—and the differing representational capacities of the various media outside the frame. These are, however, further discussed in Chapters Six and Seven.

[3] As Baker (2002) says, "Most SMRs have not developed beyond planning tools....Most have no capacity to present inevitably technical holdings in ways that can benefit owners, teachers, local communities, tourists and the interested general public."

[4] One recent example of the public being let down by the publication of erroneous scientific news was the fiasco in 1999-2001 around *National Geographic*'s publication and exhibition of *Archaeoraptor*, a bird-dinosaur 'missing link' fossil discovered in China, which was later proven to be an amalgam of two different fossils. Although the magazine "prefers not to break scientific discoveries without having them peer reviewed in advance" (Simons 2000: 130), this did not happen here. *Geographic*'s scheduling of their article on the fossil and its exhibition did not give *Nature* enough time to peer review and publish the scientific report, and *Science* twice rejected versions of the report. Rather than delay their launch, the magazine published the news in November 1999 (Sloan 1999). When faced with the later confirmation that the fossil was a fraud, the magazine's embarrassment was such that they commissioned an investigation and printed the "unvarnished account" and a selection of readers' letters about it in later issues (Simons 2000; Forum, February 2001). By-passing peer review was only one of many things that had gone wrong. Simons (2000: 128), a "veteran investigative reporter", was to conclude that the *Archaeoraptor* episode was "a tale of misguided secrecy and misplaced confidence, of rampant egos clashing, self-aggrandizement, wishful thinking, naïve assumptions, human error, stubbornness, manipulation, backbiting, lying, corruption, and, most of all, abysmal communication." As one reader responded (Carlson 2001): "We can all understand the desire for fame and fortune as potential frailties that may taint validity. Peer review is perhaps the best tool of science for credibility. The notoriety of this event will echo for all scientists and publications, and that may be the true benefit." This incident was the subject of a BBC2 *Horizon* documentary, *The Dinosaur that Fooled the World*, broadcast in February 2002.

[5] This rule was named after Franz Ingelfinger, who in 1969, while editor of the *New England Journal of Medicine*, wanted to protect his subscription-based journal from the competition of free papers and thus decided to publish only articles not released elsewhere first. He later admitted that he had only intended this to apply to rival science publications, but the rule, expanded to include all types of media publication, has since been taken up by many specialist journals (Shaw 2000b: 10-11).

[6] The amount of revising occasioned by peer review in archaeological journals has not, to my knowledge, been studied. The current editor of the *New England Journal of Medicine* recently claimed that 90% of articles published in her journal have undergone "significant revision as a result of peer review" (Shaw 2000b: 11).

[7] Gould (1997: 126-127) does suggest that we may be unable to acknowledge conceptually "a negative result as a phenomenon at all." As he says, new discoveries cannot always be

assimilated because "Sometimes the theory has to crumble first, and a new framework be adopted, before the crucial facts can be seen at all."

[8] In March 2002, an American professor took out a full-page 'advertorial' (i.e. an advertisement that looks like an editorial page) in the *Sunday New York Times* (at a cost of about $100,000) to disseminate his research on the "liquid nature of the sun", a theory "that contradicts accepted thinking" (Anon. 2002d: 7). As he admitted, "I have never submitted this paper to a scientific journal and I was advised by a senior scientist to opt for this course of action."

CHAPTER SIX

SAME STORY, DIFFERENT SPIN I: PRESS CASE STUDIES

On the face of it, shaped timbers found on the Solent seabed off the English coast and nine concentric post-hole circles revealed beneath a ring of standing stones in Somerset have little in common. Yet both discoveries generated a fascinating collection of articles in the British national press when they were announced in 1997. This collection affords us the opportunity to examine in detail how different newspapers covered the same stories and to investigate some of the questions about press mediation raised earlier. The chapter is divided into four sections. The first introduces the case studies and discusses why they were chosen for study, why they were reported in the press and the special problems they posed for journalists. The second recounts the background to these discoveries and their announcement to the press. The third section analyses the informational content of their coverage, looking at the treatment of the core facts and additional information, the framing and language, the messages that were conveyed and the journalists that were involved. The final section examines how the newspapers formally presented their articles, comparing them on a range of criteria like placement, headlines and illustrations.

The first objective of these studies is to ascertain how interested the British press are in bringing archaeological stories to the attention of their readers. Exploring how different sectors of the British press construct their coverage and invest in its formal presentation will tell us much about how papers judge the newsworthiness of such announcements and about their perceptions of readers' capacity to consume scientific information. By giving equal weight to the form and content of these articles, the second objective is to demonstrate the value of addressing textual and visual representation as two separate but interrelated fields of critical enquiry. These case studies highlight the strengths and limitations of both types of representation and offer convincing evidence of British newspapers' practice of communicating science news through a combination of visuals and text. The third objective is to find out to what extent different sources and means of release affect

how these articles were mediated and the quantity and quality of the coverage received. Do different sources and means make any difference, and are they of equal importance in influencing the communication of information? Does the shift towards employer-controlled communication affect the work of journalists and ensure more consistency in the coverage's content and form? Covered by downmarket and midmarket tabloids as well as upmarket broadsheets, these cases also encourage a fourth objective, allowing us to question assumptions about tabloid versus broadsheet coverage. Are only the quality papers capable of "serious" or "elaborate" coverage (Stone 1989: 201; Fenton *et al.* 1998: 40), or are the tabloids given less credit and the broadsheets more than they deserve? In other words, were the 78% of daily newspaper readers who favour the tabloids denied access to 'serious' coverage of these stories, and did the 22% of broadsheet readers receive the 'quality' coverage they expected (ABC: Sept. 1998 [*Guardian*, 23 September 1999, p. 9])?

Introducing the Case Studies

Before proceeding, it would be useful to know the gist of each story.

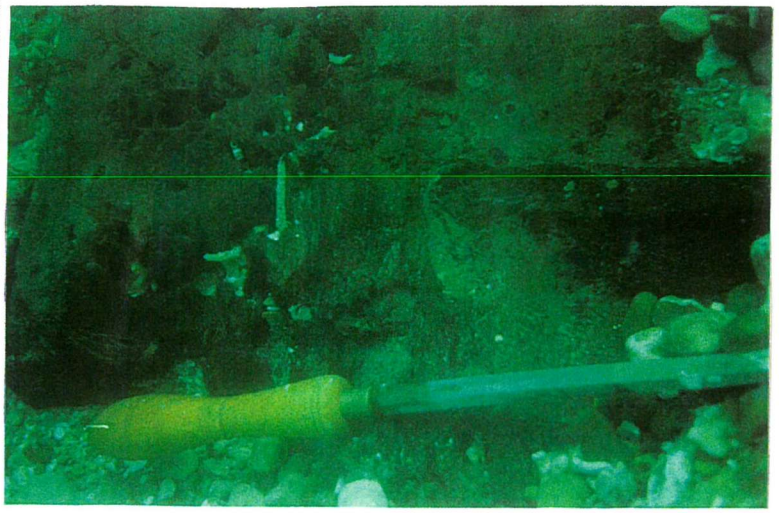
'The Oldest Boat in the World' (OBW)

On the 7th of May 1997, six national papers covered the announcement of the results of carbon-dating tests that confirmed a 6,000-year-old date for shaped timbers that had been raised from the Solent estuary in 1996 (see **Figure 6.1**). Hoping that the timber was from an old, possibly Roman, shipwreck, the divers responsible had been amazed by these results, which led them to believe that they may have found evidence of the world's 'oldest boat'.

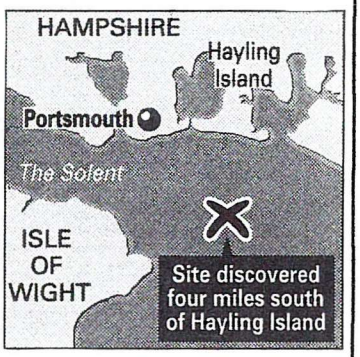
Stanton Drew Woodhenge (SD)

On the 11th of November 1997, eight dailies carried English Heritage's announcement of the results of geophysical surveys it had conducted at the Stanton Drew Stone Circles in Somerset (see **Figure 6.2**). These revealed anomalies in the ground beneath the existing standing stones in the shape of nine concentric rings, likely to be the post-hole remains of timber circles, enclosed by a 135-metre-wide circular ditch. English Heritage experts interpreted the findings as evidence of a woodhenge or wooden temple, dated to c. 3,000 BC, whose size would make it one of the largest of these uniquely British Neolithic structures found to date.

Figure 6.1: 'The Oldest Boat in the World'

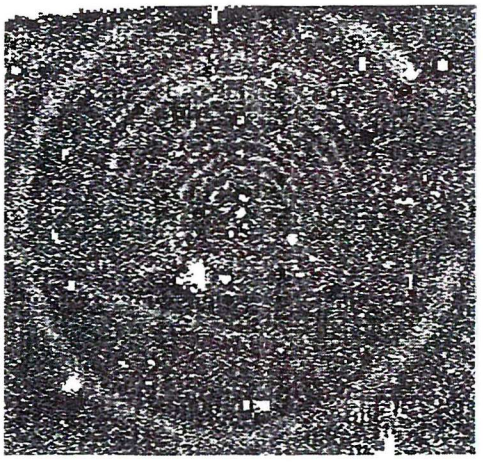


Underwater shot of timbers found
(Source: Don Bullivant)

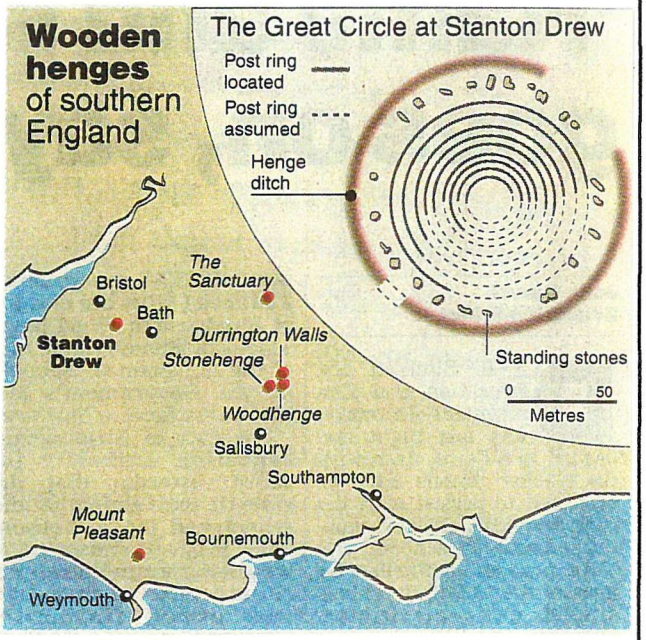


Map of location
(Source: *Daily Mail*, [Derbyshire 1997])

Figure 6.2: Stanton Drew Woodhenge



Magnetometer results
(Source: *The Times*, [Hawkes 1997])



Map of location and graphic
(Source: *The Guardian*, [Bowcott 1997])

What makes these stories, their coverage and their mediation appropriate as case studies? On the level of 'story', these discoveries deal with different disciplines (underwater and land archaeology), different types of finds (artefact, monument), and different methodologies (underwater technology and diving, geophysics). This variety allows press representation to be examined across a range of variables, enabling us to see whether these variables matter in terms of the investment newspapers were willing to make in reporting them. In addition, the discoveries are not easy to explain to lay readers, and although they both fit within a context of earlier finds, neither of them could rely on effortless contextualisation.

On the level of 'coverage', it was important that each announcement attracted sufficient coverage in general and, especially, across the different sectors of the UK press. Choosing announcements that hit the papers on the same day—a defining criterion likely to skew the results towards a homogeneity often, but not always evident in press reporting—was perceived as a necessity in order to ensure that all newspapers had equal time to produce their articles. It was the level of 'mediation', of how these stories were released and by whom, that most justified their selection. OBW was announced in a press release and followed up by phone calls by the divers themselves, without institutional support (Don Bullivant, *pers. comm.*). SD was announced by the chairman of England's pre-eminent archaeological organisation, English Heritage, at a small press gathering in London (BBC 1997). The different status of the informants and their varying abilities to stage-manage the news release offered a way of comparing how these factors influenced the amount, form and content of the coverage. While this explains why I chose these stories, why did the press cover them?

The stories conformed very little to accepted definitions of what constitutes 'news'. Spriggs (1994: 119) quotes a media guidebook as claiming that 'A story or event is considered newsworthy...when it is new, involves conflict, relates to famous persons, is directly relevant to great numbers of people, involves mystery, is considered confidential, pertains to the future, and/or is funny." Our stories only tick, at best, two of these boxes ('new' and 'mystery'). Moreover, they challenged journalistic axioms about preferring controversy over routine, avoiding complex issues, not considering 'methods' as newsworthy and focusing on news with short-term applications or that overturn conventional thinking (Nelkin 1995: 113, 105, 112; Fenton *et al.* 1998: 17). Both discoveries were the result of routine

work involving complicated technology or interpretative skills; neither had short-term applications; and only OBW could be said to have the potential to 'rewrite history'. In addition, contrary to archaeologists' media assumptions (see Chapter Two), the finds were of little intrinsic aesthetic or monetary value. So why report them?

The answer lies in their dramatic and metaphorical potential and in the way they were brought to journalists' attention. In a country that for half a century has had "a rather low level of conflict and drama" (Tunstall 1996: 199), 'dramatic' news is a sought-after commodity, and, as discussed in Chapter Four, science news often needs to be 'hyped' in order to secure its news space. These imperatives help to explain why the sources and journalists were disposed to see, promote and even magnify these discoveries' newsworthiness in terms of their rarity or their potential to be cast in eye-catching superlatives ('oldest', 'bigger', etc.). The fact that the finders were surprised by their discoveries also added to the stories' drama.[1] In addition, the processes involved in each find's discovery allowed their retelling to be easily framed in the popular narrative of a detective story. They could also be connected to well-known references, respectively the raising of Henry VIII's warship, the Mary Rose, and Stonehenge. For stories of little direct public relevance, these connections provided anchors for engaging public interest and making the finds meaningful. Lastly, the news stories emerged not from journalists' scouring of scientific journals, but from press-centred announcements. By directly contacting journalists and especially by organising a press conference, the informants created media events that of themselves were newsworthy.

Despite these positive news aspects, the reporting of these announcements did present journalists with special problems. Given that they dealt with prehistory, their significance, what they represented and how they should be interpreted could only be educated guesswork, even for the scientists involved. The dating of the OBW wood was scientifically confirmed, but were the timbers really part of a ship or could they be something else? There were underground anomalies at Stanton Drew, but were there other explanations for their existence? Pitts (2001a: 21) confirms that some archaeologists were concerned about the 'woodhenge' interpretation, but the "fact that even the most informed archaeologists could come up with little better than [the result of ploughing] left intact the possibilities of a huge prehistoric temple of some kind." But what kind and for what purpose?

That the stories contained unresolved questions was partly a consequence of the announcements being made so early in the work, for they were released just two months after the dating and survey results and before further verification. This meant, in theory at least, that both the informants and journalists were limited in what they could say or report in a definitive manner. As Pitts (2001a: 20) says of the SD press conference, English Heritage "faced a conundrum: on the one hand they clearly had a find of international significance; on the other hand there was really very little that could be said about it." A further problem for journalists was the fact that these stories were integrally linked to complex scientific methods: sonar soundings, dendrochronology and carbon-dating (OBW), and geophysical surveying (SD). To report these stories at all, journalists would be challenged to find ways of explaining these sophisticated concepts to the lay public. A further complication was the intangible, if not invisible, nature of the finds. Making waterlogged timbers and survey blips meaningful would be a substantial test of journalists' skills.

The Discoveries and their Announcement

We now need to turn to the background to each story and how they were announced to the press.

'Oldest Boat in the World'

The finders were divers from the British Sub Aqua Club's Mary Rose Special Branch, which was so named because they, under the leadership of Alexander McKee, had been responsible for re-finding the remains of the Mary Rose in the Solent in the late 1960s.[2] In 1992, they were undertaking a routine sonar scan of the Solent seabed for the local council when an anomaly appeared on the scan off Hayling Island. Although the team were looking for evidence of a Roman causeway, when they inspected the site, they found evidence of shaped timbers, some bound together, and a 'hull depression', suggesting to them the possible existence of a shipwreck. They raised a wood sample and sent it to the Museum of London Archaeological Service for dendrochronological dating and assessment. These first results suggested that the wood pre-dated the 15th century and came from a very cold or very hot climate (i.e. possibly of foreign origin). For a team

eager to find evidence of Roman shipwrecks off the English coast, the results were promising, but in no way conclusive, and they knew this.

The national newspapers were not alerted to this find until July 1996, when one of the divers, Don Bullivant, contacted *The Times* about a memorial service that was being organised to honour McKee, who had died in 1992. Bullivant's purpose in contacting the press was to gain recognition for McKee's work. "One day," he told the journalist (Duce 1996), "I hope he will be recognised as one of the pioneers of underwater archaeology." In his account of McKee's work and ambitions, Bullivant described the Solent timber find, its initial results and their intention to raise the £600 needed for carbon-dating. Although Bullivant did not claim that the shipwreck was Roman, *The Times* was less cautious. Its headline of 18 July read: "Divers believe hull is Roman wreck." Upset by the presumptions in the headline and article, the divers were nonetheless grateful when this publicity brought forth a private donor who covered the carbon-dating costs. Two wood samples were taken and submitted in October 1996 to Queen's University Belfast's Radiocarbon Research Laboratory.

The results came through on the 4th of March 1997.[3] The samples' radiocarbon age (Yrs BP) was 5584±23, with two calibrated age ranges of cal BC 4464-4366 and cal BP 6413-6315 and of cal BC 4492-4358 and cal BP 6441-6307. In other words, the wood was not Roman, but Neolithic. At over 6,000 years old, were these timbers the remains of the oldest shipwreck ever found? Faced with these results, the divers met to discuss how best to manage the public release of this information in order to avoid the overstatements that had occurred in 1996. They agreed to send out a press release and then to speak directly to interested journalists. Although they had photographs of some of the timbers *in situ*, they did not offer these to the press. The press release was sent out two months later, receiving coverage on the 7th of May 1997 in *The Daily Mirror* (Anon. 1997a), the *Daily Mail* (Derbyshire 1997), *The Daily Express* (McGowan 1997), *The Daily Telegraph* (Fleet 1997), *The Independent* (Anon. 1997b), and *The Guardian* (Kennedy 1997).[4]

Stanton Drew Woodhenge

In fields at the village of Stanton Drew in Somerset stand 27 megaliths "in varying states of decay and collapse" forming a circle "about 110m across", its size making it the "second largest stone circle in Britain" (Pitts 2001a: 15). It is, in fact, one of

three stone circles on the site, which lies, as can be seen in Figure 6.2, at the eastern end of a triangle of Neolithic monuments that include Stonehenge, Avebury, Woodhenge, Durrington Walls and the Sanctuary. As Pitts (*ibid*: 15-22) remarks in his account of the discovery, it is surprising that a site of this importance had not received any earlier attention from excavators or geophysicists, other than an incomplete and "essentially negative" resistivity survey in 1961 (*ibid*: 347, note 10). This was to change in the first three days of September 1997, when a geophysics team from English Heritage under Dr Andrew David, its head of archaeometry, conducted a fluxgate magnetometer survey of the ground beneath the circle.

The results of the survey, a non-invasive technique that detects anomalies underground by registering the differences between their magnetic fields and that of undisturbed earth, were to amaze the team. They could make out nine thin concentric rings below and within the standing stone circle and one wider ring, some 135 meters in diameter, possibly a ditch with a large break or entrance towards the northeast, that was outside the existing circle (see Figure 6.2). As Pitts (*ibid*: 19) recounts:

> Stanton Drew was transformed. The ditch added a completely new dimension to the site. And if that fat ring was a ditch, then the thin ones were probably lines of post holes. There were a few ancient ditch rings enclosing concentric circles of post pits elsewhere in Britain...but none even half the size of this.

What the team believed they had found was a woodhenge, a Neolithic timber ceremonial structure or 'temple', one of eight such structures ever found in Britain (and nowhere else), the most recent of which was Durrington Walls, discovered in 1967 by Geoffrey Wainwright, who was now English Heritage's Chief Archaeologist. Confirming the readings became imperative, and in mid-October, they were back surveying at Stanton Drew with a more sensitive caesium gradiometer. This survey "showed that the rings consisted of hundreds of discrete spots about 1m across at intervals of around 2.5m," writes Pitts (*ibid*: 20), "If these were post holes, they must have held 400 or 500 huge timbers." An ancient timber temple, bigger in size than Stonehenge, too large to have been continuously roofed (as it was assumed other woodhenges were [*ibid*: 21; Pryor 2001: 267]), and, although undated, likely by relative chronology to be some 5,000 years old, now seemed on the cards. Four weeks later, on the basis of these surveys, English Heritage held a press conference.

Like the divers in OBW, English Heritage released the news to the media without first publishing the findings in a scientific journal and came to the announcement with a history of problems with the press, despite having been under the helm since 1992 of Sir Jocelyn Stevens, a former newspaper managing director with a 13-year career at the *Express* group. The reason for the haste in going directly to the media was, I would suggest, not unrelated to the fact that its Annual General Meeting was to be held two weeks later. An institution that had delayed the news of the discovery of a 500,000-year-old hominid tibia at Boxgrove so as to coincide with its 10th Anniversary celebrations (Pitts and Roberts 2000: 56-57, 211-212), was more than capable of hurrying the SD announcement in order to create positive publicity in advance of its AGM. Its need for positive PR should also be seen in the context of recent media fiascos. Its press office had, for instance, bungled an agreed embargo with *Nature* over the above Boxgrove announcement in May 1994 (*ibid*: 56-57). More seriously, the organisation's public image had been severely bruised by the "appalling public-relations mess" of the annual stand-offs at Stonehenge between the police and midsummer revellers, 500 of whom had been arrested in the so-called "battle of the beanfield" in 1995 (Wainwright 2000: 939).[5] Some good news from another Neolithic site would clearly be welcome. Thus, despite having "little to say", English Heritage pushed ahead with its 10 November press conference. With no time to prepare reconstructions to help journalists visualise the woodhenge, English Heritage was lucky to find in its archives "a fine watercolour by Peter Dunn" of the Durrington Walls woodhenge under construction (and thus roofless) to add to its press kit (Pitts 2001a: 21). At the gathering, Stevens, Wainwright and David explained the discovery in detail to about a dozen press and TV journalists.

The news broke later that day as the last item on BBC1's *Six O'Clock News* (BBC 1997). The report devoted just under two minutes to the story, managing to pack in footage of the standing stones, a magnetometer survey in progress, Stonehenge, the press conference itself and interviews with Stevens at the conference and Professor Richard Harrison on site. The item explained the significance of the discovery, with Stevens emphasising the uniqueness of woodhenges to Britain and its relevance in terms of "the more we know about them, the more we know about ourselves." Behind the newsreader was Dunn's reconstruction of Durrington Walls, which would also feature in the press articles. The next day SD was

covered by eight newspapers: *The Daily Mirror* (Anon. 1997c), *Daily Mail* (Mouland 1997), *The Daily Express* (Ingham 1997), *The Financial Times* (Anon. 1997d), *The Guardian* (Bowcott 1997), *The Independent* (Keys 1997), *The Daily Telegraph* (Irwin 1997), and *The Times* (Hawkes 1997, de Bruxelles 1997, Anon. 1997e).[6] Any hopes that English Heritage may have had of major front-page coverage were dashed by breaking news from America—about British nanny Louise Woodward being set free despite her conviction for the murder of infant Matthew Eappen—that took over all the papers' front pages.

Content Analysis of Coverage

It is useful to begin by looking at the quantity of coverage these discoveries received (see **Table 6.1**). The absence of the *Sun* and *Daily Star* is proof that these downmarket tabloids judge such stories to be of no interest to the 33% of the British newspaper-reading public whom they serve. Overall, the qualities produced more coverage than the tabloids, but there are more of them, and at least the *Mirror*, *Mail* and *Express* covered both stories, unlike the *Times* and *Financial Times* (*FT*). Counting an article's mere existence, of course, ignores the size factor, and two of the articles (the *Mirror*'s OBW report and the *FT*'s piece on SD) only amounted to three sentences each. In terms of amount, it is probably fair to say that each story received adequate coverage in the midmarket and upmarket papers, certainly commensurate with their status as scientific news and with the efforts expended by their sources.

The following analysis compares how these eight newspapers retold these discoveries and constructed their meaning to the public in text alone. The analysis focuses first on how the core information of who, what, where, when and how was reported and then on how the papers treated other aspects of each stories' news that one might expect to find in their coverage. These aspects include information about interpretation, the finds' significance and archaeological context (i.e. the other finds with which these discoveries should be associated and the environment or society at the time). The analysis then deals with the narrative framing and language used in the coverage, before extracting some of the explicit and implicit messages about archaeology that the coverage conveyed. Finally, it will examine whether the type of journalist doing the reporting affected the

Table 6.1: Breakdown of Coverage of Case Studies by Newspaper Group and by Story

Breakdown by Newspaper Group:

Downmarket tabloids:

The Sun	0	no articles
The Daily Star	0	no articles
The Daily Mirror	2	1 article each story

Midmarket tabloids:

Daily Mail	2	1 article each story
Daily Express	2	1 article each story

Upmarket broadsheets:

The Financial Times	1	no OBW article, 1 article SD
The Daily Telegraph	2	1 article each story
*The Independent**	3	1 article OBW, 2 articles SD
The Guardian	2	1 article each story
*The Times**	3	no OBW article, 3 articles SD
Total:	17	

*: The front-page introduction to the Independent's main SD coverage is counted as a separate article; *The Times*'s SD front-page banner is not because it is only a headline and graphic.

Breakdown by Story:

OBW	6 articles in 6 newspapers
SD	11 articles in 8 newspapers

Total: 17

articles' contents. In the analysis I will be examining overall coverage, taking each paper's main and subsidiary articles together, and only referencing articles separately when necessary to avoid confusion.

I have been mindful throughout this study of two different assessments about how British national newspapers approach scientific news. The first may be out-dated, but it is still likely to represent the views of many archaeologists. "Newspapers also maintain," Stone (1989: 201) has written, "a distinction between archaeology as knowledge and archaeology as popular interest. 'Serious' archaeology is largely limited to reports in the 'quality' newspapers, *The Times*, *The Guardian*, *The Daily Telegraph* and *The Independent*." In their examination of studies about the press response to the GM food debate of the late 1990s, Hargreaves and Ferguson (2000: 43-44) suggest that prejudices about tabloid versus broadsheet science coverage have too often obscured proper critical analysis. This bias has allowed the qualities to go unchallenged and the tabloids to be unfairly condemned. On this latter point, they wrote (*ibid*):

> It is striking, for example, to any reader of the *Daily Mail* that although that newspaper certainly rejoices in an abundance of prejudices...it does also report subjects at a depth and length traditionally associated with the broadsheets....If you read with care the *Daily Mail*'s coverage of the GM food scare, you see, certainly a paper on the warpath: but it would not be true to say that the newspaper left its readers short of information, most of it factually accurate....In other words, even if you had relied only or mainly on the *Mail* for information about GM food, you would have received some plurality of information and opinions, though you would have been in no doubt about the conclusion the paper intended you to reach.

The following analysis tries to avoid automatic assumptions of quality press superiority and tabloid press inferiority and to weigh up these two cases against the above critiques.

The Core Facts

Who

The finders behind the stories are named in all but two instances: once in each story. *The Mirror* calls the OBW finders "divers" and the SD finders "experts", "archaeologists", or "researchers". In OBW, the five other papers mention that the

divers are members of the team that found the Mary Rose and name either Don Bullivant or John Barber as team members. Identifying their connection to the Mary Rose is significant in that it lends credibility to their claims about the timber finds as, given their history, the team could be expected to recognise underwater ship remains. In SD, the *Mirror* is the only paper not to mention English Heritage, with the rest naming, citing their positions, and/or quoting from Sir Jocelyn Stevens, Dr Geoffrey Wainwright or Dr Andrew David. Interestingly, unlike OBW, the actual team who did the survey (Mark Cole and Tim Horsley [Pitts 2001a: 15]) were not deemed important enough to be named, either at the press conference or by the papers, and are referred to only as a "team" in the *Guardian* and *Independent*. Thus, the teamwork that was vital to both discoveries is most explicitly expressed in the OBW coverage, but is mostly ignored in the SD coverage. The naming of individuals was more important to the broadsheets, but with only one absence of name in each case, the means used by sources to announce their news did not seem to make a difference to the reporting of 'who'.

What

The sources' different media strategies also made little difference in how the papers described the subject of the discoveries, for there is much similarity in these descriptions, with only a slight difference in the precision of the definitions, the most precise not always being in broadsheets. Five of the six papers call the OBW discovery "timbers" (the *Independent* preferring "wood"), with only the *Guardian* making mention of their being "shaped" and the *Mail* offering the information that some of them "appear to have been bound together", telling details in support of the shipwreck identification. The SD survey results are consistently referred to as underground evidence of concentric timber circles surrounded by a ditch, and only the *Telegraph* and *Mirror* fail to apply the term 'henge' to the find. The number of rings is mentioned in all but the *Independent* and *FT*, and the *Mirror* produces the only major inaccuracy by identifying the post-hole anomalies as the remains of burial pits (mixing them up with the evidence of burial pits in the centre of the henge). Every paper except the *FT* gives some idea of the woodhenge's dimensions and/or the likely number, size and weight of the

timbers used in its construction. The *Telegraph, Times* and *Express* mention that the structure was probably not roofed, only the *Independent* claiming it was roofed. In addition, the *Express, Times, Guardian* and *Telegraph* all refer to Wainwright's suggestion at the press conference that the timbers might have been decorated or carved. Excepting the *Mirror* and *FT* because of their incorrect or undetailed descriptions, the rest of the tabloid and broadsheet papers expressed adequately and with pertinent details the 'what' of these stories.

Where and When

Of the basic facts, the 'where' was the least problematic, with all the papers correctly identifying the locations of the OBW and SD discoveries. The 'when' of a story is usually not counted in the core facts, since 'news' is supposed to imply 'now'. However, here, I use 'when' to mean the assumed or corroborated age of the discoveries, a salient feature of the stories and a key factor in why the OBW find was announced. The *Mirror* and *Telegraph* settle for "6,000 years old" for the OBW timbers. Three papers use figures derived from the scientific dating to express the timbers' age as "up to 6,441 years old"(*Express*), "6,431 years old" (*Independent*), and "4,300 BC" (*Guardian*). Only the *Mail* actually quotes the (calibrated BP) dates as a range: "between 6,307 and 6,441 years old." Although estimated only by relative dating, something no paper mentions, the SD woodhenge is given as "5,000 years old" by five papers, the *Independent* and *Times* adding "3,000 BC", the figure given in the *Telegraph.* Both the *Mirror* and *Guardian* offer instead a date range ("3,200-2,500 BC"), and only the *FT* gives no date. As with the 'who', the OBW press release seemed as efficient as the SD press conference in getting across the 'where' and 'when' with a measure of accuracy.

How

Although the SD survey and interpretation was a relatively simple process occurring over a matter of weeks, the OBW discovery was complicated and had taken place over five years. The OBW 'how'—from an initial sonar scan through repeated diving expeditions to two different dating tests on raised timber

samples—is not mentioned at all in the *Mirror* and is reported in truncated versions by the *Express, Telegraph* and *Guardian*. It is more fully described in the *Independent* and especially the *Daily Mail* in these terms:

> ***Independent***: ...while investigating a Roman causeway in 1992...they found the pieces of wood.... Initial analysis showed the wood was older than the 15th century and came from either a very cold or very hot climate, but only recently has carbon dating on the wood been carried out.... Electronic soundings of the site...show what could be the shape of a vessel...
> ***Daily Mail***: The timbers were discovered by a routine scan of the Solent in 1992....diver Don Bullivant...discovered a 40ft hull depression in the clay, 30ft below the surface. On later dives, planks and timbers were found sticking out of the seabed....A sample was brought to the surface and sent to be dated using a dendrochronology or 'tree ring' test. But experts at the Museum of London Archaeological Service could not locate the wood type—and suggested it might even have come from the southern hemisphere. Another sample was brought up eight months ago and sent to Queen's University, Belfast, for carbon dating.

Although the *Telegraph, Guardian* and *Express* also mention Queen's University, Belfast, they miss out on the dendrochronology stage of the process, and the *Mail* is the only paper to credit the institution that did that testing. The *Mail*'s decision to focus selectively on the "southern hemisphere" as the wood's origins may have been an attempt to justify its interpretation of the ship's origins, as discussed below. Both the *Mail* and *Telegraph* make the point that the discovery had come as a result of routine work, something that they and the *Express* and *Times* would also emphasise in their SD coverage.

The SD woodhenge was "stumbled upon" (*Mail*) "by chance" (*Express*), and the dailies reported the process in these terms:

> ***Mirror***: Researchers made the find during a survey of the stone circles using hi-tech scanners.
> *FT*: Using sensitive ground-scanning equipment...The technology involved measuring subtle variations in the local magnetic field to map out the underlying features.
> ***Daily Mail***: ...during a routine survey....Using experimental magnetic detectors...(a caption explains that 'a magnetometer...maps magnetic signals from the site'.)
> ***Express***: ...found without a single spade thrust into the soil.... archaeologists made a routine survey with a technique called magnetometry—using equipment to read magnetic signals given off by the soil.
> ***Independent***: ...completely unknown until scientists started surveying the area a few weeks ago...Using the archaeological equivalent of an X-ray, a magnetometer, a scientific team from English Heritage probed deep beneath the surface of the field without digging a single hole.
> ***Guardian***: ...was discovered using a pioneering technique to measure minute variations in the soil's magnetism....The hand-held caesium vapour magnetometer used by Andrew David and his team is capable of measuring variations 100,000

times less powerful than the earth's natural magnetic field.
Times: The traces were found by archaeologists...while they were carrying out a routine survey, using instruments that can detect small magnetic anomalies in the soil without disturbing the surface....'There is now no timber left—it would have decayed long ago. But the disturbance of the soil when the pits were dug to take the uprights shows clearly.' [Wainwright said]...The technique used to find the hidden rings makes use of the fact that any disturbance of soil tends to affect its magnetism. Until a few years ago, magnetometers sensitive enough to detect the anomalies at Stanton Drew did not exist. The existence of the post holes could have been found by conventional digging, but the site has not been dug in recent times.
Daily Telegraph: English Heritage discovered the site during a routine scan using magnetometers....the instruments could pick up tiny variations in the soil's magnetism. Human activity, such as burning, tends to increase the magnetism of buried material. The magnetometers gradually revealed buried concentric circles. They are made up of hundreds of 'splashes' at 8ft intervals. Each splash represents a circular pit a yard wide. Dr David said the magnetic signal may have been emitted by charcoal remains from burning the posts or by the remains of bacteria in the wood.

Only the *Mirror* and *FT* fail to mention the magnetometer, and the *Independent* alone offers an analogy (to X-rays). The *Express, Independent* and *Times* do underline the non-invasive nature of the surveying, but the midmarket papers clearly thought that their readers would not be interested in a detailed account of how magnetometers work, whereas three of the broadsheets anticipated and tried to satisfy their readers' interest and possible questions about the process. The *Guardian* names the advanced magnetometer and highlights its sensitivity, while the *Times* and *Telegraph* offer informative details about why the woodhenge had not been discovered earlier and why the post-holes emitted magnetic signals.

Comparing the transmission of the core facts, it is evident that there was little difference between tabloids and broadsheets in the 'what', 'where' and 'when' of the stories, but that the broadsheets as a whole did greater justice to the 'who' and 'how'. That many papers emphasised the perseverance of the divers, the unexpected nature of the discoveries and the amazement of the finders does conform to the image of science and scientists as described in the 'Nelkin Frame' (see Chapter Four). The inadequacies of the *Mirror* (in both stories) and of the *Financial Times* (in SD) must be acknowledged, as must the superior coverage of OBW's basic facts by the *Mail*. It was in the explanation of the finding process that the press conference produced better results than the press release, for the rest of the core facts came across adequately in both strategies. Would this change when one examines how the papers dealt with other aspects of the stories?

Although it is essential to start with the core facts, their very centrality to journalism means that they are likely to throw up fewer discrepancies in the coverage. It is more productive therefore to look at how the press handled the rest of the information surrounding the stories. There are a number of additional aspects that one would expect to find in their coverage. I have already dealt with one: the different types of scientific work involved (here the use of hi-tech and/or traditional methods of investigation), which was a key factor in the stories and featured in much of the 'how' coverage. Other aspects to be considered are the interpretations, significance and contextualisation of the finds, whether the opinions of other experts were sought and whether there is mention of future work to be undertaken. SD also opened up other issues specific to its story.

Interpretation/Significance/Contextualisation

How these three aspects were dealt with in our stories is perhaps the clearest indicator of differences in the coverage. In theory at least, evidence that is seemingly irrefutable (e.g. a named tomb) is less likely to produce wildly inaccurate interpretations, but archaeological evidence is seldom that conclusive, especially when it comes from so far back in time, as these finds do. Thus, how the newspapers reported the interpretations surrounding the OBW and SD evidence is our first concern. Based on these interpretations (and scientific dating), the sources made claims about the significance of their discoveries, chiefly relating to their antiquity or size, and it is instructive to compare how these claims were handled in the coverage. Finally, one needs to look at how this significance was contextualised. Both archaeologists and journalists put great store in 'context' and comparisons: the former primarily for reasons of corroborative evidence, the latter to increase readers' understanding by slotting new information into existing frames of reference. How were these finds positioned in relationship to previous finds or existing knowledge? And were they accompanied with any contextualisation of what life was like at the time when the 'oldest boat' sailed the seas or the largest woodhenge was constructed?

The OBW discovery provided the most problems in terms of interpretation, as the antiquity of the dating results on the timber had "shocked the diving club" (*Telegraph*)—whose members had expected a Roman date—and had made them cautious about their 'ship' identification. "We don't really know what we have got....Hopefully it is a ship....[the sonar scan evidence of a ship shape] could be misleading," Bullivant is quoted as saying in the *Independent*. "We are fairly sure the wood comes from a ship" is how he is quoted as putting it in the *Express* and *Mail*. The pro-ship evidence is based on the divers' expertise, but also includes the "hull-depression" found on the site (three papers), the shaping of the wood ("the timber has certainly been worked by man" one of the divers says in the *Guardian*) and that some timbers are "bound together" (*Mail*).

All the papers, except the *Mirror*, question the interpretation, implicitly by using conditional language (e.g. "may", "believe", "if") or explicitly ("It is possible the wreck is not a ship" [*Mail*]). Two papers base this doubt on the different coastal environment around the Solent in Neolithic times. The *Mail* tells readers that "Six thousand years ago the coast was very different and what is now sea bed may then have been dry land." The *Independent* reports that "It is not clear as to whether the site would have been dry land or shallow water at the time, and the likelihood of a 100ft long vessel existing in northern Europe at that period is extremely remote." (Where the *Independent* got "100ft long" is a mystery, since the only figure given consistently is 40 ft.) Surprisingly, only two papers propose alternative interpretations: Bullivant offers "a clump of trees" or "a building" in the *Independent* and Dr Margaret Rule suggests "a walkway across mud flats" in the *Telegraph*. Taking into account the age, coastal changes and (as no paper did) the wetland archaeological work at the Somerset Levels (Hayes 1993: 48-49) and Flag Fen (Pryor 2001: 291-292), even shaped timbers bound together seem to suggest that Dr Rule's interpretation might be the most plausible.

Despite these doubts, it was perhaps inevitable that journalists (and readers) would be curious as to what a 'boat' of this age might have looked like. The divers were circumspect, Bullivant admitting in the *Telegraph* and *Mail* that "it is too early to say for sure what the ship might look like." Both papers however persevered. Although "keeping an open mind" and preferring the walkway alternative, Dr Rule ventured that "This may be a raft" in the *Telegraph*. The *Mail*'s science

correspondent similarly pushed Bullivant to speculate that, as paraphrased in the report, "it would probably be similar to primitive rafts used by Egyptians to transport stone for building pyramids." The paper goes further by reporting that "archaeologists" had said that "it might even have sailed from Egypt, either crewed by adventurous traders or swept dramatically off course by a terrible storm." These informants are, not surprisingly, unidentified, and the attempt to pursue this angle would result, as we shall see below, in an attractive but suspect graphic reconstruction of Egyptians sailing along the English channel. It seems clear that the divers should have been better prepared to answer what was, after all, a fairly predictable question about their claim. Admittedly, they would have had little to gain in terms of raising interest in their future work if they had been more forthcoming about alternative explanations, although they undoubtedly learned a lesson about being too forthcoming in offering analogies.

The significance of the discovery was bound up in its being identified as a ship, 'the oldest' one ever found. The *Mirror*, *Express* and *Telegraph* express its significance in relation to how this find pushes further back, by 2,000 years, the date when "man first went to sea." This striking but debatable trope probably came from the sources, for Bullivant is quoted in the *Independent* as saying that the earliest ship so far recorded "is 4,000 years old", presumably a reference to the Egyptian Khufu boat of about 2,600 BC (Delgado 1997: 222). The *Mail* and *Independent* chose instead to tie the boat's age to pre-dating or 2,000 years before the construction of the Pyramids and Stonehenge. Thus, both tabloids and broadsheets sought simple, accessible 'hooks' to explain OBW's importance. Exceptionally, the *Guardian* offered the most modest and insightful appraisal: "Marine archaeologists were immediately sceptical that it could be a boat, but said shaped timbers from such a date were of great interest whatever the structure."

Regarding contextual associations, most ship references in the OBW coverage are to the Mary Rose, useful reminders of the diving team's history, but, as a 16th century vessel, irrelevant in terms of context. Only the *Independent* and the *Guardian* refer specifically to other early boat finds. The *Independent* incorrectly dates a Dutch dugout canoe to 8,000, rather than 11,000, years ago (Delgado 1997: 68), and the *Guardian* mentions the Dover Boat, the "oldest plank-built sea-going vessel ever found...estimated at 1,300 BC." The *Independent* also reports, albeit

unattributed, that "it is known that humans were carrying out ocean voyages of 200 miles 25,000 years ago, and 50 mile sea journeys as long as 60,000 years ago." While these broadsheets made some effort to contextualise by comparison, only the *Mail* tried to combine archaeological and human context:

> Britain in 4,000BC had only recently become an island with the end of the Ice Age. Many people were turning to agriculture with animals from the Continent, suggesting that Stone Age man crossed the Channel in large boats. Other animals and plants used by the earliest farmers originated in the Middle East. In Egypt, farmers were sailing up and down the Nile in large boats by 4,000BC.

As we shall see again below, the midmarket tabloids place great importance on drawing a picture for their readers of what life was like in ancient times, here specifically explaining why boats were needed by Stone Age Britons (and possibly trying to bolster the Egyptian link). It is tempting to see this as 'talking down' to readers, but I would question how many broadsheet readers knew the above details left out by their newspapers. The midmarkets clearly feel that such background information humanises a scientific story, engages readers and fills in the kind of details that engender greater understanding and meaning.

Interpreting the Stanton Drew woodhenge was more straightforward, due to the status of English Heritage, the visible survey results, the structure's distinctive nature and the lack of any proffered alternative interpretations. What clinched its designation as a henge (*FT*), henge and temple (*Guardian* and *Times*), and wooden temple (the rest) was the involvement and expert testimony of Dr Wainwright, not only the institution's Chief Archaeologist but also the person who had directed the excavations at the Durrington Walls woodhenge in 1967. Not surprisingly, his assessments and comments are heavily quoted or referred to in almost all the papers. English Heritage had also anticipated, and readied the Dunn watercolour of Durrington Walls to answer, the question about what it would have looked like. The interpretation that remained in question was the woodhenge's function.

The *FT* and *Mirror* make due with "ceremonial site". The rest of the papers reiterate Stevens's and Wainwright's comments about the woodhenge being a symbol of power or focal point for the local community where "feasting" may have taken place (*Mail*, *Telegraph* and *Times*) and, as the *Times* put it, "people address the supernatural." Three newspapers discuss this at great length:

Daily Mail: The scientists believe the Stanton Drew temple was a regional centre of the supernatural, where people would ask the priests to help with everything from good health to prosperity. 'They believed in the supernatural and thought it was controlled from these temples,' said Dr Wainwright. 'If you wanted to know your sheep was going to have triplets, or wanted rain to save your crops, it was the place to come. They were very powerful people because if you went to them they could tell you anything under the sun, as long as you gave them what they were looking for.' In return for a promise of good weather, or a healthy lambing, the farmers would present the priests with gifts—stone axes were a particularly good currency.
The Guardian: 'These monumental structures became symbols of power, which were believed by the people of the time to control the supernatural,' the Chairman of English Heritage, Sir Jocelyn Stevens, said yesterday.... [Wainwright said] 'The wooden temples are generally oriented so that their entrance pointed towards the rising sun. Discarded flat-bottomed pottery, decorated with spiral motifs or geometric patterns, and the bones of pigs suggest they they were complex ceremonial sites. They were the focal points for the exercise of power in the local area.'
The Independent: At the centre of the building, the scientists detected five large pits which may have been for sacrificial offerings. Evidence from other similar but much smaller sites has in the past shown that human and animal sacrifices were almost certainly carried out in such temples. In the 17th century, when one of the stones at Stanton Drew fell over, human remains were apparently discovered in the hole where the stone had been....The newly discovered giant building at Stanton Drew was probably used for sky worship of some sort. The main entrance faces towards the point on the horizon where the sun would have risen on midsummer's day. Precisely what went on at such sites remains for the time being largely a mystery. As well as having a probable sacrificial function, it could also have been associated with fertility and water rituals....At some similar yet smaller sites large numbers of human jawbones have been found and such places may have been used as temples for communicating with the spirits or gods through the ancestors.

Despite worries about not having enough to say (Pitts 2001a: 20), English Heritage clearly found and developed an exploitable angle of great interest to most journalists, especially to the only archaeological correspondent to cover the story (David Keys of the *Independent*), who offered the most varied interpretations.

The woodhenge's significance is framed in every newspaper as being as old or older, larger, and/or as important as Stonehenge. Although two papers modestly refer to the discovery as shedding light on the "darkest age" (*Mail*) or a "transitional phase" (*Guardian*) of British prehistory, Keys in the *Independent* is altogether more bullish:

> The discovery is without doubt one of the most important archaeological finds made anywhere in the world this century. Although there are no gold and no inscriptions, the sheer scale of the newly discovered building suggests that prehistoric south-west England was even more sophisticated than has been thought until now....this giant building with its forest of massive columns is likely to force a total re-examination of the nature and scale of Neolithic Britain.

Three newspapers make the patriotic point that henges are "unique to Britain", with the *Telegraph* quoting Stevens saying that "In world heritage terms, wooden temples are one of the things that make Britain of international significance." The *Times* manages to squeeze in references to the Pyramids in its subsidiary article (Anon. 1997e), trumpeting the fact that the woodhenge was built 400 years earlier and that the builders of the henge were "near-contemporaries of those who invented the wheel in Mesopotamia, and the sail in Egypt." Interestingly, the tabloids alone pursue an economic angle. The *Mirror* cites the local publican as saying that "Tourism will go ballistic now." The *Mail* however warns the publican "rubbing his hands in preparation for an avalanche of trade" that "he may have to wait," for "Tourists expecting another Stonehenge will be disappointed as nothing of the temple itself remains." It adds that English Heritage "was at pains to point this out 'to prevent a sudden and unmanageable rush of tourists to the site'." The *Express* similarly cautions eager tourists: "Sightseers who pay a £1 entrance fee to visit the rings will have to use their imagination."

In terms of archaeological contextualisation, given their British uniqueness, it is disappointing that the *FT*, *Mirror* and *Express* only refer to Stonehenge and that the *Mail* and *Times* only mention the existence of seven other woodhenges without naming them. The *Telegraph* and *Guardian* draw comparisons with Durrington Walls, Woodhenge and the Sanctuary, with the *Guardian* adding Mount Pleasant in its text and placing them on a map of the area, as we have seen. The *Independent* chooses instead to refer to the well-known Neolithic sites of Silbury Hill and Avebury. It is also the only paper to offer some account of the configuration, date and religious significance of Stanton Drew's stone circles.

All the papers, bar the *FT*, try to say something about SD's Neolithic context in terms of human activity and society. Conforming to stereotype, the *Mirror* only refers to "savage rivalry between groups of Neolithic man at Stonehenge and the new site." The other papers are more expansive:

> ***Daily Telegraph:*** [Wainwright said] 'It was a time when people were quite well off, with time and wealth to begin to build and create social and tribal structures.'
> ***The Guardian:*** ...around 3,200 to 2,500 BC—when tribal societies were emerging in southern England....Little is known about the men and women who built the timber temple. It is likely, however, to have been a religious centre controlled by a priestly hierarchy at a time when Britain's population had reached one million.
> ***The Express***: 'It was the focal point of the tribal territory and shows that 5,000 years ago these people were beginning to organise themselves into society' [said

Wainwright]...In an age when everyone lived in small huts, the wooden henge would have been as imposing to Stone Age farmers as Durham Cathedral was to medieval peasants.

The Independent: The picture that is increasingly emerging of the Neolithic age in the Wiltshire-Somerset area, is of a very complex hierarchical society in which massive power must have rested with either kings, paramount chieftains or priests. The economy appears to have been based on cattle ranching—but huge amounts of man-power were diverted to the construction of vast monumental buildings and other structures....Some archaeologists have already suggested very controversially the existence of small towns or even states. This extraordinary discovery will force academics to consider whether it is evidence of an embryonic civilisation which failed to survive in the long term.

The Times: [Wainwright said] 'By this period, a social structure was developing, with distinct tribal areas. The temples were focal points for these tribes, where they gathered and held feasts. Other wooden henges contain masses of pig bones, along with decorated fragments of pottery. It looks as if the people deliberately broke the pots and scattered them around.' At the time, the population of Britain may have been as great as one million, according to Dr Wainwright. 'It's a great mistake to think the people who built this place were rude, untutored, starving individuals. They were very sophisticated with successful agriculture and made beautiful items such as carved stone axes for barter.'

Daily Mail: It also draws back the veil on a lost people and their fascinating way of life. The temple was built at a time when Britain had just become an island and its one million population was forming itself into tribes. They were relatively prosperous times, with families owning land and livestock, and communicating through a rough Celtic language....Stanton Drew man, and woman, lived in roundhouses, built of timber uprights with wattle and daub walls and thatched roofs. The houses were quite spacious inside, usually just a single room although some were partitioned. They were basically farmers, tilling the soil and growing wheat and barley. Livestock included sheep, cattle and pigs. To supplement the diet, men hunted deer and boar in the forests. Although there were no marriage ceremonies as we know them, families tended to stick together and raise children. Nor were men necessarily all long-haired and bearded—some shaved. Facially, and in size, the people of Stanton Drew would look little different from those who live there today. They wore rough woollen garments, including tunic and trousers, plus linen and leather. Cloaks and simple hats kept out the cold.

As with the woodhenge's function, this contextualisation was seen as a valuable angle to develop, with both tabloids and broadsheets giving readers some picture of Neolithic life and in so doing disabusing them of some of the misconceptions that the journalists and archaeologists clearly thought they held.

Dr Wainwright's breadth of knowledge was clearly an asset in providing this 'back-story'. But it was Stevens who offered up the parallel that would have the most resonance with British readers by equating the woodhenge with the Millennium Dome, the enormous and expensive temporary structure then under construction in East London and the subject of heated public debate. "They were

expressing their power by building these great rings, just as we are celebrating the millennium by building a huge dome," he says in the *Times*, adding that "This is clearly a very British habit, and it is 5,000 years old." In the *Express*, the same connection is reported with Stevens suggesting that the antiquity of the habit "must be very encouraging for Peter Mandelson," the government minister then responsible and under fire for the Dome. The *Express* also makes cogent analogies to the Royal Albert Hall (as a size comparison), to Durham Cathedral (as a parallel explaining the woodhenge's imposing presence) and to "Red Indian totem poles" (as a reference to what the carved timbers might have looked like). Its reporting of Stevens's attempt to compare the woodhenge with "London in the Swinging Sixties" was altogether less compelling.

From the above, it is clear that interpretation, significance and contextualisation are, like the 'how,' treated as the most newsworthy features of these stories, particularly in midmarket and upmarket papers. There is also a marked concern, in all but the *Mirror*, for maintaining an open mind about the OBW claims and the woodhenge's function. Less ambiguity surrounds SD's claim to significance, and this is surely a reflection on the greater perceived credibility of the sources and their methods in announcing the news. Context does seem to mean two different things here: scientific context to the qualities and human context to the tabloids. Both approaches create their own problems: more potential scientific errors in the former and more 'off course' interpretations in the latter.

Expert Opinion and Future Work

The number of experts whose opinions about scientific claims are solicited by journalists will depend on the authoritativeness of the sources, whether the information comes from already peer-reviewed publications, and/or how controversial the claims being made are. It is therefore surprising that few specialists were asked to comment on the OBW find. Despite some blind references to "archaeologists" in the *Guardian* and *Mail*, only these papers and the *Telegraph* cite specific "marine archaeologists": Peter Marsden, Sean McGrail and Margaret Rule respectively. All three questioned the claims, but welcomed the news as "exciting". Dr Rule's contribution, already referred to, added substance to

the *Telegraph*'s coverage, as did McGrail's to the *Mail*. "If this turns out to be a boat it would be enormously significant," he is quoted as saying, "We know people were using the seas from 6,000BC if not earlier, but all we have to go on is boats from a much later period." Regarding future work planned by the divers, the *Guardian* mentions their plans of conducting a full survey, the *Mail* says that they hope to lift further timbers when they "can get funding", and the *Independent* reports that they intend to seek further expert opinion in identifying and dating the wood. As it turned out, no further monies were raised, and no subsequent work was, in fact, undertaken (Don Bullivant, *pers. comm.*).

With Dr Wainwright and Dr David present at the SD news conference, the press apparently felt little need to supplement their contributions with comments from other experts. The two that are quoted (Paul Linford in the *Mirror* and Aubrey Burl in the *Independent*) provide no great insights: "It is enormously significant," says Linford, and the discovery is "magnificent", says Burl, who does predict that the use of such technology may lead to future discoveries. The three tabloids display less concern with seeking expert verification than with trying to inject human interest into their articles through interviews with the local publican, vicar or farmer, all three in the *Mail*. None of these justifies its inclusion: the farmer "can't get that excited" (*Express*), the publican thinks it "fantastic" (*Mirror*) and the vicar says "we are all very pleased" (*Mail*). It is instructive that both attempts to supplement the content beyond the information offered to all the media at the conference (and thus to make their coverage distinctive) added little to the substance of these reports. The *Telegraph*, *Express* and *Times* confirm that there are no plans for major excavations at the site, although the *Times* and *Mail* suggest that a partial or small excavation might be done to confirm the ring remains are post holes. Significantly, the *Mail*, *Telegraph* and *Guardian* report that English Heritage may now use the surveying technology at other stone circles.

Special Features of the SD Story

Two more aspects of the SD discovery deserve attention because they develop further angles or illustrate how different papers responded to the challenge of relating these finds to other news stories. One of these involves the woodhenge's

construction. While the *Express* only quotes Wainwright on how "experienced" the builders must have been at lifting five-ton posts, the *Telegraph* and *Times* (Anon. 1997e) offer their readers a picture of how the posts were put in place:

> ***Daily Telegraph***: Neolithic man would have erected the posts by inserting a ramp into each pit, ramming a post down the ramp and then pushing the post upright.
> ***The Times***: The henge was built in much the same way as Stonehenge. Pits up to four metres deep were dug, and ramps arranged alongside them. The oak pillars were dragged and pushed until they overbalanced into the pits, and were then pulled upright. The wooden henges would have lasted for up to 400 years before needing replacement.

It is surprising that it was broadsheets, not tabloids, which favoured these active descriptions. More surprising still is the *Daily Mail*'s unique reporting of what may have been behind the change from timber to stone circles:

> ***Daily Mail***: It is thought the ancient Britons switched to stone temples when the country began to face an early forestation crisis. Dr Wainwright explained: 'It would have taken 18 acres of mature oak forest to build this temple. We had the equivalent of a rainforest situation in the UK and all the evidence suggests that Britain was deforested by 2500BC.'

The other aspect worth raising relates to how other news was accommodated in the SD coverage. The Stanton Drew discovery was bound to send some journalists scurrying for colourful 'yarns' about the existing stone circles. The one attached to Stanton Drew is most succinctly summarised in the *Express*: "According to local legend, the stone circle was created by the Devil when he turned a party of dancing wedding guests to stone." The *Telegraph, Guardian, Mirror* and *FT* were not enticed to include the legend; the *Mail* and *Independent*, like the *Express*, mention it briefly towards the end of their articles; but the *Times* devotes an entire subsidiary article to it and other Stanton Drew legends (de Bruxelles 1997). While distinct from the SD piece and informative on aspects of local history, this article and its saucy headline ("Bride eager to dance had Devil to pay") seem out of place in a quality paper.

Framing and Language

The coverage of these discoveries offers some insights into the issue of whether or not the media focuses on results or on the processes that produced those results. In OBW, the relative shortness of four of the articles means that they tend to

emphasise the results, whereas the *Mail* and *Independent* have sufficient space to retell in detail the sequence of events that led to the find. In SD, a balance is reached between the two focal points with ample descriptions of both the surveying and the woodhenge and its probable functions. Although both stories are framed as 'quests', personalisation is confined to reporting the amazement of the finders to their survey or dating results (e.g. "stunned", "amazed", "astonished", "mind-boggling"). What comes across in the coverage is the accidental nature of the discoveries, both occurring during the undertaking of 'routine' work. These features of the coverage give readers the impression that scientific discoveries are often unplanned, the result of a combination of luck, intuition and incremental work undertaken by dedicated teams. This impression partly conforms to the way science is usually framed by the press, as outlined by Nelkin. The fact that so many articles emphasise the finding process, however, contradicts the assumptions about science coverage made by Nelkin and others.

In terms of the language used, the broadsheets are clearly more comfortable than the tabloids with using sophisticated or scientific terminology. There is a difference in calling the SD technology "experimental magnetic detectors" (*Mail*) or a "caesium vapour magnetometer" (*Guardian*), in describing Neolithic social structures as "tribes" (*Mail*) or "a very complex hierarchical society" and "an embryonic civilisation" (*Independent*), or in referring to Dr David as a "senior English Heritage science expert" (*Express*) or the "head of archaeometry" (*Times,Telegraph*). Yet all this really tells us is that broadsheet readers are presumed to have a more extensive vocabulary and level of education than tabloid readers. Despite this, the quality papers do explain terms (the *Independent*, for instance, equating magnetometers with "X-rays"). Moreover, the midmarket tabloids do expose their readers to difficult terms most relevant to the stories like dendrochronology (*Mail*) and magnetometry (*Express*).

There are also exceptions to the assumption that tabloids employ more evocative language than broadsheets. As mentioned above, it was the broadsheets that recounted with relish the details of the woodhenge's construction, its probable functions and other SD legends. In terms of descriptive panache, the *Express* and *Mail* do edge past their competitors in making the news alive to their readers, by putting flesh and bones (and hats and cloaks) on the humans behind the stories.

As we have seen, almost all the papers use familiar allusions to anchor these stories (e.g. the Mary Rose, Stonehenge). But the midmarket tabloids make a special effort to find other anchors (like those in the *Express*'s SD article) that collapse the distance between modern readers and their Neolithic ancestors and thus give these ancient finds some contemporary relevance. These comparisons are thus not just journalistic embroidery, but constituent elements in engendering public understanding. Overall, both the frames used to shape these stories and the language employed demonstrate a far less polarised approach to scientific news reporting in the tabloids and broadsheets than one might expect.

Messages

Looking at the content in the coverage as a whole, what messages about archaeology did the public receive? At least nine messages about archaeological practice emerge from these stories:

1. That the process of archaeological research is rarely about finding concrete evidence intact and immediately recognisable, but is more often a time-consuming, unpredictable and unglamorous endeavour that depends on chance, intuition, interpretative skills and perseverance.
2. That archaeology is not just about 'digging', but involves the use of hi-tech technologies that do not require the raising of a trowel.
3. That new discoveries can come from undertaking routine work.
4. That such work is undertaken not by individuals but by teams of people, one's fieldwork colleagues as well as outside specialists.
5. That discovery is only the beginning of an even longer process of study and testing necessary before final judgements can be made.
6. That an artefact need not be a priceless treasure to be significant, for artefacts or evidence of little intrinsic worth, some virtually invisible, can be even more valuable in terms of expanding our understanding of the past.
7. That finds or their functions can be differently interpreted or remain illusive to interpretation even within the profession, and that this is normal, not a sign of conflict.
8. That a find that turns out not to 'rewrite history' or to be different from what

one expected does not automatically lose its significance, and

9. That finds of great significance are rare, not frequent occurrences.

The stories sent out additional messages about the uniqueness and importance of Britain's archaeological heritage, about how new finds can challenge or add to existing knowledge about Britain's past and about how Neolithic Britons were more adventurous and sophisticated than previously or popularly imagined. While these messages are not exhaustive, archaeologists might be surprised at the number of worthy messages that arose from these stories. This leads to a final question: did it matter who the journalist was?

Journalists

As can be seen in **Table 6.2**, these 17 articles were written by a variety of journalists. Received wisdom is that it should matter whether an archaeological correspondent, specialist or generalist covered these stories. Overall, more non-specialists (generalists or unnamed reporters) covered these stories (at 59%) than specialists (at 41%), and more specialists were used in the broadsheets (5) than in the tabloids (2). The only article written by an archaeological correspondent (David Keys in the *Independent* on SD) is, however, only marginally longer than the *Mail*'s SD coverage by a generalist and is written in a literary rather than journalistic style. It does offer the most interpretive account of the woodhenge, but it is occasionally wrong (e.g. over the woodhenge being roofed) and over the top in assigning significance to the discovery. It is not appreciably better than the coverage written by the *Telegraph*'s science correspondent or the *Times*'s science editor. With only two specialists involved, the OBW coverage might have benefited from the more questioning approach that more specialists might have brought to it. The SD story was covered by more specialists, and they produced four of the five largest articles. But do specialists really matter?

It was, after all, the *Mail*'s science correspondent who was responsible for OBW's most contentious article. Even unnamed reporters sometimes produced the better coverage, for the *Independent*'s OBW article is almost twice as long and more informative than the piece in the *Guardian* by heritage correspondent Maev

Table 6.2: Type of Journalist Covering the Stories

No by-line	5	*Daily Mirror* (OBW, SD), *Independent* (OBW), *Financial Times* (SD), and *Times* (SD subsidiary article)
Generalist	5	*Daily Mail* (SD), *Daily Express* (OBW), *Daily Telegraph* (OBW), *Guardian* (SD), and *Times* (SD subsidiary article)
Specialist	7	
Of which:		
Heritage Correspondent	1	*Guardian* (OBW)
Archaeological Correspondent	2	*Independent* (SD)
Environmental Correspondent	1	*Daily Express* (SD)
Science Correspondent	2	*Daily Mail* (OBW) and *Daily Telegraph* (SD)
Science Editor	1	*Times* (SD)
Total:	17	

Kennedy (although her shorter report is more 'accurate'). In SD, the article written by the *Mail*'s generalist reporter (Bill Mouland) was 50% longer than the *Express*'s article written by environmental correspondent John Ingham, although both produced creditable accounts. Given the detailed information offered by English Heritage, there would, of course, be little excuse for the SD reporters, of whatever status, to produce inadequate pieces, as the *FT* and *Mirror* did. A reporter's pedigree will matter less the more stage-managed the news release is and the more authoritative the sources are, making it hard to judge better or worse coverage on the basis of the type of journalist who covered it.

Conclusion to Content Analysis

Comparing the way eight dailies handled the content of these discoveries has deepened our understanding of distinctions that do exist in the British national press's coverage of archaeological news. First, it is clear that the downmarket *Mirror* and upmarket *Financial Times*, representing the greatest extremes in terms of readership profiles, are the least committed to providing their readers with such news. The other papers do display this commitment: proof that six out of ten dailies reaching some six million people do deem such stories to be newsworthy.

Second, regarding the tabloid versus broadsheet debate, this analysis has shown that the four interested broadsheets tend to give greater attention to open discourse, archaeological context and scientific detail, while the midmarket tabloids tend to devote more space to human contextualisation. This dichotomy could be seen to substantiate Stone's (1989: 201) distinction between papers that treat "archaeology as knowledge" and those that treat "archaeology as popular interest". Yet there are numerous examples above where newspapers cross this divide, and where all three newspaper groups play to popular interest by relying on a very limited repertoire of familiar anchors, like the Pyramids and Stonehenge. I would contest Stone's simplistic division and his implicit equating of 'serious' archaeology only with the quality papers' knowledge-based treatment of the subject. In this view, one presumes, technological explanations are 'serious/knowledge' and explorations of lifestyle are 'non-serious/popular interest'. Yet, if knowledge means "thoughts and information in perspective, in

meaningful contexts" (Gripsrud 1999: 35), then both are elements of 'serious' archaeology that help to build the public's knowledge of the subject. The *Times*, *Guardian*, *Telegraph* and *Independent* may have generated between them 62% of the words used to express these stories' content, but the *Daily Mail* and *Express* did not leave their readers "short of information, most of it factually accurate", to reiterate Hargreaves and Ferguson (2000: 43).

Third, this analysis has also shown how important the media strategy chosen by the sources was in affecting the content of these articles. It was ultimately more important than either who the sources were or the choice of journalist. The OBW story suffered in both amount and depth of coverage, not because the story was of lesser importance or the divers were less credible, but because the divers were less well prepared and their press release and phone calls less efficient at addressing the variety of questions that journalists would have. Without the backing of an institution and the funds to create a media event, the OBW divers were at a clear disadvantage. At its press conference, English Heritage was better able to control how the news was released across all the media (receiving exposure on that evening's TV news as well). It was also able to provide journalists with a total package: illustrations, personal accounts, experts to flesh out the background and answer questions and spokespeople, like Sir Jocelyn Stevens and Dr Wainwright, who understood the value of succinct and quotable summations.

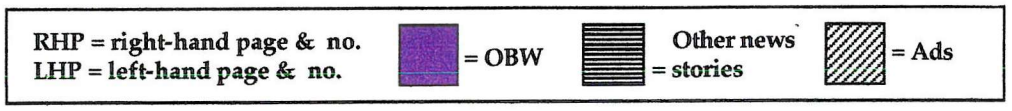
What is also clear is that successful stage-management of news release does lead to homogenised content. This may be welcome news for sources, for they will have ensured some congruency of information across the newspaper spectrum. However, it is not good news for the public, for it is not in the public interest that they should be deprived of critical or investigative reporting. Nor is it ultimately good news for archaeologists, for they should surely want their profession to face proper scrutiny. It is not even good news for the press, for, although it makes journalists' jobs easier, it reduces newspapers' opportunities to create their own distinctive coverage. What sources have to understand is that such stage-management leaves the press only one avenue to pursue in order to distinguish their coverage: formal presentation. It is to this that I now turn.

Form Analysis of Coverage

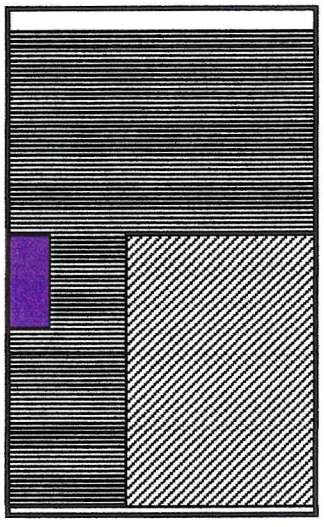
The recent decisions of *The Independent* and then *The Times* to change from a broadsheet to a tabloid format are the latest in a series of major and minor revolutions that have changed the 'look' of the British national press, from the dense and word-fixated newspapers of the 19th century to the 'airier' and illustration-led papers of today (LeMahieu 1988: 67-68). Newspapers undergo periodic face-lifts, adapting their formal presentation to attract more readers, more readers of a certain class or gender and, above all, more advertisers. 'Form' is therefore a key element in building or maintaining a distinct identity, and the way that papers formally present the news has become a prime tool to escape the uniformity of content produced by sources' increasing reliance on press-centred mean of communication. Price's observation (1996: 41, his emphasis) that "While the *content* of the message is usually regarded as the most important factor in creating meaning, its *form* often provides the vital clue to interpretation", takes on great relevance in the context of the British press. A form analysis of the coverage of our stories is thus essential and should demonstrate how important formal presentation is in creating distinctive coverage and in offering the British public choices in how they consume archaeological news.

Eight criteria of formal presentation are examined here: page placement, location on the page, article size, headlines, and the use of maps, photographs, graphic illustrations and subsidiary stories. Throughout the analysis three questions are posed. First, what does the formal presentation of these discoveries tell us about press receptivity to and investment in archaeological stories? Second, does the coverage confirm or refute assumptions about the different presentational styles of tabloids ("short and highly visual") and broadsheets ("elaborate and in-depth") (Fenton *et al.* 1998: 40)? And third, did the different sources and media strategies affect the coverage's formal presentation at all, or as much as they affected content? To assist readers in following my analysis, I have provided schematic renderings of the coverage (see **Figures 6.3** and **6.4**).

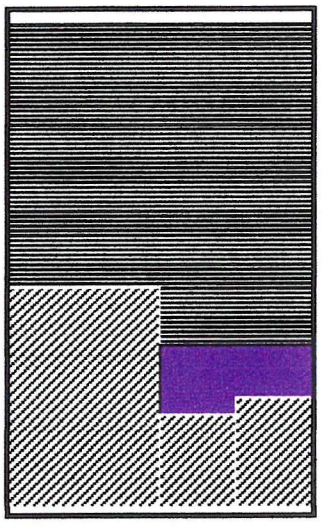
Figure 6.3: Schematic Version of OBW Coverage (7 May 1997)



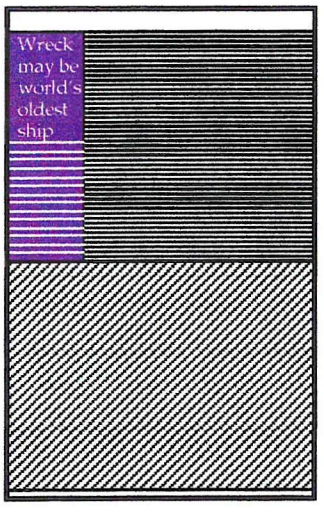
The Daily Telegraph: RHP 3



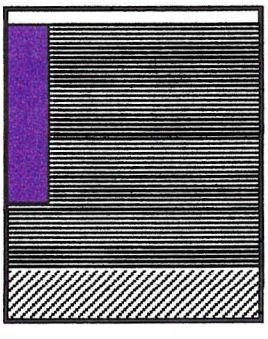
The Guardian: LHP 10



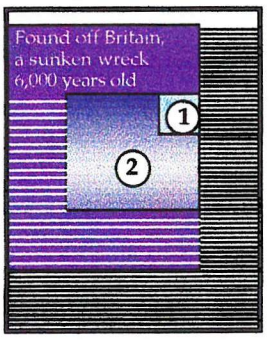
The Independent: LHP 4



The Express: RHP 5



Daily Mail: RHP 11



1=Map of Solent
2=Graphic of
'Egyptian' raft

The Mirror: LHP 16

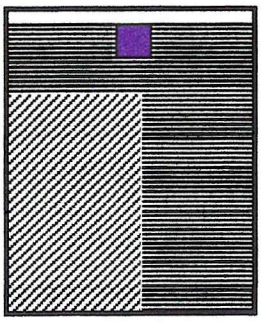
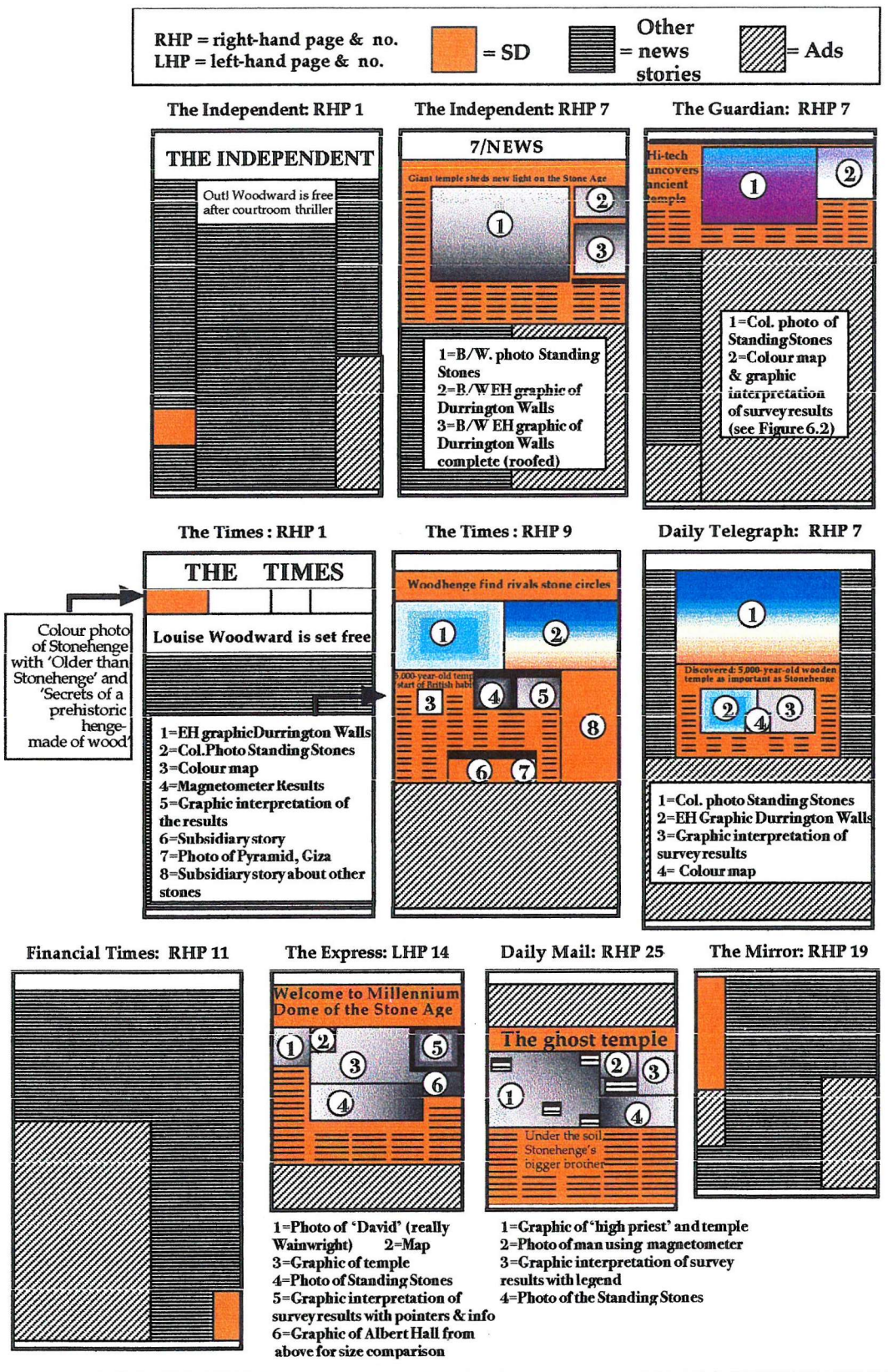


Figure 6.4: Schematic Version of SD Coverage (11 November 1997)



Early Placement

Which page a story is placed on will obviously depend on a number of factors beyond the significance of the news itself, like competition with other stories and advertisements for space and whether or not the text is to be illustrated. Yet a story's perceived newsworthiness is often reflected in how early it appears in the paper, with the front page being the most prized position. This is especially true of the tabloids which run their news coverage without internal divisions and thus mix together national and international subjects. The quality papers do divide their news coverage into sections (usually 'news' followed by 'home' or 'national' news and then 'overseas' or 'international' news). The geographic provenance of a story can dictate its placement in the qualities, but broadsheet editors define the geographic limits that these terms encompass and most can choose to place any story, regardless of provenance, earlier in the paper as 'news'.

In the summary in **Table 6.3**, the perceived importance of the OBW story is evident in its 100% success rate in achieving early placement (defined as being on or before page 10 in the qualities and page 20 in the tabloids). Although mentioned on the front pages of the *Times* and *Independent*, Stanton Drew fares less well in general, due to its later placements in the *FT* and *Mail*. That the stories together achieved early placement in 86% of cases does indicate that this kind of specialist news is deemed important by both tabloid and quality newspapers, with the two later placements coming equally from both. In terms of placement, OBW was presented as an important find, and the divers were not disadvantaged by their status or their reliance on a press release. The greater status and media efforts of English Heritage did earn it more front-page placements, but less consistent placement overall. Moreover, it had to contend with the mixed blessing of front-page competition: English Heritage's likely expectations of more front-page coverage being thwarted by the Louise Woodward story.

Location on Page

Although dictated by the size of the article and space and layout considerations, whether a story is placed on a right- or left-hand page and its location on that page

Table 6.3: Comparison of Coverage in Terms of Form Criteria

(6 newspapers covering OBW + 8 covering SD=14)

Criterion	OBW (out of 6)	SD (out of 8)	Total	%of 14
*Early placement**	6	6	12	86%
*Good page placement***	3	6	9	64%
*Large article size****	1	6	7	50%
Large/evocative headline	2	6	8	57%
Use of map	1	4	5	36%
Use of photograph(s)	0	6	6	43%
Use of graphic(s)	1	6	7	50%
Subsidiary story(ies)	0	3	3	25%
Totals:	14/48 (29%)	43/64 (67%)		

*: Counting 'early' as appearing by page 10 in broadsheets and page 20 in tabloids.

**: Assessing right- vs left-hand page, top vs bottom, and outside vs inside edge.

***: Deeming 'large' as being over 25% of total page size.

in relation to margins, other stories and advertisements is an important criterion. It, for instance, permits one to judge the newsworthiness of stories that are smaller or unillustrated, but that have been given prominence by their siting. The general rules seem to be that right-hand pages are better (i.e. more read) than left-hand ones (Seymour-Ure 1996: 177), that the top half of the page is better than the bottom half and that outside-edge placement is preferable to an inside one.

On this score (see Table 6.3), the value of OBW's early placements is diminished by the fact that only half of these are well sited. This may have been a result of judgements about the relative importance of the story, but it may also have been connected to the absence of any visual material that might have expanded the size of the articles and influenced their page placement (as occurred in the *Mail's* coverage). The woodhenge story is well sited in every paper except the *FT* and *Mirror*, and much of this is directly related to the size and number of illustrations used in all the other newspapers. As with early placement, a good page location for a scientific story is not exclusive to the quality papers, and 64% of the coverage being well sited adds to the notion that such stories are prioritised rather than marginalised by the British press. The provision of illustrations to journalists at the SD press conference was clearly an important asset in guaranteeing better page locations.

Size of Article

The size of an article, both in text and illustration, is perhaps the clearest indicator of the significance accorded to a news story. As can be seen in **Table 6.4**, measuring the amount of words devoted to each story shows that SD received twice the coverage of OBW. It would be easy to conclude from this that Neolithic monuments are more newsworthy than Neolithic ships, but this ignores several factors. One is that wordage alone is an inaccurate guide to relative newsworthiness. Because of their size, qualities normally carry three times more words than tabloids (Tunstall 1996: 12). Thus, for a midmarket tabloid to use only a third of the words to tell the same story is to be expected, as is the dominance of SD wordage over OBW since it received more broadsheet coverage. Looking more closely, what is striking is the *Mail's* top position with the largest text on OBW, the

Table 6.4: Size Comparison of the OBW and SD Coverage

	Para-graphs	Words	Words per paragraph	% size of page	% of article is illustration
OBW					
Daily Mirror	2	41	20.5	1.9%	na
Daily Express	12	207	17.25	9.6%	na
Daily Telegraph	8	234	29.25	3.9%	na
Guardian	9	287	31.8	5.9%	na
Independent	12	467	38.9	11.2%	na
Daily Mail	20	625	31.25	57.1%	34.1%
	Total: 1861				
SD					
Financial Times	1	69	69	1.7%	na
Daily Mirror	9	136	15	6.4%	na
Guardian	12	431	35.9	29.5%	49%
Daily Telegraph	16	475	29.7	40%	62%
Daily Express	23	545	23.7	80.95%	48.4%
Daily Mail	23	801	34.8	81.7%	43.5%
Independent	20	820	41	50%	51.1%
Times	23	1184	51.5	60.55%	46.2%
	Total: 4461				

Financial Times's pathetic SD effort and the *Mail* equalling the *Independent* in words about SD.

It is generally acknowledged that tabloids use more paragraphs and fewer words per paragraph than broadsheets. Regarding paragraphs, only OBW conforms to type (tabloids=34/qualities=29). SD shows the extremes of the phenomenon with the *FT* at one paragraph of 69 words and the *Mirror* at 9 paragraphs for 136 words. But it also shows some congruency between, for instance, the *Mail* and *Independent*. On the issue of words per paragraph, half of the papers (*Mirror, Express* and *Independent*) follow the form in their articles on OBW, but the other half (*Mail, Guardian* and *Telegraph*) do not, using 29-31 words per paragraph. SD again shows the *FT* and *Mirror* as polar opposites, but there is not much difference between, say, the *Mail* (34.8) and the *Guardian* (35.9) or the *Express* (23.7) and the *Telegraph* (29.7). All in all, it seems fair to conclude that in terms of text formatting these cases tend to confirm expectations at two extremes (*Mirror* vs *FT* and *Times*), but confound them in the middle ground inhabited by the other five papers.

Other factors to take into account are the physical size or presence of the article on the page and the relationship between text and illustration. As we can see in Table 6.4, in the SD story, the two midmarket tabloids show a marked consistency in affording the greatest amount of page space to their coverage (around 81%). This generosity with space has to be seen again in the context of the tabloids being about half the size of broadsheets. In other words, if you halve the midmarkets' figures, then their SD coverage is matched or exceeded by the *Telegraph, Independent* and *Times*. The outsiders here once again are the *Mirror* and *Financial Times*, neither of whom granted much space to the story. The OBW coverage is notably different in that only the *Mail* devoted significant space to it, with a third of its coverage being taken up by its illustration. Its unique attempt to illustrate OBW may prove the assumption that a "highly visual" presentation style is the prerogative of the tabloids, but this view is contradicted in SD. There, the broadsheets' percentage of space devoted to illustrations is higher than the midmarket tabloids' in every case except the *Times*. As discussed below, the propensity of the British press to convey news visually is perhaps one of its most distinctive features, one which is shared by both tabloids and qualities.

The final factor affecting article size relates to the amount of time expended by

the informants in talking to journalists and answering their questions and to the materials provided by them to back up their news. Going back to Table 6.3, it is patently clear that the investment of English Heritage in organising a press conference and supplying photographs and graphic illustrations paid significant dividends in terms of the size of coverage it received over that achieved by the OBW divers and their press release. Even with the poor showing of OBW, the fact that these stories overall generated large articles in 50% of cases again indicates a receptivity to archaeological news amongst the British press.

Large or Evocative Headlines

In content, language and graphology, headlines are strong indicators of what newspapers see as a story's most salient features and its relative importance to other news stories, and of how they think their readership can be best attracted to read the article. Given the dual role of summarising an article's content and engaging reader attention, tabloid headline writers in Britain's competitive market seem to prioritise the latter, using abbreviated and evocative language to entice readers, whereas their colleagues in the quality press tend to prioritise the former, using typographical means to direct readers' attention. What do the headlines of our stories tell us about these and other assumptions?

In terms of content and language, the most notable feature of the headlines and sub-headlines (see **Figure 6.5**) is that they are relatively wordy. Only two tabloid and two broadsheet main headlines use less than five words. If one includes the captions used with illustrations, it becomes apparent that readers would not have to read the articles to register the basic information about the finds. This wordiness is a likely reflection of the complicated nature of these scientific stories, but it may also indicate that British newspapers assume a low level of reader interest in such stories and therefore encourage their consumption by offering a choice between headline scanning and article reading. Almost all the headlines are immediately relevant to each story's content, not always the case in British headlines. Although most British readers would have little difficulty in matching the headline with the newspaper group from which it came, there are some anomalies, most notably in the *Daily Mail* and *Times* examples.

Figure 6.5: Headline Comparison of OBW and SD

(Article headline in normal type; sub-headline in italics)

OBW

6,000yr old ship found	*Mirror*
Found off Britain, a sunken wreck 6,000 years old	*Daily Mail*
Divers' find puts history all at sea	*Express*
Solent wreck may be oldest boat in world	*Telegraph*
Wreck may be world's oldest ship	*Independent*
Carbon-dating puts 'boat' timbers at more than 6,000 years old	*Guardian*

SD

Ceremonial site is discovered	*FT*
Ancient site discovery is bigger than Stonehenge	*Mirror*
The ghost temple: *Under the soil, Stonehenge's bigger brother*	*Daily Mail*
Hi-tech uncovers ancient temple: *Survey reveals structure twice the size of Stonehenge*	*Guardian*
New Stonehenge found (front page), Giant temple sheds new light on Stone Age (page 7)	*Independent*
Discovered: 5,000-year-old wooden temple as important as Stonehenge	*Telegraph*
Welcome to Millennium Dome of the Stone Age: *Forest of poles as imposing as a cathedral*	*Express*
Older than Stonehenge: *Secrets of a prehistoric henge--made of wood* (front page), Woodhenge find rivals stone circles: *5,000-year-old temple 'start of British habit'*, Builders of the oak tree marvel beat great pyramid by four centuries, Bride eager to dance had Devil to pay (p.9)	*Times*

Two-thirds of the headlines emphasise the most 'sensational' aspect of these discoveries, that is, their 'superlative' claims to great age or size, claims that came from the sources. Equally notable is that almost all of the headlines focus on the 'what' of the story (ship and temple). Only one mentions the 'who' ("divers" in the *Express*). Only two give us any geographic location (the *Mail* and *Telegraph* in OBW). The SD headline writers obviously assumed that references to Stonehenge would register the story as being British. Yet only one paper, the *Mail*, offers the key fact that the discovery is "under the soil". It must be remembered, of course, that 'who' and 'where' are often telegraphed to readers via accompanying photographs, captions or maps. Only two headlines, both from the *Guardian*, include information about the 'how' (i.e. "carbon-dating" and "Hi-tech"). Similarly, only two (*Express* in OBW, *Independent* in SD) try to offer insights (other than age or size) into the finds' significance, primarily expressed in terms of how these finds upset or expand existing knowledge.

This leads to another issue: what the headlines tell readers about the certainty of the claims being made by the sources. The broadsheet OBW headlines stand out on this point for using "may be" or putting the word boat in quotation marks. No such caution is evident in any of the SD headlines. The greater uncertainty in the OBW headlines reflects the doubts of the divers themselves and the caution expressed by experts within the texts, but it may also stem from the divers being seen as less unimpeachable sources of information than English Heritage. Overall, the qualities are more judicious than the tabloids on this issue, and the OBW examples do prove that open discourse is achievable, even in headlines.

Four headlines deserve special attention. The *Times*'s two subsidiary headlines in SD veer towards the tabloidesque: "Bride eager to dance had Devil to pay" and "Builders of the oak tree marvel beat great pyramid by four centuries." These headed articles that were included in order to add further context or inject 'human interest' into the main scientific story, and this may account for their style. Two of the tabloid headlines (the *Mail's* "The ghost temple" and the *Express*'s "Welcome to Millennium Dome of the Stone Age") are enigmatic, provocative, economical and expressive attention-getters, classic examples of the tabloids' "short and highly visual" style. The *Mail* headline is an intriguing, subtle, and imaginative way of expressing the woodhenge's invisibility and noumenal quality. The

Millennium Dome analogy is clever and timely, full of resonance and meaning for UK readers. It was the perceived analogous function of the Dome and woodhenge (Britons marking their landscape with ceremonial structures) that justified tying the two together and that produced the *Times*'s less blatant sub-headline about the Neolithic temple being the "start of British habit". As with the superlative claims, this connection came from the informant (Stevens) and did not spring unaided from a headline writer's imagination.

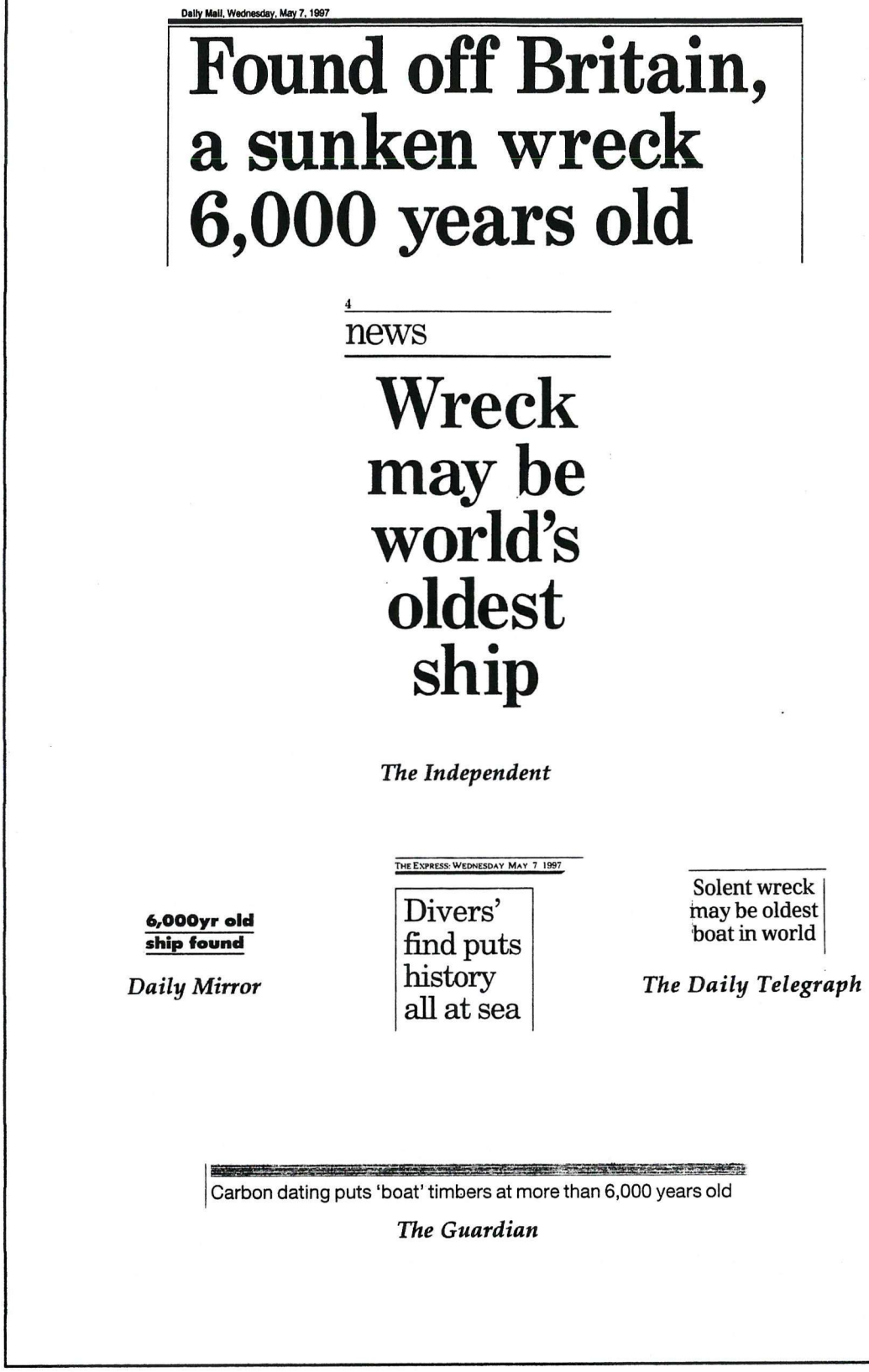
Turning to the language and word choices, there are semantic differences between describing the discoveries as:

Broadsheets	*Tabloids*	*Both*
Timbers (1)	find (1)	wreck (3), ship (2)
Woodhenge (1)	forest of poles (1)	temple (5), site (2)

The first set of terms is the more accurate/scientific, but the majority of both newspaper groups chose the more vivid vocabulary of "wreck" or "temple". Given that many readers would be unfamiliar with the term 'henge' on its own, it is not surprising that the press resorted to "temple" and, in six cases, put "Stonehenge" in their headlines, with only *Times* readers apparently expected to understand "woodhenge". The *Express*'s SD sub-headline, "forest of poles as imposing as a cathedral", does conjure up images (again aided by a reconstruction) and gives readers a meaningful comparison as to how impressive the woodhenge would have been. In general, the broadsheets employed more complete sentence structures in their headlines than the tabloids, although both groups supplemented their main SD headlines with longer sub-headlines. Some of the qualities' headlines are bland, but colourful language is evident across the spectrum. It is abundantly clear that the *Guardian* thinks that its readers are technologically-minded, for "carbon-dating" and "Hi-tech" are the first words in its headlines.

With mixed evidence so far about traditional distinctions between tabloid and quality headlines, will the headlines' typography conform to expectations? The actual headlines can be seen in **Figures 6.6** and **6.7**. The most obvious feature is the midmarkets' consistent use of larger typefaces, and this is sometimes, but not always, related to their use of fewer words. In addition, there is a notable variance between the *Mail* and *Independent* headlines and those of the other papers covering

Figure 6.6: Actual Headlines of OBW Coverage
(all reduced by 50%)



Daily Mail, Wednesday, May 7, 1997

Found off Britain, a sunken wreck 6,000 years old

4
news

Wreck may be world's oldest ship

The Independent

6,000yr old ship found

Daily Mirror

THE EXPRESS: WEDNESDAY MAY 7 1997

Divers' find puts history all at sea

Solent wreck may be oldest boat in world

The Daily Telegraph

Carbon dating puts 'boat' timbers at more than 6,000 years old

The Guardian

Figure 6.7: Actual Headlines of SD Coverage
(all reduced by 60%)

The ghost temple

Under the soil, Stonehenge's bigger brother

Daily Mail

14 NEWS THE EXPRESS on Tuesday November 11 1997

Welcome to Millennium Dome of the Stone Age

Forest of poles as imposing as a cathedral

The Guardian Tuesday November 11 1997

Survey reveals structure twice the size of Stonehenge

Hi-tech uncovers ancient temple

Ancient site discovery is bigger than Stonehenge

The Mirror

HERITAGE
Ceremonial site is discovered

The Financial Times



THE TIMES TUESDAY NOVEMBER 11 1997 9

Woodhenge find rivals stone circles

5,000-year-old temple 'start of British habit'

BUILDERS OF THE OAK TREE MARVEL BEAT GREAT PYRAMID BY FOUR CENTURIES

Bride eager to dance had Devil to pay

Discovered: 5,000-year-old wooden temple as important as Stonehenge

Daily Telegraph

New Stonehenge found

Giant temple sheds new light on the Stone Age

The Independent

OBW, although there is much congruency across the sectors in the typographic treatment of SD, excepting the *FT*. Thus, the use of typographical means to emphasise stories and direct readers' attention may be the broadsheets' primary tool, but it is utilised by both newspaper groups.

Returning to Table 6.3, that the British press considered these stories to be newsworthy is again confirmed by 57% of the articles receiving prioritised headline treatment either in typography or language. Some of the conventional assumptions about the two newspaper groups seem to hold true (e.g. the use of truncated versus normal syntax), while others (like colourful vocabulary being only a tabloid concern) are less conclusively proven here. Perhaps most importantly, compared to the OBW divers, the media-management efforts of English Heritage, as well as its more authoritative status, achieved more detailed and unambiguous headlines.

Illustrations

For those working in archaeological representation, the key role of illustration in the public consumption and professional self-definition of archaeology is clear, if professionally under-valued (Moser 1998: 15, and see Moser 2001). From the 16th century onwards, scientific illustration was "a force that would become integral to the scientific understanding of the world," for visual images "bring concepts to life, lend weight to ideas and crystallise arguments, [and]...constitute a powerful rhetorical tool that features highly in the repertoire of explanatory aids employed by scientists" (Moser 1998: 9, 15). Illustrations can do this, Gould (1997: 249) reminds us, because "Primates are visual animals, and we think best in pictorial or geometric terms. Words are an evolutionary afterthought." The use of graphic and then photographic illustration was a defining feature in the development of mass circulation newspapers in Britain in the late 19th and early 20th centuries. As LeMahieu (1988: 74) points out, "Tabloid photo-journalism was pioneered in Britain," with Lord Northcliffe proclaiming in the first edition of the *Daily Mirror* in 1904 that "our illustrations are themselves 'news'." The British national press continue this tradition today, illustrating coverage heavily and often using graphics (rather than just photographs). This level of investment is significant, for

each decision to illustrate requires judgements about which type of illustration is appropriate and about the cost-benefit relationships between the importance of a story, its likely number of readers and the paper's outlay in terms of time, money and newspaper space. The amount and different types of press illustration can therefore reveal much about underlying assessments of reader interest or knowledge and of stories' newsworthiness, as well as about the differences between tabloid and broadsheet coverage.

That the *Mirror* and *FT* were the only papers not to use illustrations in either of our stories does, again, confirm the view that the downmarket and business press assume their readers not to be interested in archaeological news. The other British dailies, however, produced a total of 28 illustrations to accompany the stories: 5 maps, 11 photographs and 12 graphics. Despite the press's occasional habit of using inappropriate illustrations to attract readers to science stories, like stills from feature films, all the illustrations employed here were directly relevant to the discoveries. In OBW, the singular attempt by the *Mail* to illustrate the story cast further doubts over its coverage, providing sustenance to critics' complaints about tabloid coverage of science. However, in SD, visual representation was a potent tool in giving meaning to the find. It made the invisible visible, gave readers the chance to participate in the interpretation and assimilate the find more easily into their existing frames of reference, and provided them with explanations of scientific interpretation likely to be indigestible if explained in words alone.

Maps

Although requiring the least investment and never used here on their own, maps are important supporting visuals that can enhance a story by providing readers with an immediate geographic focus and by supplementing information in the text. They are especially useful in archaeological stories about sites, as economical ways of visually connecting the location with other nearby sites and of offering a road map for site visitors. Each of our stories was illustrated with a map by at least one paper (see **Figure 6.8**). Of the five maps, two were in tabloids and three in broadsheets.

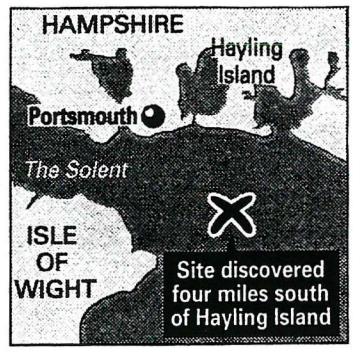
The major difference between them is whether or not the newspaper utilised the

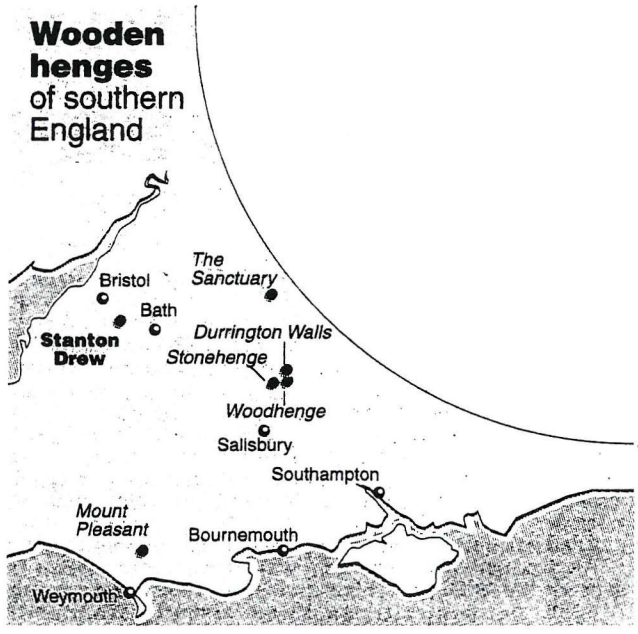
Figure 6.8: Maps in OBW and SD Coverage

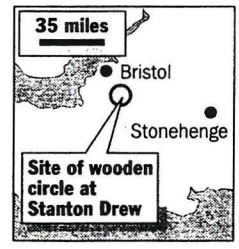
(reproduced in actual size)

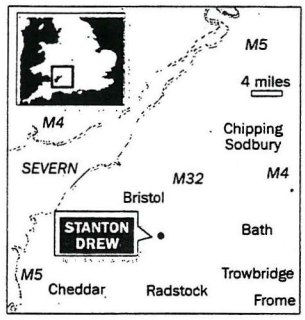
Top: OBW: the only map, *Daily Mail*.

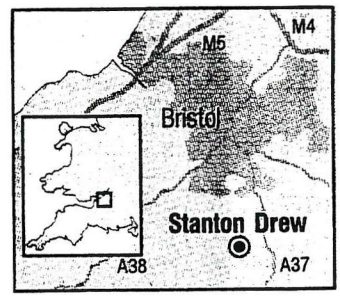
Bottom: SD: the context maps, *Guardian* left in colour and *Express* to its right; below them, the road maps, *Times* (left) and *Telegraph* (right), both in colour.











map to supply information beyond geographic location. In this respect, the *Guardian*'s SD map is exemplary in positioning Stanton Drew amongst other Neolithic woodhenges, an effort that required more homework than that done by the *Times* and *Telegraph* whose examples are little more than road maps (with motorways marked). The *Express*'s map for SD and the *Mail*'s for OBW are merely site locators, the former at least marking Stonehenge's proximity. The *Guardian*'s more sophisticated map was therefore able to make an important point about the concentration of Neolithic structures in south-west England accessible to readers through pictorial means.

Photographs

Reproducing photographs require newspapers to make additional investments in space, time and resources, for they need to be researched, commissioned or otherwise obtained (from photo libraries, wire services or informants), and captioned and laid out. The underwater photographs taken by the OBW divers and offered to the local press at the time of the initial discovery in 1992 are not easy to 'read' (see Figure 6.1) and were not put forward to the national press when the dating results were announced in 1997 (Don Bullivant, *pers. comm.*). Nor, apparently, did the divers produce more recent photographs for the press to use. Thus photographs were only supplied and used in SD. Overall, photographs were used more than maps, but less than graphics, and seven of the eleven photographs appeared in the broadsheets. They were employed in four overlapping ways: as direct illustrations of the actual find or process, or of the finder, as references to the site and/or as 'eye-catchers'. As with maps, these photographs and especially their captions reiterate or supplement information contained in the texts, including details about the woodhenge's dimensions and its being underground, how it was surveyed and its significance.

Given the invisible nature of the SD discovery, it is understandable that six newspapers would rely on photographs of the existing standing stones (see **Figure 6.9**), the four broadsheets using very large reproductions. Five of the six pictures were taken by Jay Williams, making it likely that the photographer had been commissioned by English Heritage so that they could be included in the press kit

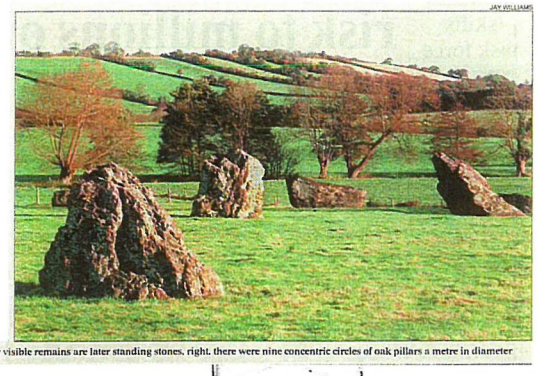
Figure 6.9: Photographs in SD Coverage
(reduced by 60%)

The Times **(below):** A. Front page (colour), B. Standing Stones (colour, main article), C. Magnetometer result (main article), and D. Khafre Pyramid (subsidiary story)

A.

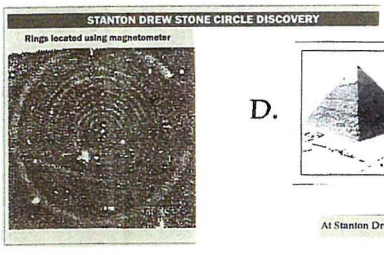


B.

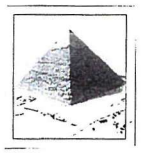


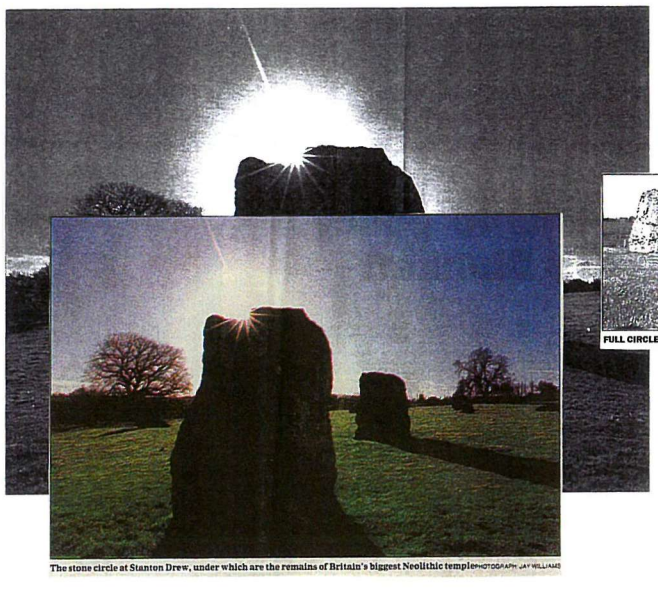
At Stanton Drew, where the only visible remains are later standing stones, right, there were nine concentric circles of oak pillars a metre in diameter

C.



D.

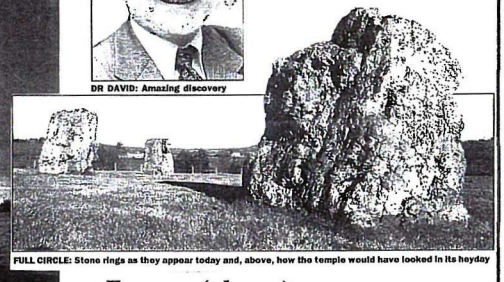




The stone circle at Stanton Drew, under which are the remains of Britain's biggest Neolithic temple PHOTOGRAPH: JAY WILLIAMS



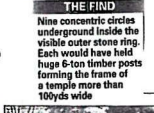
DR DAVID: Amazing discovery



FULL CIRCLE: Stone rings as they appear today and, above, how the temple would have looked in its heyday

***Express* (above):**
Standing Stones &
Photo of Wainwright





THE FIND
Nine concentric circles underground inside the visible outer stone ring. Each would have held huge 6-ton timber posts forming the frame of a temple more than 100yds wide

Above: *Independent* (behind) & *Guardian* (colour), same Stones photo



A wooden temple, twice the size of any discovered so far, lies under the standing stones at Stanton Drew. Archaeologists say it is the most significant find in 30 years



***Daily Mail* (above):**
Stones & Surveying

***Daily Telegraph* (left):**
Standing Stones

offered to journalists. Two of the photos are employed twice, the *Guardian* and *Independent* both choosing the more atmospheric shot. From my research, this usage of aesthetically pleasing rather than informative photographs is a characteristic of archaeological coverage in the *Independent* and *Guardian* and says something about these papers' assumptions about their readers' visual preferences. The different choices of the *Telegraph* and *Express* make their coverage more distinctive, and this is further accentuated by one including a person (giving a sense of scale) and the other choosing an angle that emphasises the stone's size by allowing it to break out of the frame.

The ubiquity of the standing stone pictures makes the other photographs in the *Times*, *Mail* and *Express* stand out. The *Times's* use of Stonehenge on its front-page banner is justified mainly by the fact that this iconic image is more readable in miniature and would be more recognisable to readers than the Stanton Drew circle. Its use of a shot of the Khafre pyramid in Giza appears incongruous, but it is there to draw readers to the subsidiary story about what was happening in the ancient world around the time of the woodhenge's construction. By managing to include photos of Stonehenge and the Pyramids, the *Times*'s coverage does further substantiate the conclusion that the media think these are the only two images that British readers associate with archaeology. To its credit, the paper was the only one to print a photograph of the actual magnetometer survey (alongside its graphic reconstruction), allowing readers to participate in the interpretation. The *Mail* alone felt its readers would benefit from a picture of a magnetometer survey in progress, and the *Express* made the sole attempt to personalise the story with a photo of Dr Wainwright, erroneously captioned as Dr David.

At least in this case, photographs (often largely reproduced) appear to be more a broadsheet than tabloid tool. The use of so many photographs (even with none in OBW, amounting to 43% in the comparison in Table 6.3) represents a considerable investment in the story, yet another mark of its perceived newsworthiness. On the one hand, this demonstrates the value of providing visual materials at press conferences; on the other hand, it again forcefully underlines the general homogeneity of the coverage. As with informational content, it made little difference which broadsheet the public chose, for readers would have been presented with almost identical photographic coverage. Only the midmarket

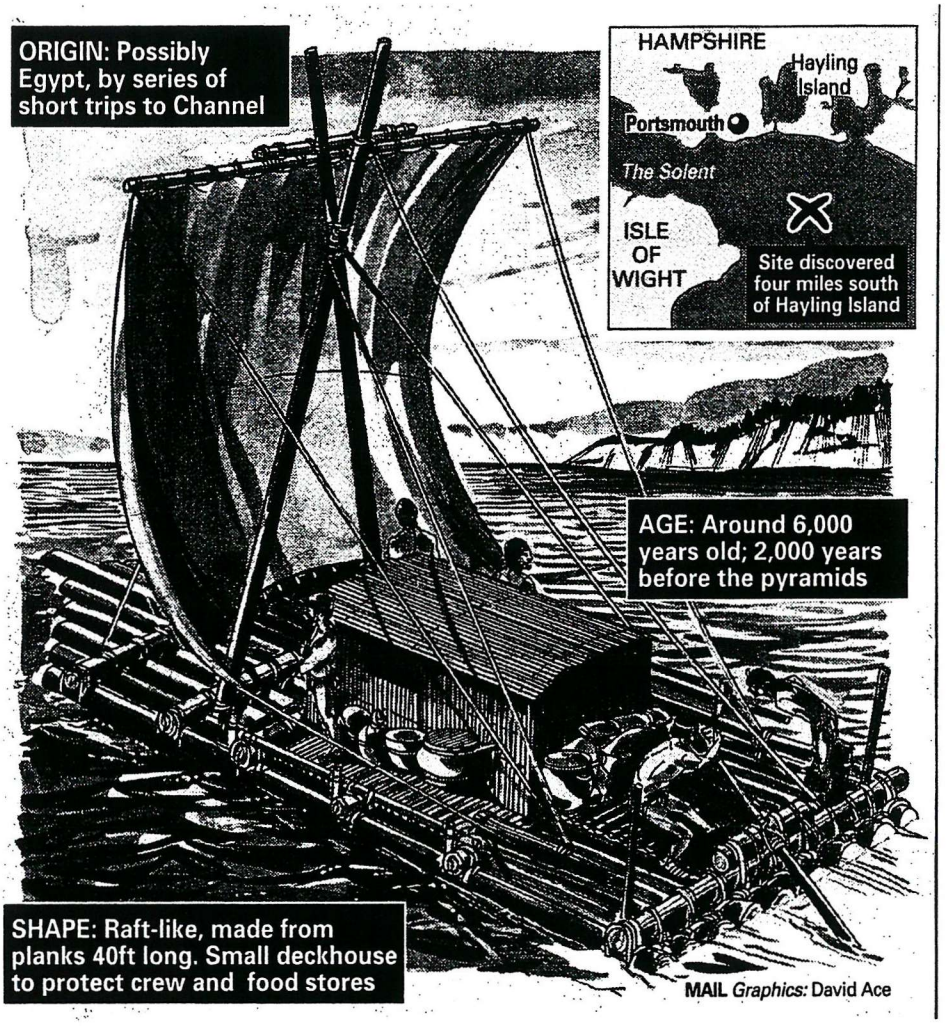
tabloids prioritised graphics over photographs, and by so doing, made their illustrations distinctive from the broadsheets. This distinction between broadsheet reliance on photographs and tabloid preference for graphics may simply be a way of developing a recognisable 'house-style'. It may also be based on assumptions about how each readership group best consumes scientific news, with one group needing the authenticity of photographic evidence and the other needing interpretations of that evidence.

Graphics

Graphics add another dimension to archaeological news presentation, for they permit the depiction of things impossible to portray in any other fashion and of scientific or statistical data more easily grasped in a visual format. They are also a kind of illustration that relies heavily on the interpretative skills of yet another mediator: the graphic artist. The notion about the illustrative choices of the tabloids and broadsheets being predicated on readers' capacities to interpret visual information with or without additional intervention is strengthened here. Although the broadsheets used graphics as liberally as the tabloids in SD, they relied on reproducing the graphic reconstructions that were given to them by English Heritage, whereas the tabloids felt the need to simplify and re-interpret these graphics.

Of the two stories, the OBW discovery presented the greatest challenge. With no photographic evidence, the papers would only be able to illustrate OBW graphically, but only the *Daily Mail* made the attempt, based on the remarks about Egyptian rafts made by Bullivant and unnamed archaeologists. The paper and its graphic artist, David Ace, turned these remarks into an imagined rather than researched reconstruction of a raft manned by Egyptians sailing off the recognisable cliffs of southern England (see **Figure 6.10**). Any doubts about the raft's provenance are quashed by the caption: "Origin: Possibly Egypt, by series of short trips to Channel." The drawing so outraged Bullivant (*pers. comm.*) that he asked for a retraction. It is perhaps useful that one such 'horror story' appears in these case studies, for it encapsulates why scientists (and the public) mistrust the tabloid press. Even though the inspiration for the drawing did come from

Figure 6.10: The Only OBW Illustration (*Daily Mail*)
(reduced by 10%)



informants' comments, it was the paper's desire for an illustration and its literal interpretation of this information that were most at fault.

The SD magnetometer survey on its own similarly offered little scope for graphic illustration, other than simplified diagrams interpreting its results (see **Figure 6.11**). English Heritage had however forearmed itself with the Dunn watercolour of Durrington Walls under construction, and this reconstruction features directly in or is the model for three broadsheet and two tabloid illustrations. The *Times* and *Telegraph* make it clear in their captions that this picture is not the SD woodhenge. The *Independent* does not, and, by reproducing another English Heritage reconstruction of Durrington Walls, in its 'completed' state, gives the wrong impression (that a structure this large could have been roofed). The midmarkets chose to adapt rather than reproduce the Dunn picture, which, in the case of the *Express*, resulted in a simplified and accessible representation. The *Mail's* graphic artists preferred to incorporate a notion of how the temple was used in its scene of Neolithic people performing animal sacrifices and its large drawing of a "high priest". The ideas about the woodhenge's function and about its being under the control of tribal leaders or a priestly hierarchy were put forward at the press conference, but, as in OBW, the graphic artists creatively interpreted these to produce a livelier (and messier) scene where a (rather glum) human figure dominates.

The other six graphics are schematic renderings of the survey results, the so-called "great circle" diagram. English Heritage may have provided both this name (since it appears throughout the coverage) and perhaps some version of it to the press, but each circle and legend has been differently adapted. There is great attention to detail in both tabloid and broadsheet drawings, down to distinguishing between where timber rings were found and where they are only 'assumed'. Four of the five papers appended gauges to give readers an idea of size; only the *Express* found a more potent way of demonstrating this, by comparing it to the Royal Albert Hall.

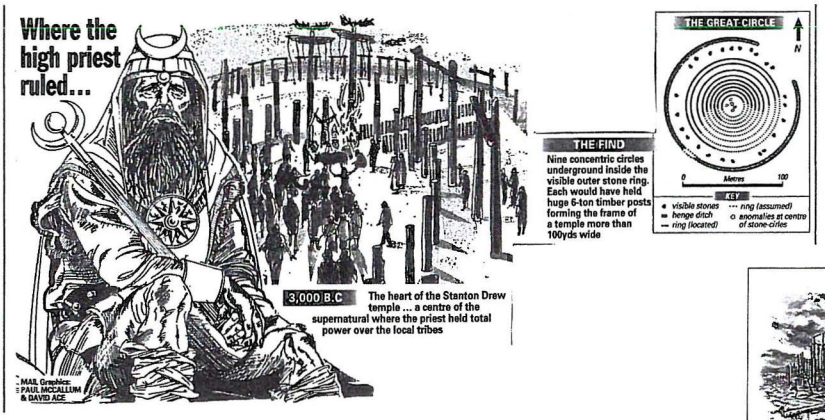
Used slightly more than photographs across the stories (i.e. 50% in Table 6.3), graphics were a key component in visualising evidence like geophysics results that, on their own, would not have given readers much of an idea of what the discovery represented. Only the *Mirror* and *Financial Times* refused to illustrate in

Figure 6.11: Graphics in SD Coverage

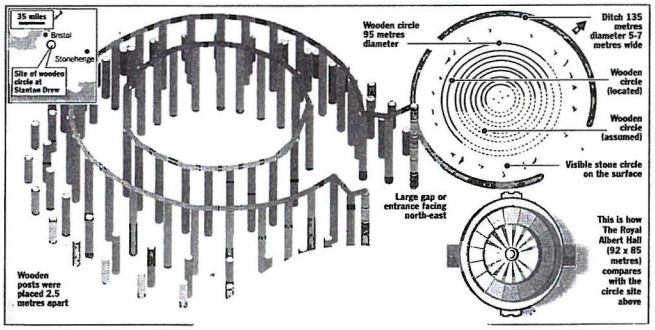
(all reduced by 60%)

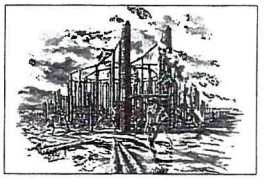
A. ***Daily Mail***: Priest, temple and 'great circle'; **B.** ***Daily Express***: temple, 'great circle', and Royal Albert Hall; **C.** ***The Independent***: Dunn reconstructions of Durrington Walls woodhenge under construction (above) and completed (below); **D.** ***Daily Telegraph***: Dunn reconstruction and 'great circle'; **E.** ***The Guardian***: 'great circle'; and **F.** ***The Times***: Dunn reconstruction and 'great circle'.

A.

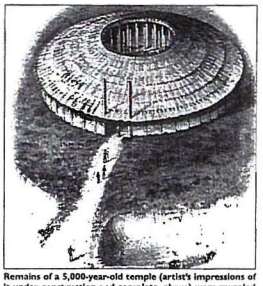


B.



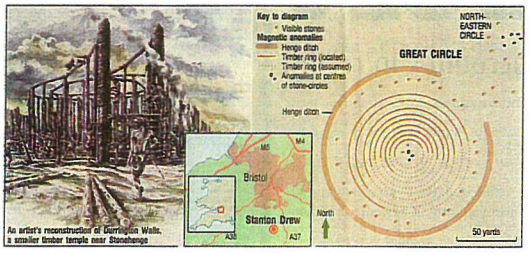


C.



Remains of a 5,000-year-old temple (artist's impressions of it under construction and complete, above) were revealed by X-ray beneath standing stones (left) – erected 300 years later – at Stanton Drew, near Bristol Photograph: Jay Williams

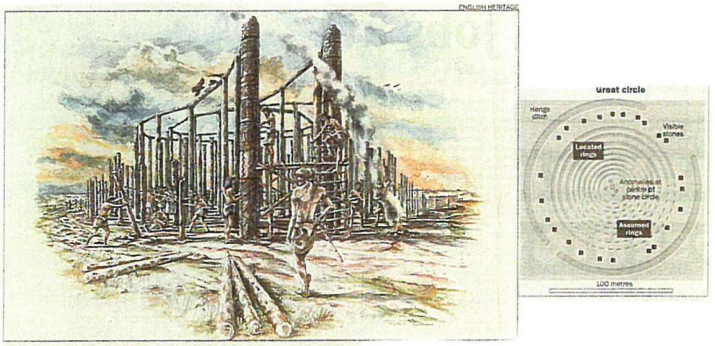
D.



E.



F.



An illustration of how a wooden henge may have looked under construction.

this way, and their coverage is weaker for that, as was the *Mail's* for having tried too hard to illustrate OBW. Overall, the use of illustration demonstrated here points to four conclusions:

1. that the British press considered these stories of importance,
2. that readers of both types of newspaper are presumed to need a choice in consumption,
3. that the means of releasing information matters greatly in providing an image-hungry press with appropriate materials with which to work and thus in allowing sources to maintain some control over formal presentation as well as informational content, and
4. that the tabloids will nonetheless re-adapt these materials to make their coverage more accessible to their readers and stand out from their rivals.

One cannot leave this section without a final word about 'layout', as this was an important factor given the number of illustrations used. Having dissected each category of illustration, it is useful to reassemble them in order to highlight one of the most successful presentations. The *Express* (see **Figure 6.12**) managed to incorporate six illustrations in its SD layout in a compact and aesthetically pleasing way. These case studies amply prove that in analysing press coverage one is assessing the skills not just of journalists and editors, but also of a host of graphic illustrators, photographers, headline writers and layout designers, all of whom, as mediators, have contributed to the end result.

Subsidiary Stories

Less important than illustrations, yet still indicative of added newspaper investment is the use of subsidiary stories to supplement main coverage, sometimes written by different journalists and developing other angles. Three such stories are used here, all in SD, but they have different functions. In the *Independent,* it is simply a way of getting a summary of the news onto the paper's front page. The two in the *Times* extend the contextualisation of the original story by emphasising its significance in relation to other achievements in the ancient world or by injecting local colour (the legends surrounding the Standing Stone Circle). This points to a segmentation of information that both amplifies the

Figure 6.12: Presentational Layout

Daily Express: Stanton Drew, reduced by 50%

Welcome to Millennium Dome of the Stone Age



DR DAVID: Amazing discovery

BY JOHN INGHAM
ENVIRONMENT CORRESPONDENT

A TEMPLE twice as big as Stonehenge and covering half as much ground again as the Royal Albert Hall has been discovered after 5,000 years.

It was left to modern technology to show up the Stone Age equivalent of the Millennium Dome beneath a farmer's field.

Archaeologists who revealed the location of their important find yesterday admitted they only discovered traces of the timber circles by chance when they were scanning three ancient stone rings.

The site, at Stanton Drew in Somerset — about 35 miles west of Stonehenge — has drawn mystics and historians for centuries.

Sir Jocelyn Stevens, chairman of English Heritage, said yesterday: "If you were interested in the supernatural, this was the place.

"It was like the Stone Age equivalent of London in the Swinging Sixties.

"It seems like the idea of the Millennium Dome is 5,000 years old, which must be very encouraging for Peter Mandelson."

The circle, or henge, was found a metre below the ground without a single spade thrust into the soil.

English Heritage archaeologists made a routine survey with a technique called magnetometry — using equipment to read magnetic signals given off by the soil.

They were astonished to find that inside the stone rings and below the ground were nine more circles, getting smaller towards the centre.

Senior English Heritage scientist Dr Andrew David said: "It is a near-perfect circle, with an outer diameter of about 135 metres, placing it among the largest henges in the country."

His colleague, archaeologist Professor Geoffrey Wainwright, added: "Henges are unique to Britain and this is the biggest and most elaborate of the lot.

"It was the focal point of the tribal territory and shows that 5,000 years ago these people were beginning to organise themselves into society.

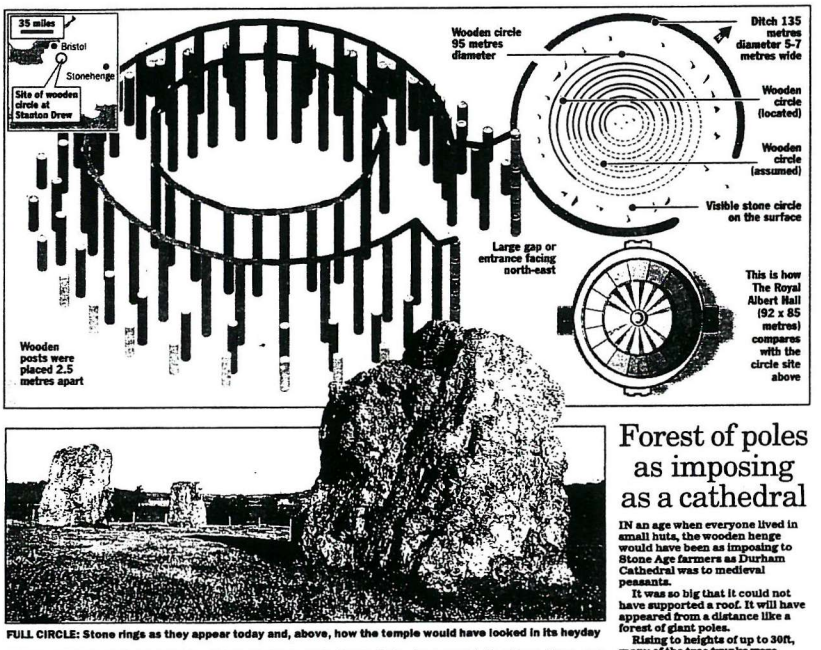
"These temples were symbols of power and the people who controlled the temple would also control the people in the region."

According to local legend, the stone circle was created by the Devil when he turned a party of dancing wedding guests to stone.

Farmer Richard Young, who bought the land two years ago and has grazed his sheep there ever since, said: "I'm quite fascinated, but I've lived here all my life and the stones have just been there so I can't get that excited.

"I hope it stays quiet. We get about 50 people a week visiting during the summer and next to no one in the winter."

Sightseers who pay a £1 entrance fee to visit the rings will have to use their imaginations — because there are no plans to excavate the site.



FULL CIRCLE: Stone rings as they appear today and, above, how the temple would have looked in its heyday

Forest of poles as imposing as a cathedral

IN an age when everyone lived in small huts, the wooden henge would have been as imposing to Stone Age farmers as Durham Cathedral was to medieval peasants.

It was so big that it could not have supported a roof. It will have appeared from a distance like a forest of giant poles.

Rising to heights of up to 30ft, many of the tree trunks were probably carved like Red Indian totem poles.

Professor Geoffrey Wainwright, English Heritage's chief archaeologist, said: "The oak posts would have been huge — weighing up to five tons each.

"That compares with six tons for the biggest stone at Stonehenge, so these people were already getting experience at lifting heavy weights."

importance of the discoveries and allows readers to pursue further those parts of the story most interesting or relevant to them. Of all the criteria examined here, this was the only one exclusively pursued by the broadsheets. This criterion therefore supports the view that quality papers offer more "elaborate and in-depth" coverage of science news than the tabloids, a view that is often but not always substantiated by the other criteria.

Form Analysis Conclusion

Some distinctive features of formal presentation have been demonstrated here, notably the importance that both newspaper groups place on illustration and on offering readers different ways of news consumption. Whether through headlines, visual summaries of story content or both, tabloids and broadsheets anticipate and try to accommodate readers' different levels of interest and knowledge and thus their different capacities to consume scientific news. The midmarket papers' tendency to re-interpret rather than reproduce visual information produces more mediated and sometimes dubious illustrations, but this approach is also more costly than just publishing materials handed over by sources. It therefore shows these papers' investment in maintaining their distinctiveness and in mediating stories to their readers in a way that will appeal to and be understood by them. In this sense, their approach to formal presentation mirrors their approach to content, where human context is similarly privileged. The broadsheets, with a more educated constituency, intervene less in the mediation of information between scientific sources and readers, and thus they can, and do, offer more scientific details. This gives the impression that they are more 'straightforward' in their coverage, but it would be a mistake to think that they are not involved in mediation. They, too, make choices in formal presentation: from where they place the news and how much copy they expend, to the angles and language they use in headlines or subsidiary stories and the types of illustrations they prefer. It is abundantly clear that more research needs to be conducted in order to see whether or not the distinctions found here are exceptions or rules.

Looking again at the overall picture of how the two stories were formally presented (Table 6.3), it is clear that the British midmarket and upmarket press

placed a high value on the Stanton Drew woodhenge discovery, which achieved a 'score' of 43 out of a possible 64 (i.e. 67%). The 'oldest boat' timber find did considerably worse with 14 out of 48 (i.e. 29%). This analysis has thus shown the value of press conferences over press releases. OBW's failure to achieve SD's level of presentation derives in part from the find's more ambiguous status as news and the finders' less authoritative status, but it has more to do with how the discovery was announced. By using a press conference and offering visual materials, English Heritage was able not only to control the content of their finds' coverage, but also to dictate to a large extent the quantity and quality of their formal presentation, achieving in the largely unpredictable process of scientific communication through the media a predictable outcome that certainly justified its investments.

Conclusion

These case studies have demonstrated that it is not just the 22% of the British public that read broadsheets who enjoy serious archaeological news coverage. On the evidence here, at least 46% of readers, that is, the six million who read the midmarkets and four of the upmarkets (i.e. excluding the *FT*), are regularly offered meaningful information on archaeological discoveries. I equate here 'serious' with 'meaningful', for this is a more productive correlation to use in media analyses and avoids the 'knowledge' versus 'popular interest' split that is, in any case, not epistemologically sound. By reporting content in some depth while maintaining their presentational preferences and flair, the midmarket tabloids deserve more credit than most scientists and media researchers afford them. Equally, the quality papers deserve to be questioned about their supposed superiority in the field, for they are capable of mistakes and of using 'downmarket' tactics (e.g. tabloidesque headlines, visually striking rather than informative illustrations, etc.). Yet in content and form what these six papers were able to produce overnight is truly impressive. This should not blind us to the fact that over half of the British newspaper-reading public never read about these discoveries. Notwithstanding, there is clearly an audience for these scientific stories in Britain, and most of the British press are addressing this audience and its

ways of consuming news.

With such press receptivity, it is perhaps disappointing, even worrying, that so much of the coverage reads and looks the same. The demonstrable homogeneity in form and content seen here is directly attributable to the means used by sources to announce the news, with press conferences being the most efficient strategy. This may be welcomed by those who use this strategy, for it means that there is a greater chance that their announcements will be reported in their own terms, even in their own words, and will achieve a consistency of reporting across the media spectrum. But it is debatable whether this outcome is good for the public or the profession, as too many claims may slip through unquestioned. The increasing dominance of this pathway of communicating archaeology to the public (as well as science journalists' reliance on other pre-packaged sources like specialist journals, as we saw in Chapters Four and Five) means that few science or archaeological stories are subject to the more probing scrutiny of independently initiated and investigated journalism that the public have the right to expect and that the scientific disciplines should be open to and could benefit from. In this sense, the demise of enterprise journalism cannot be ultimately in either the public's or the profession's best interests. There may be some comfort in knowing that although sources may extend their control over mediation by pre-digesting news to fit journalistic requirements, they can never be totally successful, because they cannot control what other news appears that day or how papers will individualise stories to circumvent uniformity.

These studies have also shown that source credibility will matter in the degree of certainty with which the news is reported, but that in other respects, it matters less who was speaking than how or how well they were speaking. English Heritage had reason to be pleased with the positive coverage it received, but the divers were unsuccessful in obtaining further support for their work, the goal that had motivated their announcement. It also does not seem to matter, as much as one might of thought, to whom sources were speaking, as, on the evidence here, generalists familiar with the subject or on hand for the announcements were as skilled as specialists in reporting the stories. Again, this was largely due to the thoroughness of the information provided at the SD press conference.

Of course, not all archaeologists will have such significant discoveries to

announce. Certain aspects of archaeological work may never be covered as extensively as these two finds were. Referring to a point made by Chris Stringer, Stoddart and Malone (2001: 460) state that "exceptional discoveries...receive a level of publicity which is not replicated by press coverage of the slow and steady work which marks their refutation and proper contextualization." Regardless of whether or not this is true (and more evidence would be required to substantiate it), this is the kind of mindset that the profession should be questioning. This attitude ignores what 'news' is and what the role of the journalist is. It presumes that scientists and the public share the same interests in reading science stories, and it glosses over the profession's own unresolved problems over contextualisation and the length of time such contextualisation takes.

It is also true that not all archaeologists have the resources of a major institution behind them. However, the basic requirements for effective press management are not expensive commodities: advance preparation of responses to likely questions, a few photographs or illustrations and some quotable statements from colleagues or experts. If the motivation behind the announcement is to achieve modest coverage (and the process or 'how' is easy to explain), then a press release will do the job, as long as it contains the core facts that journalists will always report. If more is being asked of the media coverage in terms of profile or specific aims, then it is likely that only a press conference will achieve this. As there is no mileage for archaeologists in having only one newspaper reporting a story (unless it has paid well for the exclusive rights), as journalists rely on other media (especially scientific journals) as primary sources for articles, and as television increasingly wins the battle of being 'first with the news', then the 'herd' journalism that comes with media-centric news release will more and more replace what little enterprise journalism still remains.

A number of questions and issues arise from these case studies. One is the subjectivity involved in drawing lines between adequate and inadequate fulfilment of criteria. In content terms, does any interpretation, no matter how far fetched, count as an interpretation? In terms of form, when is a headline deemed 'evocative'? Although I have tried to focus on criteria that can be statistically proven, there is no way of avoiding subjectivity in many of the criteria that are relevant to critical analyses of press coverage. Another issue is the difficulty in

dealing with areas of overlap or conflict. For instance, a plethora of illustrations will automatically affect the size and placement of a story and are thus bound together, although treated here separately. More complicated is the case where fulfilment of a criterion in one analysis (say a front-page placement) is counterproductive to an element in another analysis (that story not providing adequate informational content). In addition, by dividing illustrations into three criteria, this form analysis is perhaps too heavily weighted against stories, like OBW, that are not easy to illustrate. Ironically, such divisions might be *more* informative as criteria if the British press used them *less* frequently, but collapsing them into one criterion would have devalued their central role in British press coverage of science stories.

Above all, I am aware of how my decision to choose stories that were released on the same day affected the analyses, and that a different collection (of one paper's coverage over a longer period or several papers' coverage of a long-term issue or campaign) might have produced different results. The demands of long-term publicity, in particular, have different dynamics and often involve people other than journalists and archaeologists, people with different objectives and opinions. It would be especially useful to look at cases where there is more conflict between archaeologists, the media and the public. The case studies analysed here give a fairly unproblematic picture of their relationship. Given that so many stories today do hit the headlines on the same day, I would like to think that my choice was ultimately justified.

This chapter has pointed out some of the problems that sources face when communicating news and that journalists encounter when reporting on a discipline as complex as archaeology. It has underscored the importance of seeing communication as a process of mediation, the central theme of this dissertation. It has demonstrated the benefits of analysing all sectors of the national press with equal consideration and of applying equal scrutiny to form as well as content in any analysis. Most importantly, this chapter has emphasised the need to base our judgements of the media not on anecdote or assumptions, but on evidence.

Notes to Chapter Six

[1] The finders' amazement and enthusiasm were well captured in the press articles themselves, but were also independently confirmed by personal contact in the case of OBW (Don Bullivant, *pers. comm.*) and by watching the TV coverage of the SD press conference (BBC 1997).
[2] The remains of the Mary Rose had, in fact, been first discovered in 1836 by salvage divers John and Charles Deane, who had raised "several pieces of artillery" and "lesser objects " (e.g. bottles, bows, pieces of oak, etc.), selling the latter at auction in 1840 (Blot 1996: 20-21). In 1967, Alexander McKee and his colleagues "leased the immediate area [around the site] for £1 a year", although it wasn't until a decade later that they raised enough money "to carry out a full survey" (Rees 2001: 28).
[3] I am indebted to Don Bullivant for sending me the test results and photographs of the timber finds, as well as for speaking to me about the background to the May 1997 announcement and his reactions to the coverage.
[4] Although not confirmed or denied by Bullivant, the fact that *The Sun, Daily Star* and *The Times* did not cover it may well have been because they were not contacted, the *Times* perhaps because of its earlier article.
[5] English Heritage's Stonehenge problems continue to this day, not just over midsummer access (as documented in BBC2's two-part programme on 'The Stones' in March 2004), but also over the long-delayed, much-debated plans to divert traffic and construct a visitors' centre at the site.
[6] I have not been able to ascertain whether the absence of SD news in *The Sun* and the *Daily Star* was because they were not invited to this press conference, were invited but didn't come, or were invited, came, and didn't report on it.

CHAPTER SEVEN

SAME STORY, DIFFERENT SPIN II: TV CASE STUDY

Previous chapters have highlighted television's significant role in the public communication of archaeology. This last chapter is appropriately devoted to an examination of how television mediates archaeology, centred round a case study of three documentaries (French, British and American) that were produced about the same archaeological project. The project was French archaeologist Jean-Yves Empereur's 1995 underwater survey and rescue operation in search of the remains of the Pharos or Lighthouse of Alexandria, the Seventh Wonder of the World. The production history of these documentaries is illuminating because the television producer behind them, Stéphane Millière of Gédéon Programmes, largely funded the archaeological mission itself, receiving in return all-media rights to its exploitation, and assumed responsibility for all aspects of its public mediation. This arrangement between archaeologist and TV producer resulted in controlled, high-profile international news coverage and in the co-production between France 2, the BBC and the American public station WGBH-TV in which the three broadcasters were able to tailor-make their own documentaries from the same filmed material.

Although an exceptional rather than representative example of TV archaeology, this case has been chosen because it foregrounds many of the issues raised in earlier chapters. It allows us to develop further the comparative analysis presented in Chapter Six by applying it to television documentaries and expanding it to encompass three different nations' broadcasters, thus providing insights into their different perceptions of and ways of catering to audience interest, expectations and understanding. It also offers us the chance to examine and assess the functioning and implications of a seemingly model symbiotic arrangement, one in which each professional's expertise was optimally utilised and the medium itself took charge of mediation—perhaps the ultimate shift in control over communication. Lastly, it invites us to deliberate on the professional and public ramifications of this model of mediation. To create a frame of reference around the

case study—to identify where it conforms to or diverges from traditional TV archaeology—it is necessary to position it within the context of how TV documentaries mediate science and archaeology, and their special relationship with underwater archaeology.

TV Documentary as Science/Archaeology Mediator

Television is acknowledged by media practitioners and analysts to be a difficult medium for communicating science and scholarly disciplines in general (Friedmann 1986: 35, cited in Fenton *et al.* 1998: 14; Gripsrud 1999: 51), and archaeology in particular (Jordan 1981: 211; Norman 1983: 29; Chambers 1999; Forbes Taylor 2001: 468-469).[1] This is seen to derive from a greater mismatch in their goals, practices and discourses than exists between these scholarly subjects and other media, like publishing. Put bluntly, television is perceived as being too populist, too driven by entertainment and narrative imperatives, to be able to mediate effectively the complex and serious worlds of science and archaeology. Whether these assumptions are well founded and how and why television's mediation of these subjects differs from press mediation, as outlined in preceding chapters, is what will be examined in this section.

The above judgements on 'television' primarily refer to television documentary, although science and archaeology are dealt with in various other genres of factual TV (e.g. news bulletins, current affairs programmes, and studio discussions). It is hard to generalise about how TV documentaries mediate science because it is itself a genre that encompasses a variety of formats. A science documentary may, for instance, be a dramatised reconstruction of a past discovery. It may be a 'fly-on-the-wall' account of a current scientific project or a combination of these and other formats within a single program. As we saw in Chapter Four, archaeological documentaries are regularly framed in six different formats. A distinction also needs to be made between documentary *films* made by independent producers (my subject here) and documentary *reportage* produced by network broadcasters and intended for magazine or current affairs programmes.[2] Despite the adaptable nature of the genre, there are special attributes of TV documentary and basic differences between its mediation of science and science journalism that are worth signalling here.

First and foremost, because of the time it takes to produce them, TV documentaries are not normally able or expected to report on the immediate 'hard news' of journalism. Documentary producers are not searching for breaking stories, but for, as Silverstone (1985: 18) puts it, "fascinating facts" and "fascinating individuals who can communicate them." Documentaries do not simply report or describe; they are about explaining, interpreting, contextualising and putting forward a case, through appeals both to intellect and emotions. Their producers' ambition, according to Silverstone (*ibid*: 17), is "to understand what is going on, and therefore to be able to make decisions about what is important, but also to construct through that understanding an argument or a way of presenting it which is accurate, coherent, and persuasive." To do this, they need to impose order, for as Silverstone (*ibid*: 44) explains, "The disorder and contradictions of an observed reality have to be transformed into an ordered and coherent, plausible and persuasive, vision of reality." In this sense, documentary producers' goals and methods are not dissimilar to journalists' (or, for that matter, archaeologists'). The audience, cautioned Collins (1987, cited in Hargreaves and Ferguson 2000: 24), need to recognise that the medium, programme-makers and scientists "wield magic" when they collaborate together to create this perception of an ordered scientific reality.

Documentary producers are able to pursue these aims with fewer of the constraints faced by journalists. Given more production time, greater programme length, larger budgets and a wider assortment of aesthetic tools, documentaries are less constrained by the pressures of urgent deadlines, event-only coverage, 'closed' discourse and information condensation. The documentary form also offers a number of attributes that are distinct assets over journalism in the coverage of scientific or historical stories. Above all, its reliance on visual imagery allows it to depict these subjects with a vividness, immediacy and authority that is far beyond what is possible in the print media. Viewers today may be more cognizant of how images can be manipulated, yet they still accept documentary images as "raw glimpses of what actually happened" (Lowenthal 1985: 368) and are easily persuaded of their authenticity or at least plausibility. The way that these images are then edited together means documentaries can also interweave or juxtapose material with greater facility than is possible in print. They can breathe life into complex ideas, arguments or subjects by interweaving the

'personal/emotional' and 'abstract/intellectual' elements of a story, and their ability to shift time and space makes them an ideal medium for drawing comparisons. The editing process is the key to television mediation and to the pliable nature of the form, as will be exemplified in how the same material was transformed in our case study documentaries. Documentary is also an omnivorous medium, able to feed off of and incorporate written sources, artefacts, works of art, photographs, radio, feature films, sound and music, as well as newsreel and archive footage. These attributes give TV documentary a distinct advantage over print media in providing synthesis, perspective and context. In addition, documentaries not only use other sources, but become sources themselves. "As time goes by", writes Gill (2002c: 13), "the box will become more and more where history is kept, its prime textual resource."

Documentary producers do, of course, face constraints, especially the need to produce a complete, convincing and entertaining narrative that will be consumed by a large, heterogeneous audience and to fit complicated material into particular formats that conform to available TV strands and satisfy programme editors' scheduling needs. Although more expansive than TV news, documentaries are still normally limited to running times of between 26 and 60 minutes, and thus their chief weakness in covering scholarly subjects is the superficiality that comes from the need for condensation and pace. As Kershaw (2003: 16) says:

> Constraints of time alone determine this. Programmes have to be fast-moving if they are to retain viewers....The 'treatment' (or script) for a fifty-minute 'show'...is as a rule only twenty or thirty pages long—scarcely the length of a pamphlet, let alone a book. So there is little room for elaboration, differentiation or qualification.

A completed documentary's verbal content will be even more abbreviated than the original treatment, the transcript of the American Pharos documentary, for example, running to a mere seven pages. These time and pacing constraints mean that television is, as Kershaw adds (*ibid*), "at its weakest where thematic or structural analysis is required, especially where the issue is contentious and subject to widely differing interpretations." They may also explain, if not justify, why television documentaries emphasise practical archaeology "at the expense" of conceptual archaeology, as Hills (2003: 208) has pointed out. Although able to provide viewers with the various sides to an issue or interpretation, the vast majority of documentaries tend to be eager to present only one conclusion, for

"too many qualifications, too much grey, will deprive the film of its coherence" (Silverstone 1985: 35).

Limitations of time, space and pace and the need for a cohesive structure also mean that documentaries guide the audience's attention throughout the film and within the image. Television is, as Kershaw (2003: 16) says, "directive". Even 'backstage' documentaries only give the impression of being non-directive, and the case study films, for example, demonstrate how different levels of 'directiveness' can be applied to the same footage, the choice largely predicated on broadcasters' assumptions about their audience.

Both the assets and liabilities of TV documentary circumscribe the subjects that the form can cover adequately or at all. Subjects unable to sustain a whole programme, that cannot be easily condensed or paced, that are too open-ended, or that have no eyewitnesses, quotable experts, stunning visuals or archive footage to offer, will struggle to be commissioned even if the subject can be shown to be of interest to viewers. Some of these deficiencies can be overcome with the assistance of filmic tools like music, dramatic reconstructions and CGI. The latter two of these are especially important to TV archaeology, for they make it possible to produce programmes on prehistoric subjects with little other illustrative potential. An overuse of these tools can, however, lead to documentaries that appear padded or 'over-produced'. The success of computer-animated series, like *Walking with Dinosaurs* (1999) and its many clones, has raised expectations and fears that factual programming will in future need to have "blockbuster movie visuals" (Green 1999), as would be borne out in *Pompeii: The Last Day* (2003).

Evocative but directive, authoritative but superficial, malleable but circumscribed and conclusive, TV documentary is an inherently conflicted medium. Its strengths make it better suited to communicating science and archaeology than the press or other factual TV forms. As Finn (2001: 266) points out, "a documentary researched, filmed and edited over months, gives its subject room to manoeuvre." Yet its weaknesses (and even some of its strengths) hold it back from doing that job to everyone's satisfaction. Having looked at the nature of TV documentary, one must also examine more closely how the process of documentary mediation of archaeology differs from that of press mediation.

Although choosing which subjects to cover is key in journalism and documentary production, their selection criteria differ in important ways.

Explaining how he chose archaeological subjects for BBC2's *Chronicle* strand, Norman (1983: 28) flagged four factors. First was "the importance of the story in archaeological terms." Released from having to judge a story on immediate newsworthiness, documentary producers can take a longer view on the significance of a subject, and this widens significantly their catchment area. Second was a subject's televisual potential. It is at this hurdle that much of the more routine work of science will fall. As Silverstone (1985: 46) explains, "Normal science, laboratory science, task-oriented, patient and committed science, with no breakthroughs to report nor charismatic individuals to present...will not be filmed on anything like its own terms." Yet despite the often visually-challenged nature of its practice—as a colleague told TV producer Forbes Taylor (2001: 477), "there are only a limited number of ways of making a hole in the ground interesting"—archaeology seems to have surmounted this hurdle in the past decade more consistently than other science subjects. This is due, I would suggest, to the increasing exploitation of CGI, which brings to life the archaeologically invisible or inanimate, and to the predominance of the 'backstage' format that foregrounds the process of archaeological work (see Chapter Four). This format, which is used in two of the three case study documentaries, has significantly improved 'normal' archaeology's televisual allure. It has also meant that TV archaeology has focused on programmes that produce 'new knowledge' as opposed to ones that present 'established knowledge', a trend that Corner (1999: 178-179) has observed in documentary production in general.

Norman's third selection criterion was a subject's scheduling potential: whether it offered novelty, balance or variety to the programmes already figuring in a strand's (or channel's) roster. Although such concerns influence print journalism, they take on added importance in television where there is little scheduling space for one-off documentaries. This puts pressure on editors and producers to develop or package documentaries into series or to select only those one-off subjects that conform to the requirements of and offer variety to existing strands (like BBC2's *Horizon* or C4's *To the Ends of the Earth*). The point in Chapter Four about history, science and archaeology becoming prioritised subjects on UK television is relevant here, for this trend has been chiefly realised through its documentary output. The consequent growth in new strands and series covering more specialised sub-fields (like forensic and experimental archaeology and, most relevantly here, underwater

archaeology in series such as BBC2's *Journeys to the Bottom of the Sea* [2000] and C4's *Raised from the Deep* [2001]) has helped to widen the scheduling potential of archaeological documentaries. Regarding our case study films, the BBC's Pharos documentary was, however, a one-off programme transmitted (in 1996) before the onset of this trend, and thus it had to stand on its own merits, chiefly the uniqueness of the subject (see below). This was also the case with the French version, and only WGBH-TV had to deal with scheduling variety, since the US film was an episode of its science strand, NOVA.

The last criterion mentioned by Norman, production cost, is where press and TV selection are the most divergent. Cost will have been a major factor (audience relevance being another) in why, as we saw in Chapter Four, almost half of the archaeological documentaries shown on British television between 1999 and 2002 were about UK, not foreign sites.[3] As also discussed earlier, TV's solution to rising costs has been to spread the investment amongst several broadcasters through the advance negotiation of co-production or co-financing deals that generate more revenue than can be raised through the selling of completed programmes, especially one-offs, to other broadcasters. In our case study, as Millière (1998) was well aware, the expense of lengthy, foreign-based and underwater filming meant that Empereur's Pharos project was not viable as a documentary subject unless it could be financed as an international co-production.

A criterion not on Norman's list—but one that would be mentioned by producers today—is a subject's potential to attract an audience. Whereas both press and TV editors recognise and cater to their organisations' audience profile (or targets), the long delay between commission and transmission in television means that selecting on the basis of expected audience ratings will be an educated guess based on the past performance of similar subjects. This explains why so much programming tends towards the predictable. In agreeing to co-produce the Pharos documentaries in 1995, the BBC could rely on the past track record of British viewers' enthusiastic response to underwater archaeology (Norman 1983: 27, 29, 30-31). However, for France 2, the first partner to commit, the venture was a gamble, for "science on television" was at that time "a problem in France" (de Cheveigné 1999: 185).

From selection onwards, for television as well as the press, 'framing' in both a structural and political sense is a vital component of the mediation process. On a

structural level, this involves how the various story elements are brought together and how the links between the reader or viewer, the subject, and the author or filmmaker are built. On a political level, the overall approach taken is, consciously or unconsciously, conditioned by the perception of science that society at large holds. In both media, readership and audience profiles, as well as market research, guide journalists and programme-makers towards the most appropriate ways to tell their stories and engage their audiences. Just as the journalists from the different newspapers made assumptions about the kind of contextualisation their readers would most appreciate in the press stories in Chapter Six, so TV producers make similar decisions based on assumptions about their channel's or programme's audience. As Seymour-Ure (1996: 173) has pointed out, television audiences are "very mixed", certainly more heterogeneous than press readerships. Yet BBC2 and Channel 4, the stations airing the most archaeological programming, do have an image of their audience, as well as an image of their channel, that affect how they frame their schedules and programmes (see Chapters Three and Four).

For instance, that BBC2 and C4 were in the later 1990s so committed to 'backstage' archaeological programmes says a great deal about assumptions that their audiences are dedicated, interested and independently-minded viewers, for this format is slower paced, more free-wheeling and less driven by conventional narrative hooks than other formats. This becomes clearer when one looks at ITV's one attempt at a 'backstage' archaeological series, *Past Finders* (2002), which assumed viewers would be impatient with following one excavation per episode, deciding instead to race between several sites each week. Similarly, when archaeological programming crossed over to BBC1, it did so in the form of dramatic reconstructions (*Pyramid* [2002], *Pompeii: The Last Day* and *Colosseum: Rome's Arena of Death* [2003]). The trend noted in Chapter Four for the directive 'detective story' format to overtake the 'backstage' format at the end of my survey period may be the result of increased reliance on transatlantic co-productions, but it may also point to broadcasters' losing confidence in the sophistication or dedication of their audience.

The structural framing of science and archaeology in the press is circumscribed by its need to focus on 'hard news'. In archaeological coverage, this has tended to privilege new discoveries and sites under threat as subject matter, and these are usually framed dramatically as quests, detective stories or 'David-and-Goliath'

battles. From my viewing experience, I would say that the same is true of how archaeological stories are framed in TV news bulletins. In documentaries, for reasons given above, producers have more "room to manoeuvre", and yet the framing of archaeological documentaries has not changed much since the 1950s when most of the story formats and presentational styles were first experimented with (see Jordan 1981: 211-213 and Chapter Four).

In deciding on the appropriate framing for a project (i.e. the format or presentational style), producers tend to start by making a distinction between whether the subject is an established story or one 'in progress' (like a current excavation), with this dictating the range of format options available. The final choice of story format then involves a more complex set of considerations: from budget, channel and series requirements through availability of material or personnel to filmmakers' personal objectives. The issue of presentational style in terms of building links with the audience almost always comes down to whether or not one uses on-screen presenters or voice-over commentary. Both have their advantages and drawbacks, and certain programme formats do dictate the style of presentation. It would, for instance, be difficult to imagine *Time Team* with a voice-over commentary or a John Romer programme without Romer's voice and presence. Neither can one escape the fact that history and archaeological series presented by on-screen experts (like Schama, Starkey, Hughes, Richards and Pryor) have recently become fashionable again, as they were in the 1970s (see Herman 2003b).

As to the political framing that conditions science mediation in general, both the press and television are equally affected by how science is perceived in society. Like science coverage in the press, television science has also been criticised for portraying science in uncritical or idealised terms (Nelkin 1995: 67; Collins 1987, cited in Hargreaves and Ferguson 2000: 24) and for being "conservative" and "blinded by an ideology of scientism" (Silverstone 1985: 4). As Silverstone (*ibid*) elaborates:

> the argument...is that television science...[accepts] uncritically—and persistently—the view of science as progressive, and [presents] it entirely in terms of its relevance to the consumer and of its impact on society. It reinforces our passivity in relation to science and systematically refuses to consider science as a critical activity, science in relation to social, economic or political action, and science as potentially open to public scrutiny.

From my extensive viewing, science and archaeological documentaries in recent years have increasingly developed a critique of science that challenges science's and scientists' infallibility, a critique undoubtedly healthy from a public perspective.[4] Silverstone (*ibid*) has acknowledged the validity of this view (he calls it the producers' "position"), which is based on empirical evidence. However, he considers it as justifiable as the critic's view that on a "deeper level of consistent professional practice" television science displays a "substantial uniformity" in its approach to science, "part of a more or less successful domination of our culture by scientific values." Unfortunately, the Pharos documentaries, as we shall see, do not support my case, for they present an uncritical view of their subject, for reasons that have to do with the nature of the relationship established between filmmaker and subject.

It is the greater dependency and intimacy of the relationship between scientists and TV professionals that makes television's mediation of science more complicated than press mediation. Journalists rely on scientists as sources, but documentary producers depend on them in a more direct way, building three different relationships with them: as idea initiators, as consultants and information providers, and as performers. The first of these invites the question: where do the ideas for archaeological TV documentaries come from?

We can answer this thanks to the accounts of TV producers and archaeologists (e.g. Johnstone 1957, Daniel 1986, Jordan 1981, Norman 1983, and Forbes Taylor 2001). From the 1950s through the 1970s, programme ideas often emerged from creative partnerships forged between in-house staff producers like Paul Johnstone, Paul Jordan and Forbes Taylor and archaeologists like Glyn Daniel, Mortimer Wheeler and Brian Hope-Taylor. By the 1980s, the balance shifted in favour of producers. At the BBC, as Norman (1983: 29-30) explained at the time, only 25% of the *Chronicle* output was generated directly from archaeologists, the remainder coming from ideas from his production team. The launch of Channel 4 brought new independent producers onto the scene (see Forbes Taylor 2001: 476-477), and by the 1990s, the BBC, too, would be commissioning much of its programming from independent producers. The laborious commissioning process made it harder for specialists to negotiate programme ideas without a producer in tow, and as Forbes Taylor (*ibid*: 469) has admitted, "subject-matter for broadcasting has traditionally emerged 'accidentally'...often it results from the personal interest,

even fixation, of an individual producer." Certainly, in our case study, it was producer Millière's fascination with archaeology which kick-started the project. When asked how his company sourced ideas for new documentaries, Millière (1998) confirmed that scientists, the internet and the press were the most useful sources, a very different order from that given by science journalists (see Chapter Four).

Even if not party to the conception, specialists may become involved in productions as behind-the-scenes consultants or information sources. From the accounts of archaeologists like Arnold (2001) and Pettitt (2001), these roles are often frustrating. An expert tries, on the one hand, to keep a programme on the right track scientifically, but is not, on the other hand, responsible for the outcome—yet is likely to be blamed by colleagues if the outcome is poor. The degree of frustration seems to depend on the subject of the documentary, who it is being made for and the scientific rigour of the programme-makers (often involving the issue of re-constructing events). As Arnold (2001: 463) admits: "not all television production companies...are created equal—some are more willing to listen to what those of us in the profession have to say." There are, however, limits to what even professionals can say when the subject involves prehistory, and this places archaeological advisers at a disadvantage. Recounting the professional criticisms he received for advising on Channel 4's *Neanderthal* (2000), Pettitt (2001: 466-467) explains:

> I, and the other adviser, Chris Stringer, did not write the programmes. We answered as many questions as we could, using the extent of our knowledge and what we hoped was sound scientific judgement. Needless to say, there is a point at which data either ends or becomes to [sic] poor to interpret with confidence. In archaeology our work generally ends at this point; in television it cannot....It is worth emphasizing that there are no blank spaces on a TV screen, and we must accept that gaps in knowledge need to be filled.

For this reason, TV's mediation of archaeology is likely to be more problematic than its mediation of other, less equivocal sciences.

The third relationship, where specialists appear on-camera as performers, can be equally frustrating. As Silverstone (1985: 103) reminds us:

> Film-making is not like writing a newspaper article or even a book. It demands that its subjects be involved in the generation of its raw material. They are involved as individuals, as physical presences, as representatives, and as symbols, but they are not involved in the decisions which will define how they are to be seen.

Scientists involved in a project's inception and who become its on-screen presenter will, of course, be more involved in the decision-making process, but most specialists' on-camera contributions, as interviewees chosen to comment on the film's subject, confer no such rights.[5] Filmmakers rely on experts to lend credibility to their programmes and, more importantly, to voice (along with the narrator) the arguments being put forward by the often invisible programme-maker. One could say that the filmmaker frames a programme's point of view, but the experts provide the vocal chords. This is why experts often feel used by the media, for they recognise how their contribution can be manipulated (see Finn 2001: 267; Hills 2003: 209; Kershaw 2003: 17). Broadcasting codes of practice oblige programme-makers to re-present fairly the views of those whom they interview and to offer 'balanced' argumentation, and the Broadcasting Standards Commission (now subsumed into Ofcom) exists to hear and adjudicate on complaints, although this route is rarely used.[6]

Although, as Silverstone (1985: 52) advises, producers need to build trust between themselves and their contributors, trust cannot resolve the inherent imbalance of power evident in this and the previous relationship. With the variables of filmmaking under the programme-maker's and commissioning editor's control, it is hard to argue with his conclusion (*ibid*: 163) that "when it comes to a question of the frame, and the definition of not just what, but of how, a particular corner of the scientific world is to be presented, it is television discourse which holds all the aces." Experts contributing to programmes in whichever capacity can only try to improve their hand: by learning what questions to ask producers, what assurances can be demanded and when to walk away. Of the trio of relationships (initiator, consultant and performer), it is obviously the first—or a combination of all three, as happened in the case study documentaries—that will offer specialists a degree of influence on programme-makers and programmes.

In summation, the nature of TV documentary makes it a reflective rather than reactive medium for mediating science and archaeology. Its larger canvas and longer production time allow it to deal with the how and why of science, perhaps not critically enough, but usually in more depth than is possible in the press. Unlike the rapid turnaround of newspaper journalism, the lengthy process of documentary production is, in fact, similar to that of an archaeological project. Furthermore, as mentioned in earlier chapters, television documentary can

actually advance a discipline, through experiments and research, in ways that the press cannot. Not as reliant on traditional pathways of communication, the documentary filmmaker is less prone to the herd instinct that crushes original and independent reporting in the press. This is not to say that television science is innovative. The number of documentaries devoted to how the Pyramids and Stonehenge were built demonstrates the amnesia of editors and producers to their own broadcasting history and the innate conservatism of their programming. There are, too, the worrying trends mentioned in Chapter Four that signal a transitional stage for documentary, as distinctions between public service and commercial broadcasting break down. As to the perceived mismatch between the goals, practices and discourses of archaeology and television, it does seem a pity that certain congruencies in goals and practice are ignored and that it is their disparities, especially in discourse and control, that prevail.

Television and Underwater Archaeology

The relationship between television and underwater archaeology is an absorbing subject deserving more than this brief account that will focus on their growing interdependence and on where our case study documentaries fit within current trends. Many factors have played a significant part in defining and cementing the relationship: the unexplored potential of the underwater world, the impact of a few crucial people and projects, the technological advances in both professions, the ethical conflicts that surround underwater exploration, the monies at stake, and the size of the TV audience.

The sea's potential to be a repository of a "greater number of monuments of the skill and industry of man" than "will exist at any one time on the surface of the Continents" was acknowledged by geologist Sir Charles Lyell in 1832 (cited in Giesecke 1996: 226). This was echoed recently on the front page of *The Times* (Rhodes and Nuttall 1997: 1) by oceanographer Robert Ballard when he said that "the deep sea holds a vast amount of human history, more than is held in all the museums of the world." Two centuries of scientific and archaeological investigations, alongside mass tourism and mass communications, have made our planet's surface increasingly familiar. "With the shrinking of our terrestrial world," writes Marsden (1998: 6), "the ocean remains an object of awe, the last true

deity in a diminished pantheon: destructive, still largely unknown, and unimaginably vast." It is this concept of a 'final frontier' that makes the ocean depths, like outer space, captivating to scientists, broadcasters and the public.

Although many have contributed to the development of underwater archaeology, one man's contribution stands out for its impact on the profession and, most relevantly here, on its popularisation: Jacques-Yves Cousteau. Through his feature-length documentaries, *The Silent World* (1956) and *World without Sun* (1964), cinema audiences were first introduced to the magic and mystery of the undersea kingdom. These films remained for a long time unique examples of what underwater cinematography could achieve and how widespread public interest in the subject could be, for it would be another 20 years before television and underwater archaeology began fully to exploit each other. The events that kick-started television's fascination with the subject were the raising of the Mary Rose in October 1982 [7] and the discovery of the Titanic three years later. Although it is exploration, not archaeology, the finding of the Titanic and its aftermath epitomises the issues and controversies that surround underwater archaeology and that influence its relationship with television.

The delay in television's take-up of underwater archaeology was understandable and necessary, for both fields needed to establish their professional practices and to develop the technologies that would facilitate their own work as well as improve their capacity to work together. Since the 1950s, starting with the aqualung, new inventions and military technologies subsequently released for civilian use accelerated access to the deep ocean, increasing the speed, safety and accuracy of underwater work, multiplying exponentially the number of accessible sites and exacerbating the conflicts between archaeologists and others, notably salvors. Improvements in the size and sophistication of camera equipment further aided the process of underwater exploration and its recording. This was brought home to the public when Ballard located the Titanic in 1985. In a less dramatic but no less significant sense, Empereur's survey and recording of the Pharos site could not have been achieved within a filmable timeframe without the benefit of these new technologies.

The Titanic case also illustrates three of the conflicts that plague underwater archaeology, but that add to its allure as a documentary subject. One is the morality of investigating and filming sites were human lives were lost, a debate

often raised over 20th century shipwrecks. In my survey period, four documentaries about the discovery of World War II shipwrecks were produced; in three of these (*U-534, Mighty Hood,* and *Sink the Bismarck,* all 2001), the programme-makers tried to assuage public discomfort (and add drama) by having survivors present to commemorate the discoveries.[8] By going further, by recovering and exhibiting some of the personal possessions of Titanic passengers, the vessel's salvors generated a wave of publicity, not always adverse or unwelcome, that would follow the exhibition around the world.[9] Chris Powell's compelling documentary, *The Battle for Titanic* (1998), would focus on the two other, inter-related conflicts: ownership rights to shipwrecks (especially those in international waters) and the 'battle' that pitches the scientific and archaeological communities against governments and commercial salvors.

Like land archaeology before it, underwater archaeology has always depended on non-professionals, namely recreational and commercial divers. This is why Dugan (cited in Cleator 1973: 154) can call it "a science founded without scientists", while, at the same time, Throckmorton (1971: 210) can complain of the damage non-specialists have done to underwater sites ("more harm...than all the forces of nature together in three millenia [sic]"). Technological advances have increased the threat to underwater remains from commercial salvage, and from the archaeologist's perspective, this has become a battle between those who want to study, record and preserve underwater sites and those who want to salvage, exploit and by so doing destroy them.

On British television, between 1998 and 2002, a third of the TV documentaries involving underwater exploration dealt directly or indirectly with this issue. Some, like *Priceless Cargo* (2000) and *Tek Sing: China's Titanic* (2000), followed uncritically the tribulations of salvors in their search for shipwreck 'treasures'. In one, *The Lost Fleet* (2000), the experiences of the salvor, forbidden from removing artefacts and having concentrated instead on testing the accuracy of a 17th century map of the ships' locations, led to his conversion to preservation, his admission that he "could never salvage these shipwrecks." Other documentaries, like Powell's film, *Treasure Islands* (2000) and *The Treasure of Hanover Cove* (1998), were more openly polemical. They foregrounded the different points of view and ultimately argued, in the first two, in favour of the preservationist cause and, in *Hanover Cove,* for greater cooperation between marine archaeologists and

commercial salvors.[10] Some of these films also explored the role that governments should play in heritage protection, but often do play as accessories to its destruction—recently exemplified in the British Ministry of Defence's deal to split the proceeds of any bullion recovered from the 17th-century HMS Sussex with an American salvor (Lambrick 2002a, Ungoed-Thomas 2003). As we shall see, it was the Egyptian government's own actions which were threatening to destroy the Pharos site that prompted Empereur's rescue operation. In the Pharos documentaries and elsewhere,[11] the suggestion of establishing an underwater 'museum' over a site has been put forward as a partial solution to the competing claims for intact preservation and public access.

The one issue most of these documentaries agree on is the prohibitive cost of underwater exploration. Salvors have used this to bolster their case, but scientists have "thrown down the gauntlet to the treasure hunters", as marine archaeologist Jonathan Adams (Nuttall and Rhodes 1997), who accompanied Ballard on a Mediterranean survey conducted from a US Navy nuclear submarine, explains:

> The treasure hunters, whose interests are completely different from ours, have stated time and again that they are the only people who can deal with these deep-water sites, which are often in international waters and beyond national governments' control. The treasure hunters have said that only they have the expertise and the money. But we have demonstrated that this is not true....We have shown that the academic community can do this and can do it bigger and better than the hunters.

What Ballard could achieve with the support of *National Geographic* and the US military—who also funded to the tune of £1m his three-week survey off Israel in 1999 (Kalman 1999)—is not, however, indicative of the financial backing and resources available to underwater archaeologists. This is where television can, at times, step in.

The expansion in broadcasting in the 1990s intensified the demand for programmes and started a competition between broadcasters for the rights to cover archaeological projects deemed to have the most TV potential. It is, for instance, rare, but not unusual, to hear of archaeologists being offered $1m for all-media rights to their projects (Millière 1998) nor for salvors to expect as much money from films as from salvage (Miller 2002).[12] Furthermore, these monies are only for the *rights*; they do not include the cost of producing the documentaries. For producers, the combined costs of rights and production, as mentioned above, force them to pursue co-producing partners to finance the film and to seek all-

media rights—that is broadcasting rights as well as ancillary rights to photographic coverage, videos, magazines, books and merchandising—in order to amortise their investment. The rush to obtain exclusivity and all-media rights to archaeological projects is mainly a three-horse race between Discovery, National Geographic and terrestrial broadcasters, whose resources tend to squeeze out independent producers. By entering the race, by obtaining these rights to Empereur's search for the Lighthouse, Millière (1998) was "trying to challenge" the dominance of the major players. Not all archaeological projects will, of course, benefit from this economic interdependence between television and archaeology. Underwater archaeology and Egyptology—subjects brought together in the Pharos documentaries—have benefited more than most, largely because of their proven audience appeal.

In 1982, when 20 million Britons watched one or more of the Mary Rose broadcasts (Norman 1983: 27), underwater archaeology proved itself to be an audience-pulling TV documentary subject. The same is true today. In 2000, for example, the six episodes of BBC2's *Journeys to the Bottom of the Sea* achieved audiences of 3.36-5.52 million, were twice the top-rated programmes in BBC2's weekly list, were twice repeated, and became, so a video catalogue (*Video Direct*, Summer 2001, p. 11) claimed, "the most requested BBC series on video ever!" In 2001, it was Channel 4 that would recoup its investment in the search for the Hood and Bismarck by transmitting the documentaries four times that year, including a two-parter that reached the number one spot in ratings (4.16 million) in its Christmas week schedule. Coming full circle, C4 would also in 2000 gather an audience of 3.59 million for *What Sank the Mary Rose?*—an episode in its *Secrets of the Dead* strand that was repeated twice in 2001.

Looking at the BBC2 Pharos documentary, transmitted in December 1996 as *The Seventh Wonder of the World*, alongside the underwater archaeology documentaries broadcast during my survey period (i.e. 1998-2002), there are at least three respects in which it was atypical of these later programmes. First, the vast majority (87%) of these later programmes were about shipwrecks, there being only three documentaries that, like *Seventh Wonder*, were about searches for other underwater structures, monuments or evidence, including *Cleopatra's Palace* (2001) also set in Alexandria. Second, most of them were set in the Atlantic or Pacific oceans or in the waters around the UK or the Americas. Despite its importance throughout

maritime history, the Mediterranean was the setting for only two other films, both of them focused on the Egyptian coast (i.e. *Cleopatra's Palace* and *Napoleon's Lost Fleet* [2001]). Lastly, over two-thirds of the programmes dealt with the 17th, 18th or 20th centuries, the *Seventh Wonder* being the only documentary in this period to represent the Hellenistic period. The distinctiveness of the Empereur-Millière project combined with its embodiment of current trends in the functional relationship between television and archaeology are what make it so appealing as a case study.

The Case Study

This case study is presented in six sections. The first provides some background on the Pharos of Alexandria, the object of Jean-Yves Empereur's 1995 search and survey. The second examines the history of archaeological activity at the site and sets the scene of the 1995 project. The third part explains the deals struck between Empereur and Stéphane Millière of Gédéon Programmes over rights and media access and between Millière and the three broadcasters over the documentaries. Section four recounts the key archaeological and media events that occurred between the first diving season in May 1995 and the exhibition of many of the finds in Paris in May 1998. Most of the 1995 events were filmed by the Gédéon crew and thus form the shared content of the resulting documentaries; some of the events, that year and later, relate to how the news from the site was controlled and how the project and documentaries were promoted. The form and content of the three films are analysed in section five, the analysis pointing up the similarities and differences between the versions and what this tells us about French, British and American broadcasters, audiences and styles of archaeological programme-making. The final part looks at the aftermath, at what happened subsequently in Alexandrian archaeology, and at the implications of the Empereur-Millière partnership for the two professions and the public communication of archaeology.

The Pharos

Not the first lighthouse in antiquity,[13] the Pharos of Alexandria, the seventh of the Seven Wonders of the World, "was the first architecturally designed" of these

structures and as such "acted as a model, both direct and indirect, for others throughout the Graeco-Roman world", its name becoming "a word for a lighthouse in many languages" (Clayton 1988: 145, 142; see Fraser 1972: 20). This influential, three-tiered monument, "still standing, intact and functioning" in 641 AD (Marlowe 1971: 63), would not survive the series of earthquakes that struck Alexandria over the next 500 years, the most disastrous of which occurred in 1303 (Clayton 1988: 155; Empereur 1998a: 62-63; Empereur 1998b: 86). The structure was often repaired and redesigned during these years, its summit, for example, being turned into a mosque in the 9th century, the Arab name for it (al-manara) and its shape becoming the model for minarets (Empereur 1998a: 45; Marlowe 1971: 63). The Pharos was in ruins by the 1340s and remained that way until 1477 when the ruling Mameluke sultan, Ashraf Qaitbay, had a fort built on the site (see **Figure 7.1**), probably re-using what was left of the lighthouse (Empereur 1998a: 36, 63). The Egyptian government's attempt to preserve this fort from sea damage was the catalyst for the 1995 underwater search for the Pharos remains.

Despite its significance, the Pharos, like many of the other Wonders, has left only a few facts undisputed. It was one of the earliest of a series of monuments constructed by Egypt's Ptolemaic rulers for the new coastal city which Alexander the Great had founded in 331 BC at the end of his conquest of Egypt, which was named after him, but which he never lived to see. Sited on a strip of land between the Mediterranean and Lake Mareotis, Alexandria benefited from having a natural breakwater, a long off-shore island (called Pharos by the Greeks), and two separate harbours created by a causeway built between the mainland and the island (see **Figure 7.2**). The city would overtake the previously thriving nearby ports of Herakleion and Canopus[14] to become "the world's greatest emporium...the most cosmopolitan centre of its day" (Rauh 2003: 11), described by Ray (1999: 3) as "the New York of the Ancient World."

Also undisputed is the treacherousness of the Egyptian coast for ship navigation. As Rauh (2003: 22) explains:

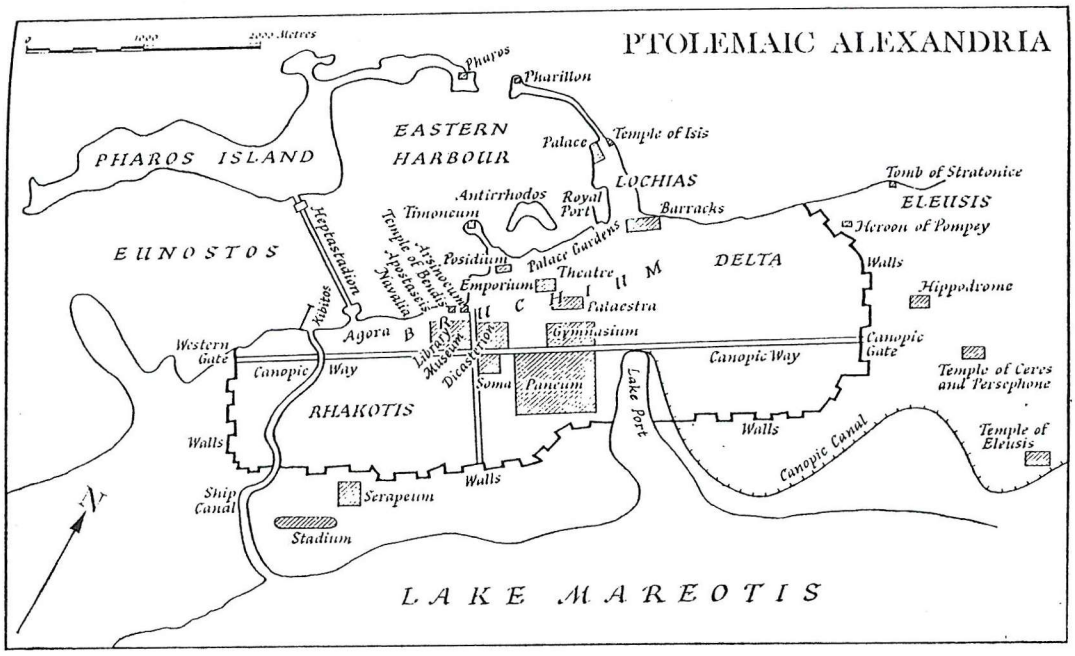
> Essentially as far as Alexandria...the coastline presented ancient mariners with low featureless terrain. Hidden sandbars and quicksands could extend as far as twelve miles out to sea. For ships driven southward by northerly storms, this coast was implacably hostile.

Rocks and reefs at the entrance to Alexandria's harbours created further dangers for ships seeking a safe anchorage (Empereur 1998a: 32). "The ever-increasing

Figure 7.1: Aerial Photograph of the Qaitbay Fort
(Source: Empereur 1998b: 63)



Figure 7.2: Map of Ptolemaic Alexandria
(Source: Marlowe 1971: 55)



importance of Alexandria," writes Clayton (1988: 143), "meant that its two harbours...had to be adequately 'sign-posted'," but the awesome size and design of the Pharos, as well as its cost (800 'talents' equated by Clayton (*ibid*: 145] to £4m in 1987 prices), also suggests a symbolic function, perhaps, as La Riche (1996: 51) suggests, not unlike New York's Statue of Liberty.

A city as grandiose as that being planned by architect Dinocrates, after the grid-like model of Hippodamus of Miletus (Clayton 1988: 139), required a suitably prestigious gateway. Alexandria would, after all, be chosen over Memphis by Ptolemy I to be Egypt's capital, a role it would play for 1,000 years (Empereur 1998a: 14-15). The first image of the city to greet those arriving by sea needed to be, as Empereur (*ibid*: 31) puts it, "une oeuvre monumentale qui frappe les imaginations, à l'image des autres bâtiments de la ville et à l'échelle même de la cité" ("a monumental work that captures the imagination, reflecting the image of the city's other buildings and the scale of the city itself"). The last fact widely agreed on is the lighthouse's general location. It was sited on the easternmost point of the island of Pharos, from which it derives its name, at the entry to the Eastern, Great or 'royal' harbour, as opposed to the western 'commercial' harbour known as Eunostos (Empereur 1998a: 35; Marlowe 1971: 54, 62; Fraser 1972: 18).

Almost everything else about the Pharos is still open to debate, including:

• *when was it built?* It was probably started around 297 BC by the first Ptolemaic ruler, Ptolemy I Soter, and completed around 283 BC by his son Ptolemy II Philadelphus (Marlowe 1971: 62; Fraser 1972: 20; Clayton 1988: 142-145; Empereur 1998a: 30). If indeed built in only 14 years, Empereur (*ibid*) considers this "une efficacité remarquable" compared to other Greek and Pharaonic structures.

• *who built it?* Sostratus of Cnidus is named on a dedication inscription recorded in historical sources,[15] said to have been on the east face of the Pharos "easily seen by everyone entering or leaving the harbour" (Clayton 1988: 144). The ambiguity in the dedication's wording has allowed some to claim Sostratus as the building's architect (Bevan 1968[1927]: 95; Marlowe 1971: 63), while others (Fraser 1972: 19-20; Clayton 1988: 143-145) see him as only its wealthy donor, the architect remaining unknown. Re-examining an epigram written by Posidippus to celebrate the completion of the Pharos, Empereur (1998a: 34-35) has recently suggested that Sostratus donated the statue that topped the Pharos, not the Pharos

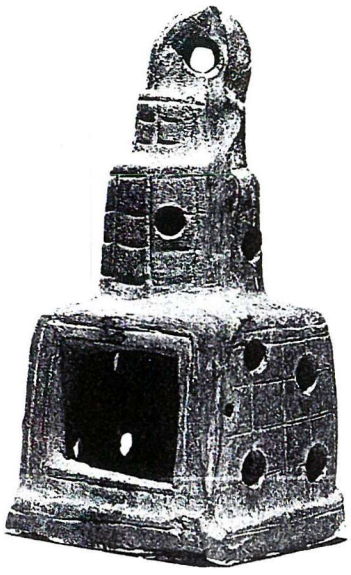
itself. Finding the dedication stone would be a key objective of Empereur's exploration of the site.

• *of what materials?* Strabo (cited in Clayton 1988: 140) writes of the Pharos as being constructed of white marble, and some scholars suggest a combination of marble, Aswan granite and limestone (Fraser 1972: 18; Marlowe 1971: 62). However, both Breccia (1914, cited in Bevan 1968[1927]: 95) and Empereur (1998a: 40-41) conclude that it was built primarily in local limestone (which is as white as marble and was used in other Alexandrian structures). Knowing what kind of stone it was made of would, of course, be vital to the hunt for its remains.

• *what were its shape and height?* Over the six and a half centuries since its collapse, scholars and artists have speculated about the Pharos' exact shape. Their interpretations have been based on ancient artefacts that depict it (like coins, mosaics, gems and terracottas) or that probably emulate it (like the 2nd century BC tomb at Taposiris Magna near Alexandria) (see **Figure 7.3**); on nothing but their imagination (see **Figure 7.4**); or on exhaustive historical research (see **Figure 7.5**). For archaeologists and Egyptologists, the last of these, the Thiersch plans of 1909, has remained the most convincing. Here there are three storeys, the first a tapering rectangle, the second octagonal and the third cylindrical topped with a statue (later a mosque), with the second and third storeys diminishing in height and width to produce a spire-like shape. As to its height, most scholars defer to the measurements taken in 1117 AD by Arab writer Abu al-Haggag Yusuf Ibn Muhammad al-Balawi al-Andalusî (Empereur 1998a: 42-45; Clayton 1988: 153-155). According to these, the first storey sat on a square platform 9.15m high; the first storey was 57.73m high; the second 27.45m; the third 7.32m; and the then mosque on top (probably not dissimilar in height to the earlier statue) being 5.49m. On these figures, I calculate the Pharos was 107.04m high, although Clayton (1988: 155) says 117m and Empereur (1998a: 42, 47) says 135m—further proof of the inconsistencies that surround the lighthouse.[16]

• *and who's on top?* That a statue topped the early Pharos is undisputed; whom the statue represented is. Some say it was Poseidon (Breccia 1914, cited in Bevan 1968[1927]: 95; Marlowe 1971: 62), and others Zeus Soter (Fraser 1972: 18-19; Clayton 1988: 143-144). More recently, Empereur (1998a: 50-51) has suggested that both may be right, that there may have been a succession of statues, perhaps even Christian ones, over the 1,000 years before the erection of the 9th century mosque.

Figure 7.3: Representations of the Pharos



a. Terracotta, 2nd century BC
(Source: Empereur 1998a: 43)

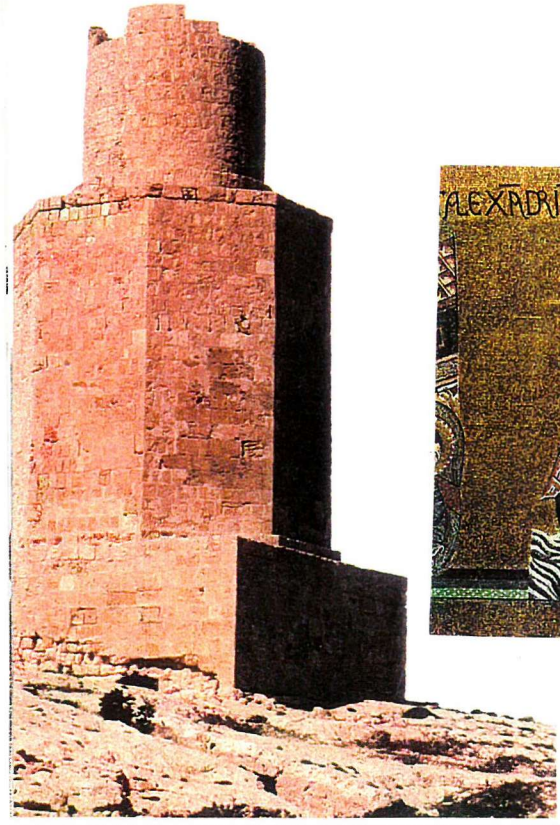


b. Intaglio, 2nd century BC
(Source: Empereur *et al* 1998: 19)

c. Tomb at Taposiris Magna, 2nd century BC
(Source: Empereur 1998a: 42)



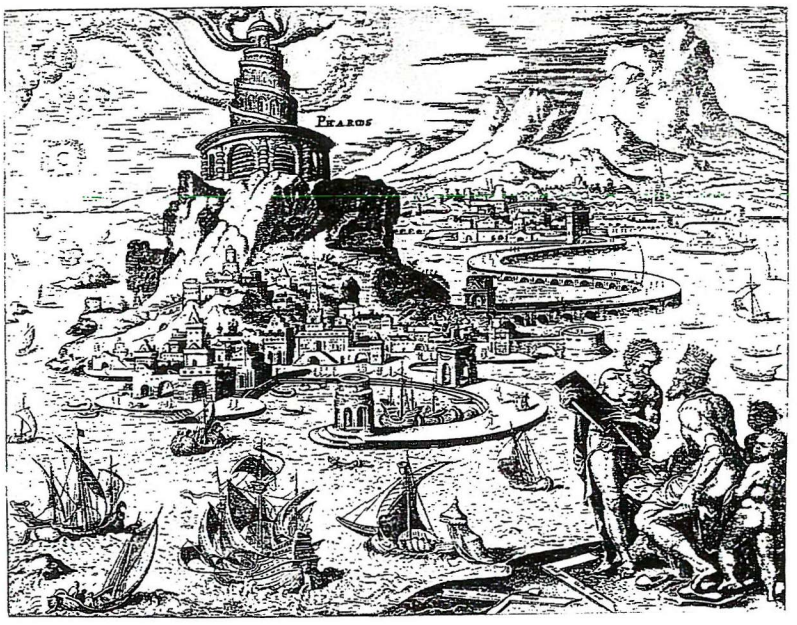
d. Coin, 2nd century AD
(Source: Empereur *et al* 1998: 19)



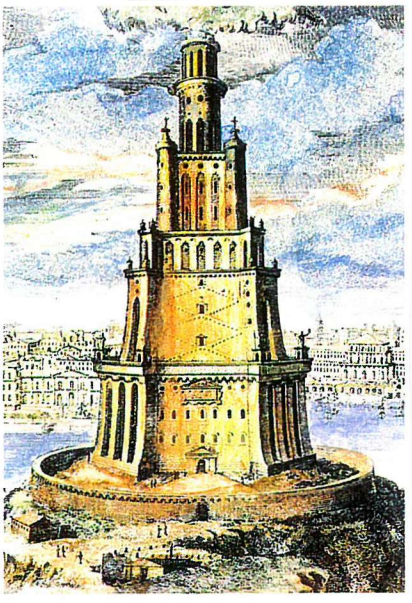


e. Mosaic from St Mark's Basilica, Venice, AD 1200
(Source: Empereur 1998a: 54-55)

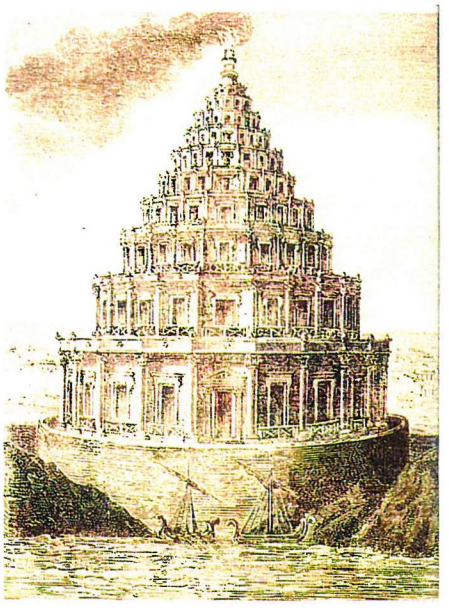
Figure 7.4: Imaginative Representations of the Pharos



a. Maerten van Heemskerck's 16th century engraving
(Source: Clayton 1988: 164)



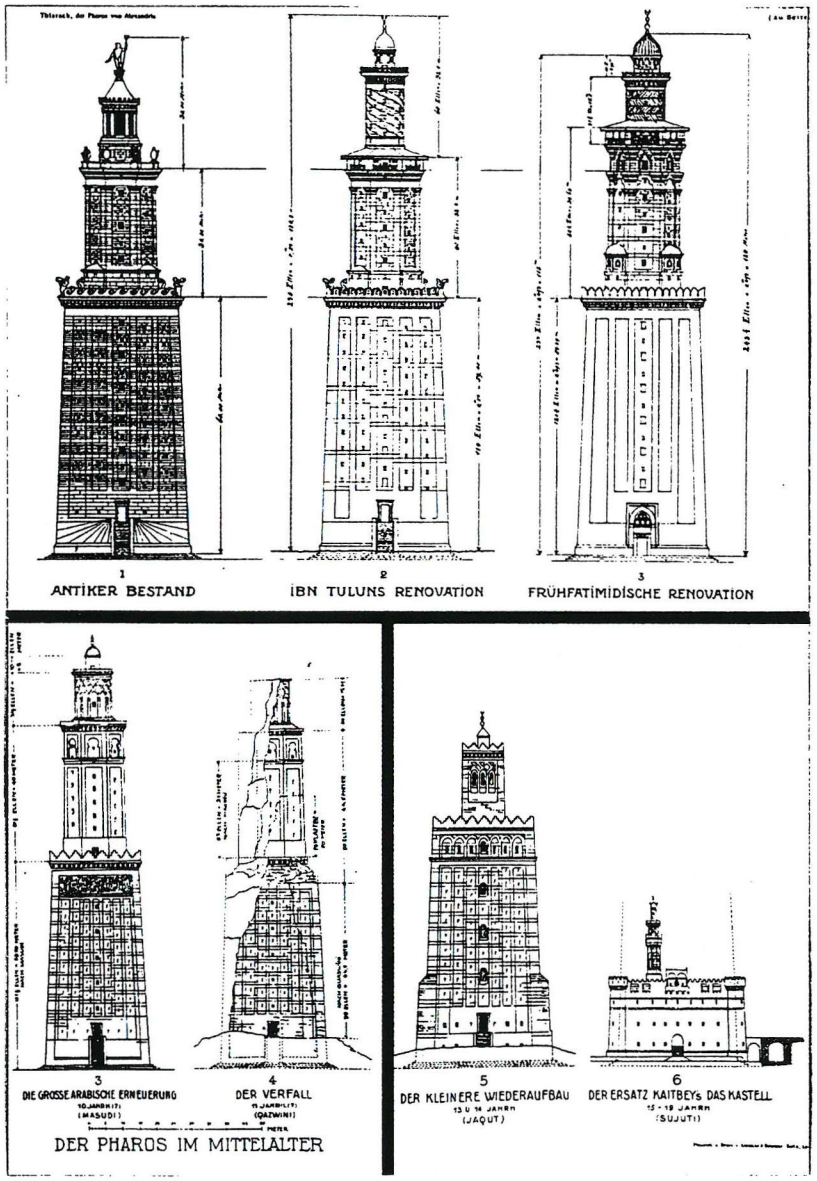
b. J.B. Fischer von Erlach's impression of 1721
(Source: Empereur 1998a: 64)



c. 19th century engraving
(Source: Empereur 1998a: 74)

Figure 7.5: Thiersch's Reconstruction of the Pharos

Published in 1909, Hermann Thiersch's drawings of the different phases in its history, derived from exhaustive research, remain the most respected and authoritative depiction of the Pharos.
(Source: Empereur 1998a: 82)



Of all the unresolved questions, the most intriguing is what happened to the lighthouse's remains? The collapse of a structure of this size would have created a massive amount of debris. As late as 1737, Empereur (1998a: 80) tells us, a visiting Englishman had noted "la présence de blocs antiques autour du fort [Qaitbay], les attribuant au Phare lui-même" ("the presence of ancient blocks around the Qaitbay fort, which he attributed to the Pharos"). But where had these and other vestiges gone? Three mutually non-exclusive possibilities have been mooted. Some remains may have been recycled for the construction of the Qaitbay fort and other Alexandrian buildings (Empereur 1998a: 36; Clayton 1988: 156). Some may have been intentionally thrown into the harbour during the 13th century to block the port entrance from invading Crusader ships (Garwood 2001; Walker 1995; Emad Khalil, *pers. comm.*). And/or some may have fallen into the sea gradually or precipitately during the 14th century as a consequence of earthquakes and tidal waves (Empereur 1998a: 62).

Recycling materials was endemic in ancient Egypt (and elsewhere), as Jean-Pierre Corteggiani, the leading Egyptologist in Empereur's team would confirm in the US version of the Pharos documentary. Undoubtedly, some lighthouse masonry blocks, perhaps even its foundations, were utilised in the Qaitbay fort.[17] The disappearance of so many of early Alexandria's buildings over the centuries has, however, reduced the chances of identifying, let alone finding, any Pharos material in other structures. As to the blockade theory, Empereur (1998a: 92-93) has dismissed this as irrelevant to the Pharos site, for the text used as evidence clearly, he believes, refers to blocks from the city's Serapeum being used to protect the city walls in a different location. Only the third option of the remains still being underwater would offer any real hope to Pharos hunters.

Searching the waters around the harbour entrance for Pharos remains would, however, be complicated by numerous factors. One is the size of the site, some five acres, which makes it "one of the largest underwater sites in the Mediterranean" (Clement 1997: 1). Another is the untreated sewage that is constantly pumped into the bay, making it "rarely possible to see more than an arm's length away" (Jehl 1997). In addition, the Mediterranean currents and winds impede underwater work for all but three to four months a year (France 2, 1996), and that is supposing one can get permission from the Egyptian Navy to dive there in the first place, for Alexandria's harbours and coastline have been a

restricted-access military zone for some 40 years (Clayton 1988: 156-157; Ray 1999: 3). Finally, there is the jumbled, multi-layered nature of the material on the seabed, to which the Egyptian government was from 1993 adding a new top layer of 22-ton concrete blocks in its attempts to shore up the breakwater and protect the fort (Empereur 1998a: 118; 1998b: 68).

The Search for the Pharos

It seems to have been acknowledged, at least as far back as the Napoleonic expeditions in Egypt in the late 1790s, that "there were interesting artifacts underwater in the harbour of Alexandria" (NOVA 1997:1). This was confirmed in 1916 when Gaston Jondet, the engineer entrusted with enlarging the port, found what he believed to be considerable evidence of submerged Bronze Age harbour-works in the western harbour (Bevan 1968[1927]: 6; Blot 1996: 42; Emad Khalil *pers. comm.*) Yet it wasn't until the 1960s that the search for the Pharos began: why had it taken so long?

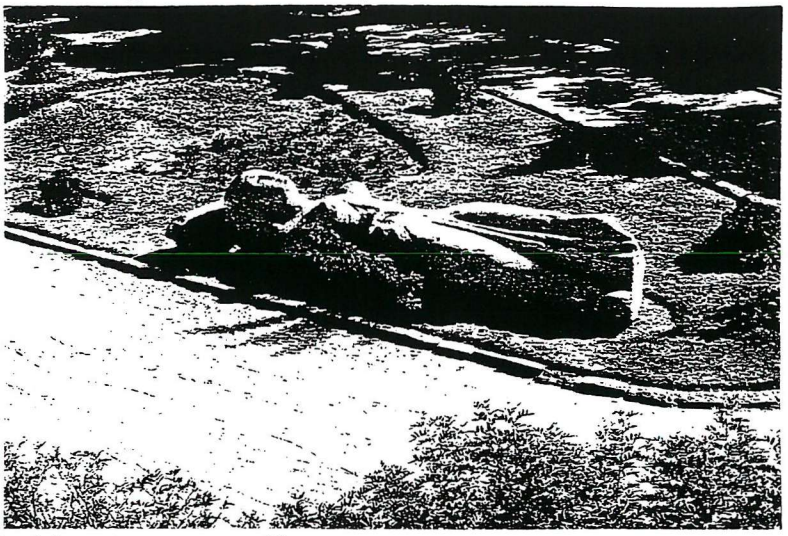
As Empereur explained in an interview with WGBH-TV (NOVA 1997:1), this was partly because the necessary equipment was not available until the 1950s, but largely because of the restrictions imposed by the military control of the area (see also Ray 1999: 3). In his later books on Alexandria, Empereur (1998a: 80; 1998b: 21, 24-25) suggested two other reasons. The extensive rebuilding of the city between 1850 and 1900 had destroyed most of ancient Alexandria, discouraging even the most intrepid early archaeologists like Schliemann.[18] Perhaps more importantly, Egyptologists tended to prefer excavating older Pharaonic sites rather than deal with, as D.G. Hogarth (cited in Empereur 1998b: 24) called them in the late 1890s, Alexandria's "obscure Graeco-Roman ruins". As Susan Walker of the British Museum recently told the *Chicago Tribune* (Mullen 2002: 15), archaeologists "haven't been as interested in looking at the era when Egypt was ruled by foreigners," a view apparently shared by Egyptians and their government. As Mostafa el-Abbadi, professor of ancient history at the University of Alexandria, told journalist Alexander Stille (2000: 98): "The Egyptians are proud of only two periods in their history—ancient Egypt and the Arab conquest. The Greek and Roman period is looked upon in a way as an alien culture." Milliére (1998) expressed a similar opinion when explaining why the fort was more important to

the authorities than the Pharos: "it is more important for them than the Greek or Roman remains because it seems to be a Muslim symbol. And the Greeks are still considered as invaders."[19]

One determined Alexandrian diver, Kemal Abu el-Saadat, managed to surmount all the various obstacles in 1961. Diving around the Qaitbay site, he found the seabed littered not just with masonry but with often broken but identifiable and large statuary (Empereur 1998a: 85; Empereur 1998b: 64; La Riche 1996: 66-67). As La Riche (1996: 66) recounts: "He told his remarkable story of colossi and sphinxes and the ruins of whole buildings to the authorities who, unlike this simple man of the sea, were certified to know such things: since Saadat was virtually unlettered, his findings, in the opinion of the specialists, must be nothing but mere fantasy." Undaunted by this rebuff, Abu el-Saadat persevered, somehow persuading the Egyptian Navy to raise two of the artefacts he had found. Out of the sea came two fragments of a female statue (see **Figure 7.6a**) made of Aswan pink granite, measuring 7m in height and identified as representing the Egyptian goddess Isis (Empereur 1998b: 76), whose temple was know to have been sited on the island of Pharos (Fraser 1972: 20). In her complete state, the statue would have been some 13m tall, making it, according to France 2 (1996), "la statue la plus colossale de l'époque hellénistique". Despite the importance of the find, six more years would pass before the Egyptian government was able to solicit help from UNESCO in mounting the first scientific survey of the site.

To assist Abu el-Saadat, UNESCO enlisted British archaeologist Honor Frost (see **Figure 7.6b**), whose expertise was ideal for the project. Having worked with Kathleen Kenyon at Jericho in the 1950s, Frost had trained as a diver at post-war excavations in the south of France and as an archaeological draughtsman with Peter Throckmorton and George Bass at the Cape Gelidonya and Yassi Ada shipwreck sites in Turkey in the early 1960s, but was best-known for her surveying of Levantine harbour sites like Arwad and Tyre in 1963-64 (Throckmorton 1996: 22; Blot 1996: 74-75). Hampered by bad visibility, during their six dives in October and November 1968, Abu el-Saadat and Frost were to survey and record a 180m2 area near the base of the fort, albeit with fairly primitive means of triangulation (Frost 1975, cited in Empereur 1998a: 114; La Riche 1996: 67). The "Saadat-Frost" method, La Riche (*ibid*) records, depended on "a cool eye, a concentrated mind, and numerous bits of string."

Figure 7.6: Site Explorations of the 1960s

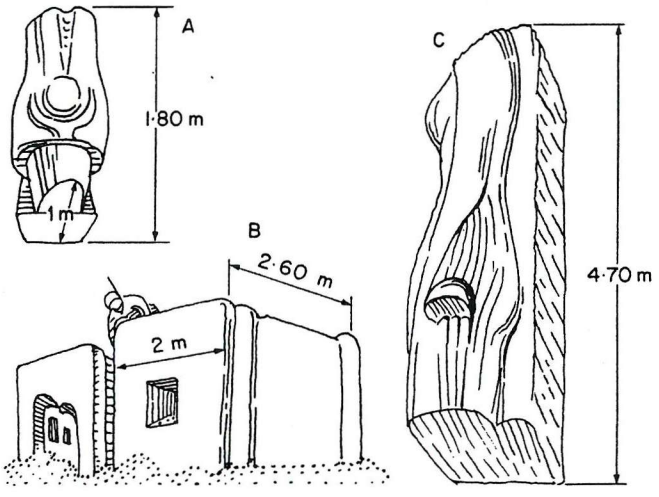


a) Above: The Isis statue recovered by Kemal Abu el-Saadat in 1961
(Source: Clayton 1988: 152)



b) Right: Honor Frost and Kemal Abu-el Saadat at the time of their 1968 survey of the Qaitbay site.
(Source: Empereur 1998a: 85)

c) Below: Some of the sketches of the artefacts discovered during their survey that Frost published in her 1975 article.
A=the Hathor crown
B=a pedestal base for a large statue
C=the torso which Frost presumed was another goddess statue, but which was in 1995 revealed to be the torso of a male colossus, the 'partner' to the Isis statue.
(Source: Empereur 1998a: 114)



In 1975, Frost published an account and some of her sketches of their survey in the *International Journal of Nautical Archaeology* (see **Figure 7.6c**). In it, she summarised their findings: a highly decorated assemblage of large statues, the crown from the previously-raised Isis, two groups of sphinxes, a fragment with Roman numbers on it and numerous large masonry blocks, some as much as 6 metres long. As to the Pharos, Frost clearly saw these large masonry blocks as vestiges of the lighthouse, and their undisturbed state and location near the fort's base led her to conclude that the structure's foundations had been close to the water's edge. She also noted that the site contained sufficient finds to occupy scholars for many years. Sadly, Abu el-Saadat would not survive to see the dénouement of the search that he had begun, having lost his life in 1984 while diving to salvage remnants from L'Orient, Napoleon's flagship at the Battle of the Nile (Empereur 1998a: 85). However, Frost would be invited back to Alexandria by Empereur to compare her early survey with the 1995 one and to take an important role in the Pharos documentaries.

Despite this auspicious start, Alexandria's underwater artefacts remained unexplored for another 20 years, and would have almost been forgotten, if not for the intervention of filmmakers. In 1980, an Italian crew producing a film about the Egyptian coast dived in the harbour and "published an article in a specialist journal in which they described their astonishment at the impressiveness of the site" (Empereur 1998b: 64). Fourteen years later, Egyptian filmmaker Asma el-Bakri decided to dive off Qaitbay in the prospect of filming some unique material for her documentary on ancient Alexandria and asked Jean-Yves Empereur to join her team "as scientific adviser" (Empereur 1998b: 64; 1999). A classics scholar and archaeologist, Empereur, like Frost, had special expertise in underwater and ancient harbour sites, having excavated at Delos, Cnidus, Thasos and Amathonte when he was with and secretary general of the French School in Athens (Empereur 1998a: 10). A frequent visitor to Alexandria, Empereur founded there in 1990 the Centre d'études alexandrines, which the city authorities would engage numerous times over the next decade to conduct rescue excavations around the city. In March 1994, his team was already involved in one such excavation in the city centre when he started diving with el-Bakri at Qaitbay (Empereur 1999).

As Empereur (*ibid*) recounts it, "The day we began filming, there wasn't a ripple on the sea, the wind was from the south, and visibility was unusually good. From the surface we could see hundreds of objects strewn across the sea floor only 24 feet below." Empereur, el-Bakri and the divers were "astonished and enraptured by the unexpected sight" of a "gigantic ruinfield" of artefacts (Empereur 1998b: 65). Back on the surface, the sight of the government barge continuing to dump concrete blocks over the site incensed el-Bakri (*ibid*: 68). Indignant at this threat to the wonders just seen, she began an energetic and emotive publicity campaign to stop the government from reinforcing the breakwater. The result was "a veritable masterpiece of bureaucratic 'even-handedness'" (La Riche 1996: 73). The authorities asked Empereur to survey the site in order to ascertain the extent and nature of the artefacts and to remove some of the most endangered, and the barge would continue dumping concrete into the bay. What could have been a long-term archaeological project became instead a race to find and identify remains before they vanished for ever.

Although much of the underwater statuary so far reported looked distinctly Pharaonic and thus seemed unlikely to pertain to the lighthouse (assumed to have been built in a Greek style befitting Egypt's new rulers), the rescue mission would be focused on finding the remnants of the Pharos. This clear objective was vital for a project authorised but without any funds. Since the government had no monies to offer, Empereur turned to Dr Nicolas Grimal, Egyptologist and director of the Institut français d'archéologie orientale (IFAO) in Cairo, who offered enough support to finance a preliminary survey of the site in the autumn of 1994 (Empereur 1998b: 69). As Empereur (1999) explains, "I reassembled the team of archaeologist-divers with whom I had worked on previous expeditions, adding architects, geologists, and photographers," including Egyptologists Jean-Pierre Corteggiani and Georges Soukiassian, seconded from the IFAO, whose expertise would be invaluable in interpreting many of the finds. It was likely at this stage, or before, that Empereur encountered Franck Goddio, an underwater explorer with a record of shipwreck discoveries and salvages. In 1992, Goddio had convinced the Elf Foundation (a charitable foundation of Elf petroleum) to finance a series of magnetometer surveys of Alexandria's eastern harbour which had confirmed "la présence de nombreux vestiges à l'entrée du port" (France 2, 1996). Although Goddio figures only fleetingly in the Pharos search and resulting films,

his later activities in Alexandria would fuel a rivalry between Empereur and Goddio that would feature prominently in the aftermath of our story.

The exploratory survey revealed the scale of the problem: there were some 3,000 blocks lying on the seabed (Empereur 1998b: 71). Empereur drew up a budget for two diving and surveying seasons in 1995, the amount needed being 1.7m francs, then just over £200,000 (Millière 1998). The IFAO and the Elf Foundation were approached, but could only offer limited financial help (some 300,000 francs) as this was the end of the financial year and their forward budgets were already committed (*ibid*). Most of the shortfall was to come from an unexpected source: French TV producer Stéphane Millière of Gédéon Programmes.

The Deal

Combining the sponsoring and filming of an archaeological project is an expensive undertaking in a competitive arena, and it is even riskier for independent producers working in a country whose broadcasters had little commitment to presenting science or archaeology on television. Describing the situation in France at the time, de Cheveigné (1999: 185) points out the apparent contradictions faced by producers of science programmes like Gédéon:

> Science programmes appear and disappear, official reports are written, Britain is regularly quoted as a [sic] example, scientists blame journalists, journalists blame TV programmes, and so on. And yet the French read large numbers of science magazines and books—so they are apparently not particularly allergic to science.

As in other countries, the deregulation of French television from the 1980s onwards "affected television in general and popularization programmes in particular", eventually knocking half of the science programmes off French screens between 1994 and 1996 (*ibid*: 186). For a fairly young (started in 1982) and specialised company like Gédéon, the mid-1990s was an inauspicious time to invest heavily in an archaeological project. Luckily for Empereur, Millière was an entrepreneurial producer passionate about palaeontology and archaeology, who since 1991 had been making documentaries about marine biological expeditions to the arctic and antarctic on which he had worked with the Elf Foundation (Millière 1998). It was Elf who introduced Millière to Empereur in late 1994 (*ibid*).

To provide the sizeable sums needed to ensure that the 1995 survey would go ahead and to produce a documentary about it, Millière had few choices and little time to make them. As he told me in 1998 (*ibid*):

> We decided to invest money. We had a very short period of time to react, only two weeks....I went there, I dived over the place, and I saw already a few sphinxes and part of the blocks, and after discussing with the archaeologists, I asked them if I could get the exclusive rights for the pictures and films. I tried to raise money from France from that, to get money to invest in the actual archaeological mission. After two weeks or ten days, I gave back the answer and said okay, I would pay for it. I phoned Sygma, the photo agency, who gave me back part of the money to get the exclusive rights for the pictures. I signed for a book with a publisher, and these deals gave me back about half of the money I had invested, about 500,000 francs.

To have made this commitment and convinced others to share in it required trust, as Millière (*ibid*) admitted:

> In fact, we did not know exactly what we would find. I only saw a very few things underwater...and you really could think that you were over just blocks of rocks...I was convinced Jean-Yves Empereur...was very serious, and...he convinced me that we were facing some remains of the lighthouse. So this is what I saw.

With half of the sponsorship monies recouped, but the first diving season only months away, Millière then set about assembling the partnerships that would guarantee the financing of the documentary.

He started by having a treatment written for the proposed documentary, outlining the basic approach (i.e. a 'backstage' format) which would entail filming in Alexandria throughout most of 1995, and sending this to broadcasters most likely to be interested and able to respond quickly. As this was a French-language project from a French independent company, Millière needed to start by securing a home broadcaster, and France's second terrestrial channel, France 2, became the first to commit. Approached next, the BBC were "enthusiastic and made a decision in about two weeks", the quickness of the response being, as Millière admits (*ibid*), "very unusual." Negotiations with WGBH-NOVA, the American PBS partner, would take longer.

Since NOVA had not worked with Gédéon before, they needed some reassurances. They wanted the documentary to be directed by "an English director...who had worked with PBS", and they wanted the film to include "someone speaking English" (*ibid*). The first request was fulfilled when all parties agreed on Andrew Snell, a British director who had made films for WNET, the

New York PBS station. With respect to the second request, Millière had already had concerns about the language spoken in the film, for Empereur's Franco-Egyptian team tended to speak to each other in an insufficiently comprehensible English (*ibid*). "So we had been thinking of having an English character in the film," explains Millière (*ibid*), "and asked Jean-Yves Empereur if he knew someone...interested in the digging there in Alexandria or a specialist [who] could come into the film." Empereur suggested Honor Frost, whom he had worked with before and who had a direct connection with the Qaitbay site. Frost was an ideal choice because "the French archaeologists were happy to meet her because she had all the drawings that she had made 30 years before, so it was something which added value for them and to the film" (*ibid*).

In an industry notoriously slow to make decisions and more used to documentaries taking weeks rather than months to film,[20] what was it about the Pharos project that prompted such quick reactions? According to Millière (*ibid*), the attraction was twofold:

> The first thing was the story: it was part of the remains from the seventh Wonder of the World that nobody had seen for six centuries. The most important thing was that everybody [knew] about the lighthouse....Also, something which was very important for everybody was that we got exclusive rights. The images we were doing would be exclusive for the broadcasters we were working with. As soon as we made the first press conference with Jean-Yves Empereur, he received about...fifty, one hundred phone calls to make films and for television crews to come to get authorisations to film. I think that if we had not had these exclusive rights, as it was in Egypt, it would have been very easy for anyone to give some money and get the rights to film and do it in a very different way and the images would have had no value.

A great story about a widely known subject and a guarantee that none of your competitors would be able to exploit it and devalue your investment, these were undoubtedly the 'USP's' (unique selling points) of the proposed co-production. To these I would add the project's novel combination of two popular TV archaeology subjects (Egyptology and underwater exploration). But what were the attractions of the deal for Empereur?

Firstly, the deal offered Empereur a media partner who respected archaeological practice and was committed to the long-term filming which would allow the film crew to become integrated members of the team. Rather than facing floods of different journalists and filmmakers descending at odd moments and disrupting work, Empereur and his colleagues would only have to contend with the Gédéon crew, except at a few pre-planned media events carefully stage-managed by

Millière. Secondly, he would be able to turn over all media requests and strategising to Millière, leaving himself free to concentrate on the archaeology. About archaeologists' relationship to the media, Millière (*ibid*) confided:

> Most of the time they are all very afraid of the media. They need them, but they are afraid of what they can do, so they need someone to protect them from the media....We control the way it happens. If you don't do that, the pressure from the media when you do a major discovery is so enormous. You can do interviews every day and they really push you, and most archaeologists don't want to be media stars.

Thirdly, and most importantly, the deal offered Empereur a long-term relationship with a major fundraiser. As Millière (*ibid*) explained:

> The deal we had with [Empereur] was that we were just starting the pump for financing his missions...that I would publicise his work and then help him in financing the next years. I would not invest any more, but I would help him in getting money to finance the work in years to come, which is what I've done. It's by the media that we got all the money he had for the years after: 1996, 1997, 1998. When I met him he had a budget of around $50,000 for one year. And now he has about $500,000 for one year.

By "by the media", Millière is giving credit to both the publicity generated around the Pharos project and documentary and the specific investment that France 2 would later make in another of Empereur's Alexandrian projects.[21] The overall publicity was crucial for enlisting and keeping on board the major sponsors—Elf and EDF (Fondation Electricité de France)—who invested monies, as well as those like Leica, Kodak and Egypt Air who provided equipment or services. As Millière (*ibid*) admits, "Each year it was quite difficult [to convince them to invest], so we had to say that we are going to 'mediatise' your investment." Just how skilfully he managed to do this will become clear. This mutually beneficial deal forged a relationship that was predicated on shared values, mutual respect and a symbiotic bond and that would be strengthened by a growing confidence in each other's expertise and determination to produce results.

Empereur's Pharos Search and its Mediation: May 1995-May 1998

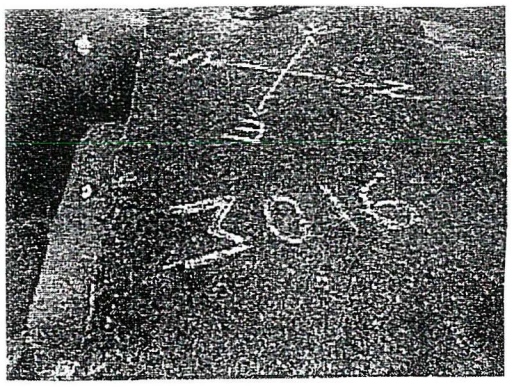
In the spring of 1995, as Empereur's 30-strong team prepared for the first diving season in May and June, Millière, the day-to-day or 'line' producer, assembled the crew that would be filming in Alexandria over the next ten months.[22] Two key decisions were the choice of underwater cinematographer and film editor, for the

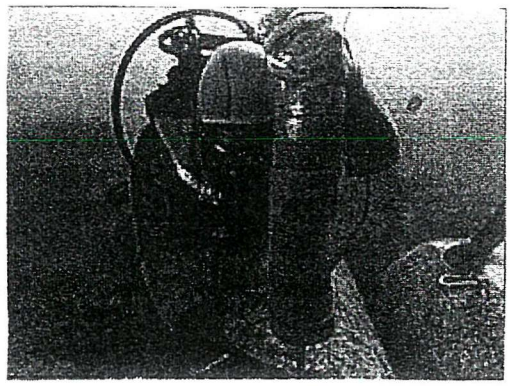
images captured by Roland Savoye and the editing of Thierry Ragobert would be instrumental in establishing the stylistic tone of the documentary. Ragobert became so fundamental to the project that he would ultimately co-edit the British and French versions with Snell and share directorial credit with him on all three versions, their creative partnership ensuring a uniformity between the two European versions. Sygma, the French agency with exclusive rights to the still photographs, also made an inspired choice in assigning Stéphane Compoint to the project. His haunting and artistic photographs would captivate press and magazine picture editors, immeasurably boosting the publicity campaign and becoming icons of the Pharos search, even of Alexandria itself.

As Empereur would explain in the French documentary, the 1995 mission had two objectives: "d'avoir une idée globale du site et sauver un certain nombre des pièces d'archéologie, des architectures antiques" ("to have a global idea of the site and to save a certain number of archaeological and architectural pieces"). In order to gain an overview of the site, and be able to work effectively on it, the team would first need a map, and the documentaries would devote much time to following and explaining this process in detail.

To create the map, the divers needed to number, measure, draw and photograph or film each block or artefact found and record its position on the sea floor, using triangulation, GPS and an electronic theodolite (see **Figure 7.7**). Each day the location references were imported into a special topographical computer database, so that a plan of the site could be gradually built up (see **Figure 7.8a**). This daily up-date also meant that "partial charts [could] be given to the divers the following day to help orientate them underwater and to allow the divers to plot and sketch complementary features of the blocks" (Clement 1997: 2). By linking this map to the identification sheets on each piece of masonry (see **Figure 7.8b**), the archaeologists could call up each block's details by simply clicking on the object's icon on the map. Since the building or buildings that the architectural objects were part of were unknown, this required their developing a different way of cataloguing them, not by their function (as is usually the case), but by their "form, dimension, volume and decoration" (*ibid*: 3). As Clement adds, "this very activity brings blocks together in identifiable groups and is the first step on the road to interpretation."

Figure 7.7: Surveying the Site





a) Above left: numbering the blocks
(Source: Clement 1997: 3)

b) Above right: attaching lead line to block in order to plot location
(Source: Clement 1997: 1)

c) Below: measuring and drawing
(Source: Empereur 1998a: 2-3)

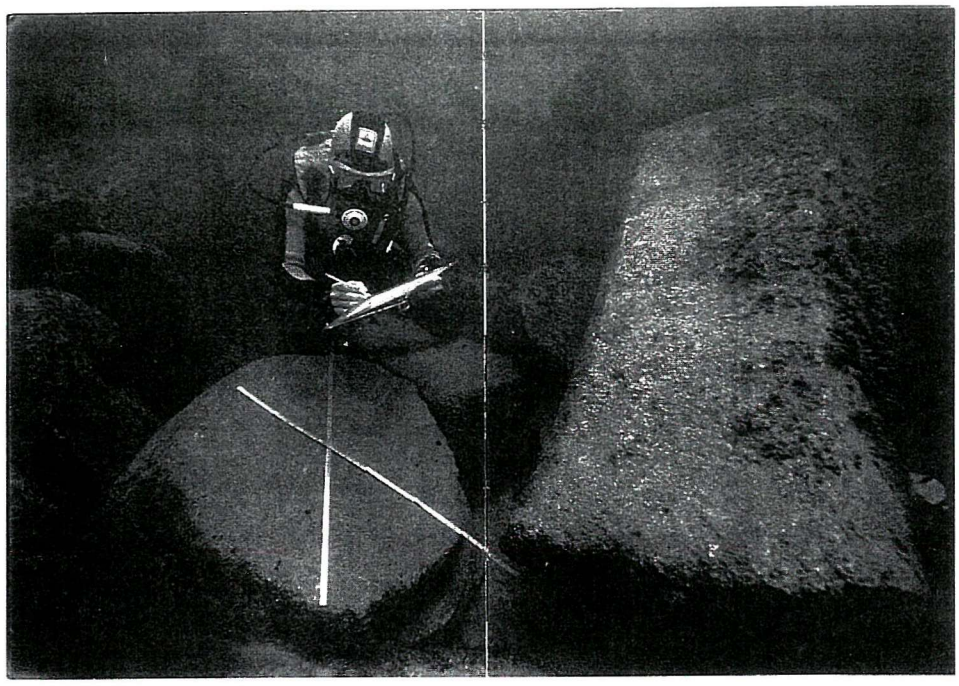
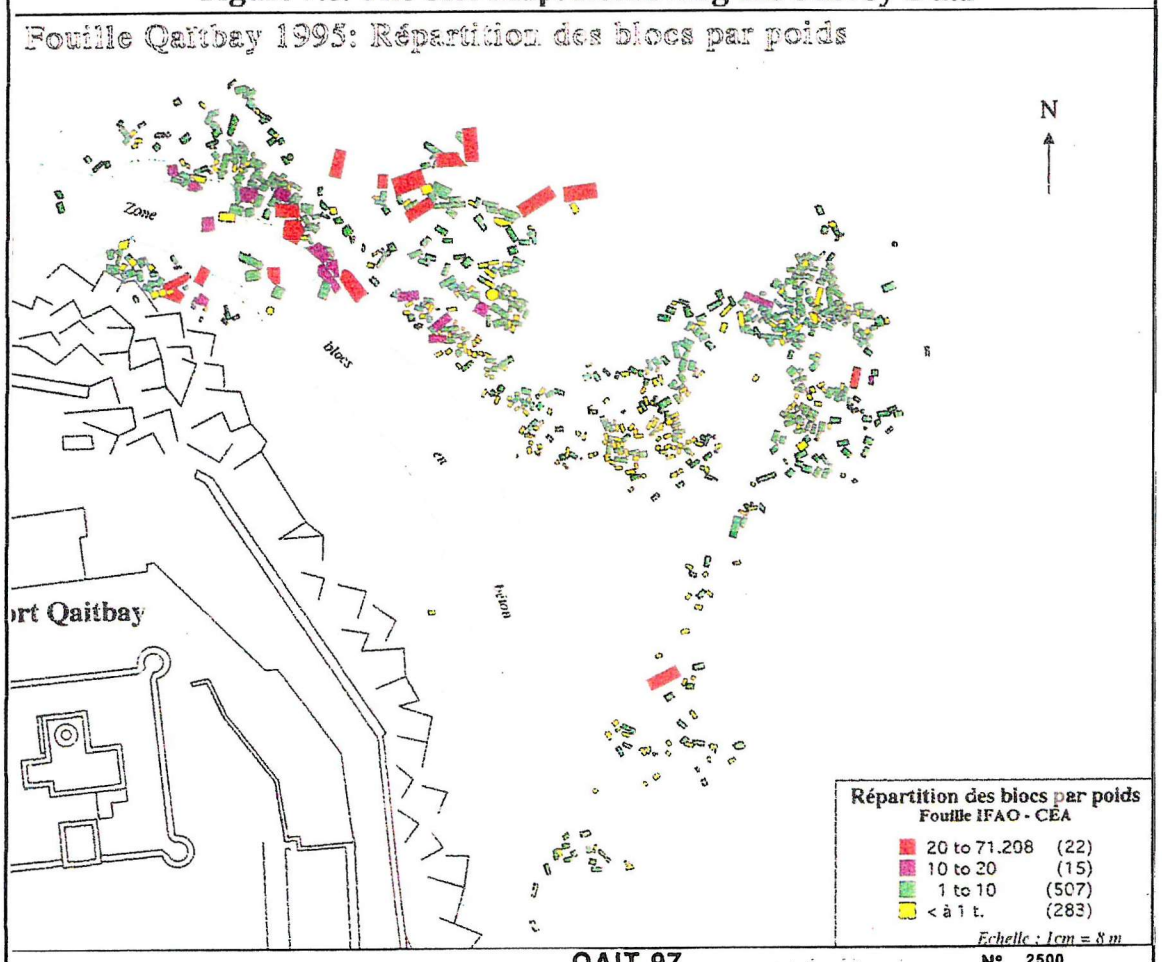
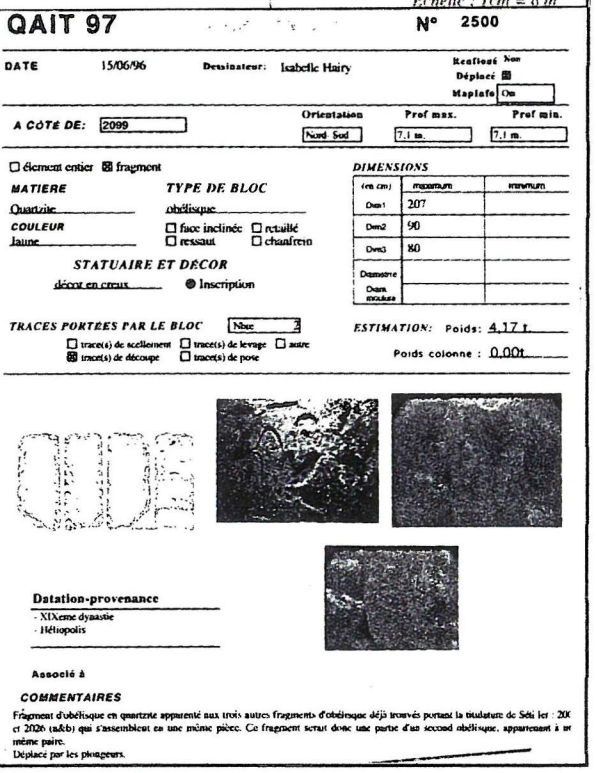


Figure 7.8: The Site Map: Retrieving the Survey Data



a) Above: computer print-out of the map with blocks distinguished by their weight, the red blocks being the heaviest
(Source: La Riche 1996: 50)

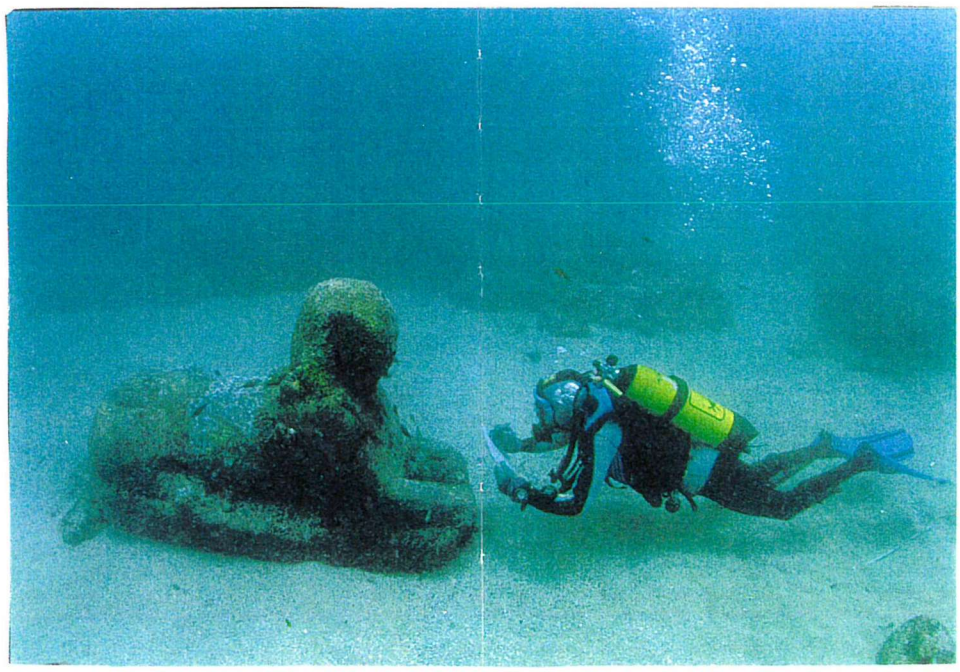


b) Right: the information sheet that appears on screen when an object on the map is clicked on
(Source: Empereur 1998a: 87)

During the month of May, the team charted some 500 blocks on the top layer of the site. From the start, the daily routine was punctuated by amazing discoveries hidden amongst the masonry. Searching for Ptolemaic-Greek remains of the 3rd century BC and later, Empereur and Corteggiani were surprised to discover columns, obelisk fragments and sphinxes whose style, hieroglyphics or inscriptions placed them as far back as the second half of the 2nd millennium BC, during Egypt's New Kingdom (see **Figure 7.9**). Some columns "with capitals in the form of papyrus stalks...bore the cartouche of Ramses II [1279-1213 BC]", and the hieroglyphics and carvings on two calcite obelisk fragments depicted his father, Sety I (1294-1279 BC), "bringing offerings to the deities at Heliopolis, the ancient city of the sun-god...the [then] capital of Lower Egypt"(Empereur 1999). The fourteen sphinxes found by the end of June showed great disparity in size, material and especially age, with 1,300 years separating the earliest (from the 12th Dynasty reign of Senusret III [1874-1855 BC]) from the latest (belonging to Psamtek III [526-525 BC], the last pharaoh of the 26th Dynasty) (NOVA 1997: 4). In the documentaries, Corteggiani would explain to his colleagues that it was likely that these earlier artefacts were taken from the ruins of Heliopolis to be recycled as decoration or building material for the new city of Alexandria. By the end of the first month, the team had recorded about a quarter of the site and had made some great finds, but they seemed to be no closer to finding the Pharos.

In June, the team started to investigate the site's lower layers. This required the delicate lifting and floating of some of the heavy upper blocks to shallow water, using chains and inflatable sacks (see **Figure 7.10**), in order to study and clean them (and select which should be brought to the surface) or just to decongest the site. It was at this juncture that a four-ton sphinx broke loose from its lifting chains, sending it plunging to the bottom, causing no injuries, but necessitating a re-briefing by Empereur on safety measures. The team also started surveying closer to the foot of the Qaitbay fort, in the area surveyed by Abu el-Saadat and Frost in 1968. They were quickly rewarded with finding the Hathor stone crown and 12-ton torso that Frost had previously recorded (see Figure 7.6c). The crown was presumed to be the headdress for the Isis statue recovered in 1961, and the torso, seen earlier only from the back, was assumed to be another goddess statue. Now made accessible (see **Figure 7.11a**), the torso was clearly male, its size equal to that of the Isis and its dress that of a pharaoh. The team also discovered the

Figure 7.9: Artefacts Found on the Alexandrian Seabed



a) Above: Sphinx--one of the most exploited photos from the 1995 mission
(Source: Empereur 1998a: 4-5)

b) Below left: Papyrus column, some of these carried the cartouche of Rameses II
(Source: Empereur 1998b: 74)



c) Below right: Obelisk fragment from reign of Sety I
(Source: Empereur 1998b: 62)

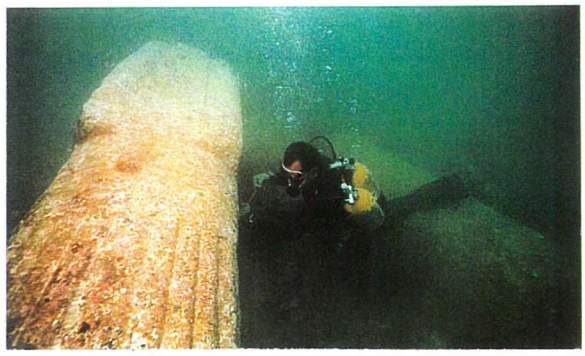


Figure 7.10: The Lifting Process

Here, one of the most complex lifts, that of the male torso
(Source: Empereur 1998a: 8-9)



Figure 7.11: Some of the Pieces of the 'Colossal' Statues

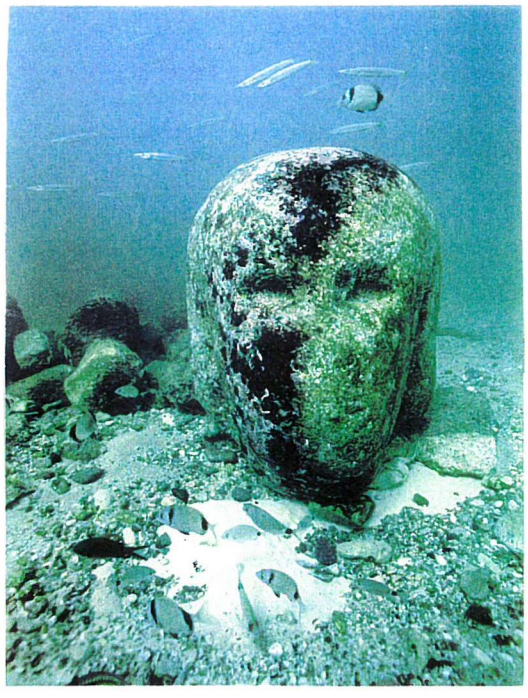




a) Above: The torso of the Ptolemy Colossus
(Source: Empereur 1998a: 88-89)

b) Left: The torso of a second female statue
(Source: Empereur 1998a: 1)

c) Below: Head of one of the male statues
(Source: Empereur *et al* 1998: 59)



torso of a large female statue and the first of three colossal male heads (see **Figure 7.11 b and c**). Despite the absence of inscriptions on them or of any reference to them in historical sources (Empereur 1998a: 89, 95), but based on their size, workmanship and hair and dress style, Empereur and Corteggiani were to hypothesise that the female and male 'colossi' were a royal Ptolemaic couple (possibly Ptolemy II and his wife Arsinoe), represented as pharaoh and Isis, that stood in front of the Pharos as a kind of "royal propaganda", visually linking the new Greek rulers with Egypt's Pharaonic past (NOVA 1997: 3; Empereur 1998a: 88-89). They would later find the head, double crown and part of the arm that matched with the male torso, and enough similar fragments to suggest that the statues of three royal couples may have graced the Pharos (Empereur 1998a: 95).

Even more promising as Pharos remnants were the largest of the masonry blocks found near the fort's base: 90% of which were Aswan granite, some as long as 11 metres and weighing around 70 tons (see **Figure 7.12a**). Their weight in particular suggested that only natural forces could have caused them to be there (Empereur 1998a: 93; Clement 1997: 3). These blocks would become the focus of attention during the summer hiatus. Having recorded some 800 blocks, the diving team dispersed until September, leaving the cartographers to tally the results so far, Empereur to present his first report to the Egyptian authorities, the crew to continue filming and Millière to start implementing his media strategy.

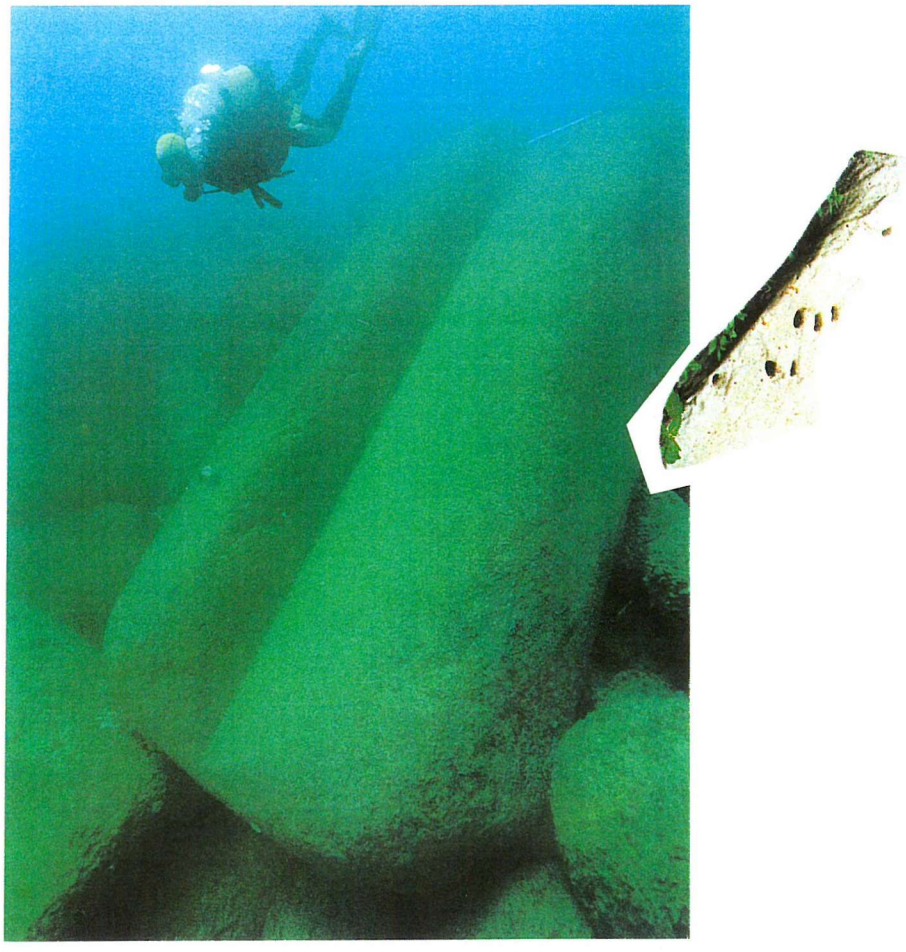
The painstaking surveying seemed to pay off. Highlighting on the map all the heaviest blocks in the assemblage, one of Empereur's assistants saw that they were aligned in a more or less straight line out from the island, as heavy stones might fall from a great height during an earthquake (see the red blocks in Figure 7.8a). From that moment, these blocks became firmly attributed to the lighthouse (NOVA 1997:2). Presenting the map and these results (on camera) to Dr Abdel Halim Nur-el-Din, the Director of Egyptian Antiquities, Empereur seemed pleased, and so, the documentaries tell us, were the authorities. The first press articles to appear about the Pharos search told a different story.

Millière's plan had been to release no information to the media until the end of the second diving season in October. At that time the lifting of some of the best artefacts onto land would be orchestrated as a kind of grand finale in front of the world's news media and Egyptian dignitaries. Then they "would close the doors again and get on with our work" (Millière 1998). Yet on the 21st of July, an article

Figure 7.12: The Largest and Smallest Remnants of the Pharos

a) Left: Diver over 5-metre-tall Aswan pink granite block: part of the door-frame of the Pharos
(Source: Empereur 1998b: 70)

b) Right: The only marble fragment found, with mortise-hole remains of where five 30cm-high Greek letters in bronze were attached: part of the dedication stone?
(Source: Empereur 1998a: 94)



appeared in *The Times* (Walker 1995) headlined "Divers speed hunt for ruins of Pharos lighthouse." According to this story, the Egyptian government had given Empereur an ultimatum "that if remains are not found by the autumn it will cover the area with a barrier of concrete." By releasing the news of this "threat to the ambitious project" (now quoted as costing £300,000) and some general information (but no photos) about the artefacts found to date, as well as Corteggiani's suggestion that the site should be turned into "an underwater archaeological park", Millière was clearly trying to counter the government's pressure with the embarrassment of media publicity. Ironically, the tactic of keeping the project out of the news in order to protect the various media partners' exclusivity may have contributed to the government's impatience. Having seen no results widely reported, the authorities may have assumed that this was because there were none to report. Whether generated or simply reinforced by this ultimatum, the international media event planned for October was becoming even more critical to the fate of the project.

Returning in September to worsening weather and diving conditions, the divers continued their survey and their preparation of the artefacts chosen for retrieval and preservation. Honor Frost also arrived to share her earlier drawings and maps, to dive on the site and ultimately to confirm to the team that the Isis statue and male torso came from the same location on the seabed (thus bolstering the 'royal couple' idea). After their dive together, Corteggiani is shown asking Frost if she had seen the marble fragment he had pointed out to her, the only marble found so far and one with traces of a Greek inscription on it. This passing comment is the only reference in the films to this artefact with the mortise-hole remains of where five bronze letters, 30cm high, had been attached (see **Figure 7.12b**) (Empereur 1998a: 94-95; NOVA 1997: 3). The Pharos dedication was reported to have been in "huge letters of lead" (Bevan 1968[1927]: 96; and Clayton 1988: 144; Marlowe 1971: 62), and, though the metal used is different, it is possible that this fragment formed part of the dedication stone (Empereur 1998a: 94-95).

The lifting ceremony, the finale of the year's work and of the documentaries, took place on the 4th of October. Although the French ambassador, Empereur's team and Frost were there to give innumerable interviews to the press and TV, the guest of honour was the Egyptian Minister of Culture. Inviting him to preside over the event was "a way to involve the Egyptians because we had to get them in

the project and in the communication if we wanted to go on, to get the right to take out all the blocks of concrete" (Millière 1998). These guests, seventeen television crews and hosts of journalists watched as the government's dumping barge, the villain in the story, was now enlisted to raise the first artefacts onto the quayside in heavy seas. Breaking the surface first, to enthusiastic applause, was the 1.5-ton, 5-foot-tall, red granite female torso (see **Figure 7.13**), a photogenic artefact, but chosen, Corteggiani told a *Daily Telegraph* journalist (Anon. 1995a), as "the easiest piece and the lightest to pull out in this high sea." The media strategy appeared to work, for, the documentaries tell us, President Mubarak announced that the breakwater dumping would stop. This news allowed all three documentaries to proclaim near their end that "the site is saved"—an up-beat closure for the films, but a premature verdict as it later turned out.

The documentary crew were to continue filming the raising of other artefacts—a total of 34 statues and blocks were lifted by the end of 1995 (La Riche 1996: 115)—as well as their journey through Alexandria's busy streets to their awaiting conservation tanks. The documentaries would use these extraordinary images in their closing sequence (see **Figure 7.14**). Sygma's investment paid off handsomely, too, as Compoint's still images of the artefacts being hoisted from the sea would figure for years to come in newspapers and magazines around the world (see **Figure 7.15**). As the statues and blocks started their six-month progress through the desalination process (NOVA 1997: 5), and as Empereur assessed the first year's results and began planning for the next, Andrew Snell and Thierry Ragobert began to assemble the French version of the documentary from the rushes.

When the French version was nearing completion, Millière made the canny decision to organise the film's premiere at the Louvre in the presence of the Egyptian Minister of Culture and France 2's programme director. This was when, as Millière (1998) says, "everybody discovered the film." The programme director "found the film so impressive that he decided to put it on prime time", an unusual step as most documentaries were relegated to off-peak hours (*ibid*). France 2 broadcast the French version, entitled *La Septième Merveille du Monde* ('The Seventh Wonder of the World'), at 20.55 on the 11th of April 1996. Three days before transmission, the Pharos search hit the headlines again.

Figure 7.13: The First Object Lifted Ashore on 4 October 1995

Five-metre-tall, red granite female torso mid-air on its way to the quay and the awaiting news media.
(Source: La Riche 1996: 17)

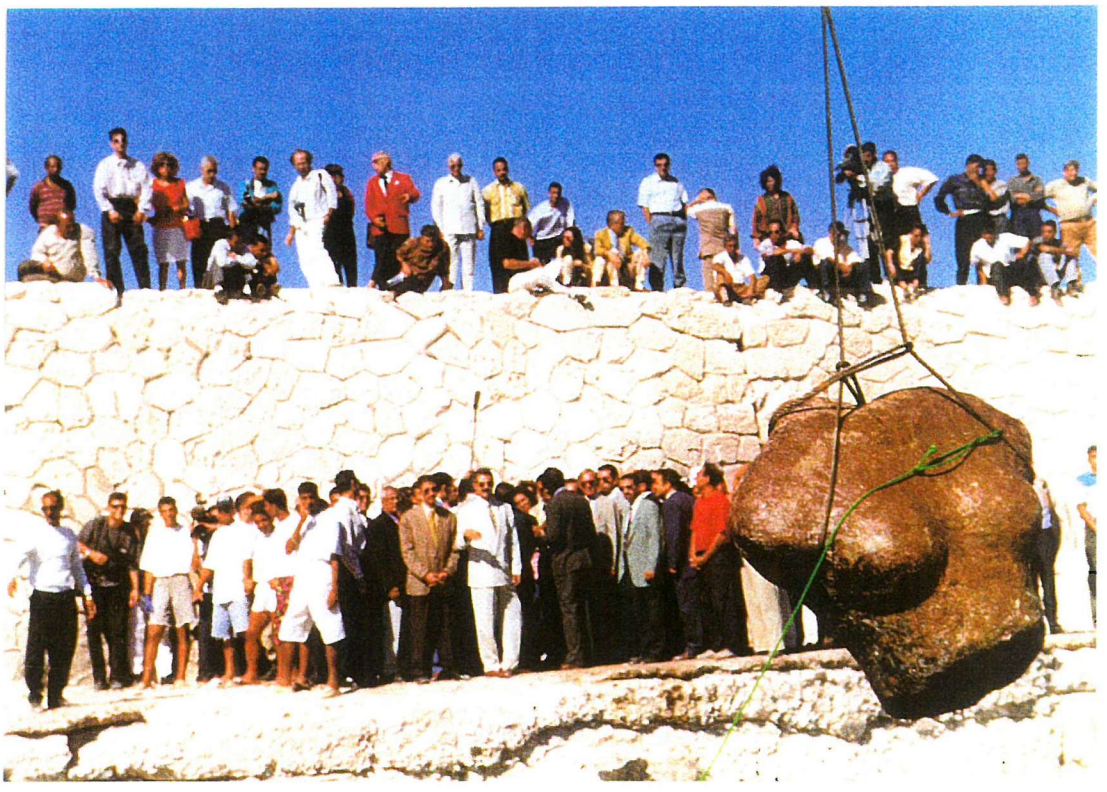


Figure 7.14: The Male Torso on its Journey through Alexandria

The filmed sequence of this journey would close the French version and be under the final credits of the British version.
(Source: Empereur 1998a: 96)

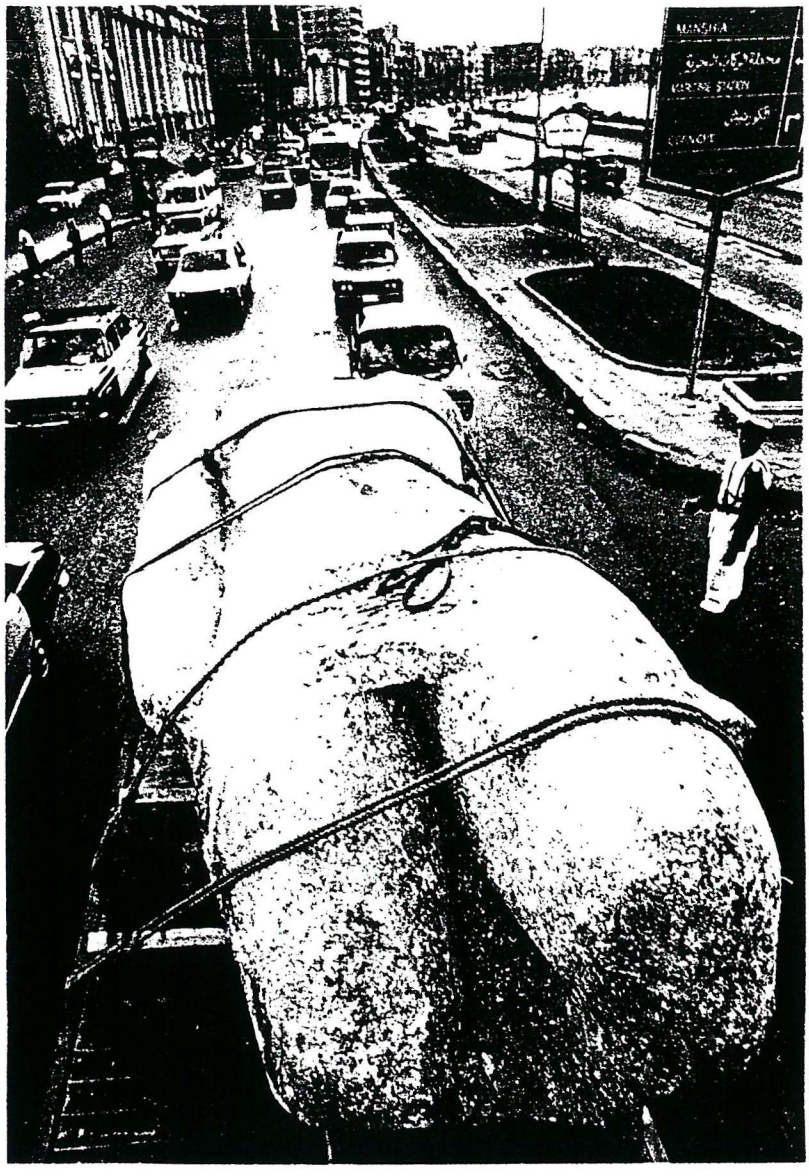


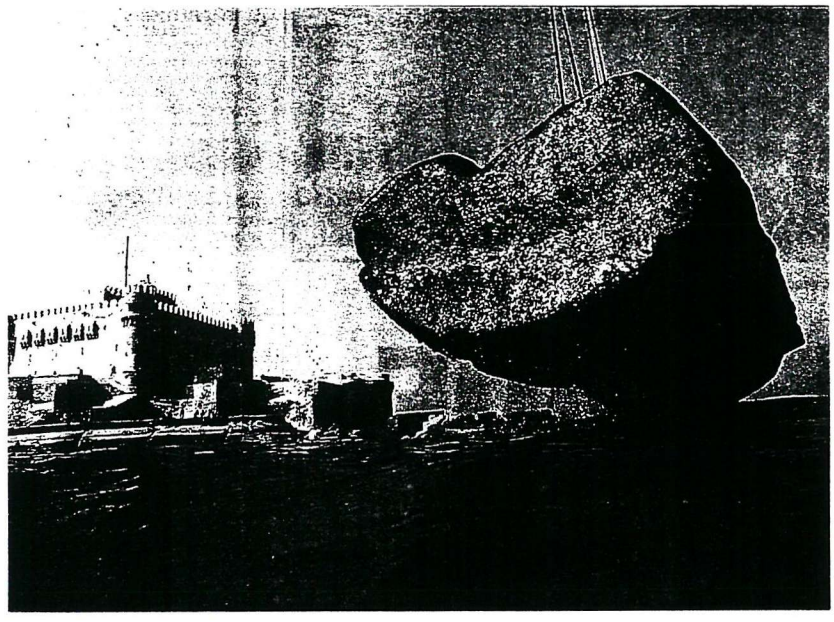
Figure 7.15: The Images That Went Round the World

Top: The male torso being lifted to the quay, from the front page of the Weekend section of *The Times*, 9 November 1996.

Bottom: The door-frame block being lifted, from *Life* , the US magazine, 1 April 1996.



Being raised slowly back into the living world after 15 centuries sunk in the waters of Alexandria's Eastern Harbour is a colossal statue of one of the Ptolemy kings, discovered last year by the archaeologist Jean-Yves Empereur



The project's relationship with the Egyptian authorities was still problematic. In December 1995, one source (Anon. 1995b) reported "the future of the site" as being "still disputed." Around this time, the team decided to make the assembling of the male 'colossus' a top priority and had already found the statue's head, but it was "under the blocks of concrete that we had not already the authorisation to move" (Millière 1998). Hearing of French President Jacques Chirac's planned state visit to Egypt (and Alexandria) in April 1996, Millière decided to use his presence "to ask the Egyptian government to remove five blocks of concrete [in order] to take out the head in front of...Chirac" (*ibid*). The blocks were removed, and on the 8th of April the 1.5–ton head was lifted to the surface, the story with pictures of Chirac standing next to it featuring in the next day's French newspapers (see **Figure 7.16**). Once again, the publicity appeared to exert pressure on the government: "President Mubarak," Millière (*ibid*) explained, "said that he authorised to take out the breakwater"—although, in fact, "this was not done."

France 2's broadcast of the Pharos documentary, coming three days after this publicity coup, earned excellent ratings of 28% ("3-4% more than they usually do" [*ibid*]) and wide acclaim in the French national and regional press, who were to devote, according to Gédéon's press books, some 140 articles to it. France 2's own website (France 2, 1996) promoted the documentary in these terms: "Les images sous-marines exclusives, le suspens d'une mission de sauvetage d'urgence, l'importance des découvertes qui ont permis une nouvelle reconstitution du Phare en images de synthèse, font de ce film un document unique" ("The exclusive underwater images, the suspense of an urgent rescue mission, the importance of discoveries that permit a new computer-generated reconstruction of the Pharos, make this film a unique document"). In a preview of the film, Simon (1996) in *Le Figaro* commended the "aspect onirique" ("dreamlike quality") of the commentary and nominated Frost's appearance as "la séquence la plus émouvante" ("the most moving sequence"). Already pre-sold to Swedish, Swiss, Belgian and Egyptian television, the French version would go on to win prizes at many international film festivals and to be re-broadcast twice on France 2 (the first earning a healthy 26% rating), making it "the first time in France that you have a documentary which is repeated three times in two years" (Millière 1998).

Figure 7.16: The Raising of the Ptolemy Colossus Head in the Presence of French President Jacques Chirac on 8 April 1996, as reported in *France Soir* (9 April 1996)

Pour Chirac, un pharaon sauvé des flots

Le chef de l'État achève sa visite au Moyen-Orient et déclare : « Après avoir détruit un mur à l'est, il faut construire un pont au sud »

Retour aux réalités et aux problèmes nationaux pour Jacques Chirac. Le président a achevé hier à Alexandrie, sur le delta du Nil, une tournée officielle de cinq jours au Proche-Orient, marquée par son désir de définir une grande politique arabe. Au côté de l'archéologue français Jean-Yves Empereur, qui fouille le site de l'ancien phare d'Alexandrie, une des sept merveilles du monde qui date du IIIe siècle av. J-C et qui gît engloutie au fond de la Méditerranée, il a assisté à la sortie de l'eau de la tête d'un pharaon ainsi que d'un sphynx.

Un peu plus tard, Jacques Chirac s'est rendu au théâtre antique pour y admirer 25 pièces, vestiges de cet immense édifice dont, depuis l'automne dernier, une équipe française d'archéologues s'efforce de retrouver au fond des eaux les morceaux épars.

Hier, au Caire, dans un discours qualifié par son entourage de « fondateur », au même titre que ceux de Washington sur le pacte transatlantique et de Singapour sur le partenariat euro-asiatique, le chef de l'Etat a annoncé qu'il allait placer la politique arabe et méditerranéenne au centre de sa diplomatie.

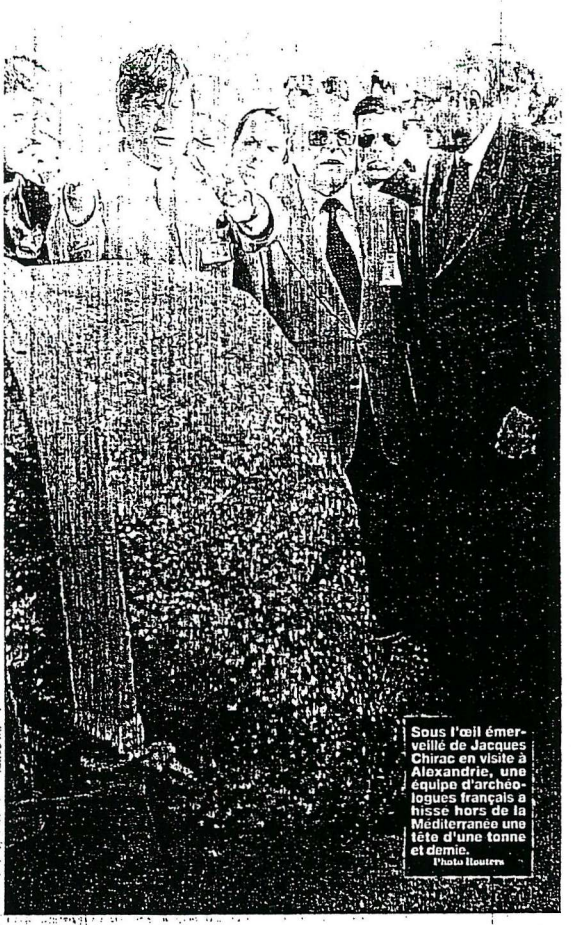
« La politique arabe de la France doit être une dimension essentielle de sa politique étrangère. Je souhaite lui donner un élan nouveau, dans la fidélité aux orientations voulues par son initiateur, le général de Gaulle », a-t-il affirmé à l'université du Caire.

Paix

Pour lui, la France doit « tirer sa force de deux atouts » : d'une part, « entre Français et Arabes, une connaissance mutuelle ancienne qui a nourri notre amitié séculaire et qui est aujourd'hui plus vivante que jamais », d'autre part, « la présence en France d'une communauté [illegible]

Le partage des eaux

Sur le sentier de la paix, éviter la guerre de l'eau. En proposant la création d'un « Institut international de l'eau et du développement » qui aurait pour mission « la gestion concertée de l'eau », Jacques Chirac a en tout cas montré sa volonté de désamorcer la bombe. Car, au Proche-Orient, le risque de pénurie d'eau



Sous l'œil émerveillé de Jacques Chirac en visite à Alexandrie, une équipe d'archéologues français a hissé hors de la Méditerranée une tête d'une tonne et demie. Photo Reuters



Eight months later, BBC2 would screen their version, *The Seventh Wonder of the World*. Since, as we shall see, the BBC made only modest adaptations of the French version to produce theirs (a little re-editing and a new commentary), the delay in transmission is likely to have been a scheduling decision. By showing it in a prime-time slot (9.40pm) on 17 December 1996, following a repeat of a popular comedy series (*Murder Most Horrid*), BBC2 was saving the documentary to be shown at the launch of its Christmas viewing season. In a year in which there was very little TV archaeology being transmitted (only one series, BBC2's co-produced *Secrets of Lost Empires*, making any impact on the schedules and viewers), the *Seventh Wonder* was perhaps seen as a special 'treat'. However, airing it at such a competitive time meant that it did not receive much advance critical attention and that its audience (below 3.34m [source: BARB]) would not be spectacular.

It would be almost another year, however, before the NOVA version aired in the States, on 18 November 1997, as *Treasures of the Sunken City*. It is unclear whether the NOVA co-producers knew from the start that they would need to adapt the material significantly or whether this realisation only came on delivery of the European versions. Certainly the amount of French dialogue, even in the BBC version and in Frost's sequences (as, contrary to expectations, she tended to speak to Empereur and his team in French), would have been seen as a problem for American audiences not habituated to read subtitles. Perhaps, too, the slow pace of the European films did not suit the 'house style' of NOVA's usual documentaries. To resolve these problems, the NOVA producers identified those passages that needed clarification and sent a crew to Alexandria to film interviews with Empereur and Corteggiani in which they answered specific questions in English. These interviews, other new material, editing alterations in order and pace, and a new commentary meant, as we shall see, that the American version would be considerably different from the European ones.

Back in France, the publicity around the Chirac visit and the film's transmission would assist Millière in confirming Elf and EDF sponsorship for Empereur's continuing work on the Pharos site in 1996 and 1997, for they were "happy to get involved in something which was very 'mediatique'" (Millière 1998). As Millière (*ibid*) goes on to explain:

> We decided that Jean-Yves needed to do more work on the Lighthouse because he had to draw every block. There were more than 3,000 blocks and they had to turn them on each side to make the drawing so it was very long and

> difficult....We also decided to go further than the place of the Lighthouse, to try to see if there were some remains, especially archaeological shipwrecks. In the beginning of 1997 we [made] a film about shipwrecks....They found about 40 shipwrecks and began the dig on two of them. At the same time [Empereur] was called by the Egyptians because, by constructing a road, they discovered a necropolis from the Greek period. So he had to go there [to start another rescue excavation] and that started a new film.

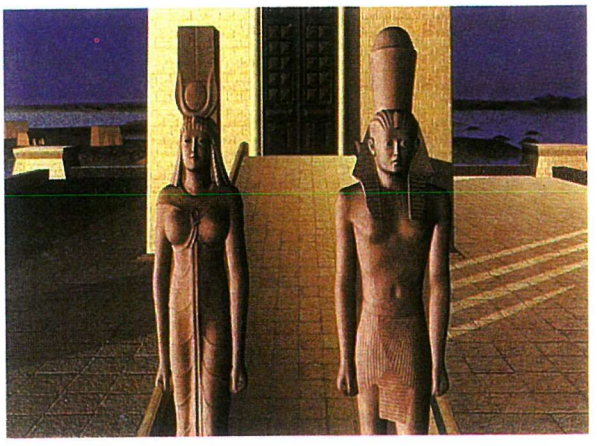
Cajoling the sponsors to support the Pharos project for 1998 was, however, proving difficult, until another fortuitous opportunity arose.

France was to celebrate 1998 as 'the Egyptian year', a year of exhibitions and events marking the 200-year link between the two countries that began with Napoleon's 1798 expedition. The Pharos project and its impact convinced the organisers to devote one of the Paris exhibitions to Alexandria, called 'La Gloire d'Alexandrie', and to ask Empereur to be its curator (*ibid*). It opened on the 6th of May 1998 at the prestigious Le Petit Palais on the Champs Elysées. Displaying many of the Pharos and other Alexandrian artefacts inside, the exhibition's *pièce de resistance* was the re-erection of the male colossus statue (referred to as the 'Colosse de Ptolemé') at the entrance to the Palais, standing guard there much as Empereur suggests he did at the Pharos 2,000 years before (see **Figure 7.17**). Laser-scanning of the four statue fragments had created a 3-D image that showed how the pieces fit together, upon which the reconstruction was based (Empereur 1998a: 94, 124). A video about this process was shown at another Paris exhibition about Egyptology sponsored by EDF. Given the statue's total weight of 23 tons and height of 12 metres, its transport and re-erection were extraordinary logistical and technical feats. Despite the added investment that Elf and EDF made in these exhibitions, the funding of the Pharos mission's last year was secured.

In addition to the Petit Palais exhibition catalogue (Empereur *et al* 1998), Empereur would publish in 1998 two books about Alexandria (*Alexandria Rediscovered* and *Le Phare d'Alexandrie: La Merveille retrouvée*) featuring the Pharos search. In these, he would underline the provisional nature of the results (Empereur 1998a: 95; 1998b: 86). Nevertheless, as we shall see in the 'Aftermath' section, there were already doubts being raised in 1998 about Empereur's claims and rivalries developing that would plague Alexandrian archaeology into the new millennium. In that section, I will also discuss the outcome of the Pharos project in archaeological and media terms and the implications of this particular model of archaeological mediation for archaeologists, the media and the public. But now I turn to the films.

Figure 7.17: The Ptolemy Colossus, Standing Guard at the Pharos (c. 3rd c. BC) and Le Petit Palais, Paris (1998)

Top: Part of the 3-D computer reconstruction of the Pharos based on the artefacts found during the 1995-1998 surveys (Source: Empereur 1998a: 94)



Bottom: The Colossus in front of 'La Gloire d'Alexandrie' exhibition held at Le Petit Palais, Paris, May-July 1998. (Source: Author's photograph)



Comparing the three Pharos documentaries, one is first struck by their titles: *La Septième Merveille du Monde, The Seventh Wonder of the World* (UK) and *Treasures of the Sunken City* (US). None of them specifically mentions the Lighthouse, and although the European titles play on audiences' presumed familiarity with the 'seven wonders' as a concept, it is debatable how many viewers would know their exact order and thus recognise the subject as being the Alexandria Pharos. The American title is even less focused on the Lighthouse, emphasising instead the notion of a 'sunken city', an unsettling trope that has, in the form of Atlantis, fired writers' and the public's imagination for millennia. It also employs the most overused media term for archaeological artefacts, 'treasure', as NOVA had done in the late 1980s when it changed the title of another underwater archaeological film, *Voyage from Antiquity*, to *Treasures from the Deep* (Frey 1999).

The French and British versions appear at first viewing to be visually identical and certainly different from the American version. That said, it is obvious that all three derive from the same footage and present the material using a combination of the two most popular archaeological formats: a present-tense 'backstage' account of a 'detective story' (see Chapter Four). Like so many films and television programmes before and after it, the documentaries frame Empereur's search for the Lighthouse as a quest, a heroic narrative, along the lines of the classic folktale models (see Campbell 1988[1949], Silverstone 1985: 170, and Silberman 1995: 251-252). Here the archaeologist-hero tries to save a site from threat and solve an age-old mystery, helped by his divers, team members and Frost and hindered by the government and its mechanical henchman, the dumping barge (which is actually referred to as the 'enemy' in the films). The programmes all contain the emotional appeal, characters and drama of a fiction feature film, which is the way Millière believes documentaries should be constructed. Millière (1998) explains:

> It seems to me that it's very important that archaeological films have to be done [this] way. You need to shoot for a very long period, you need to have good characters, and to try to do the film very close to them so that you can get the feeling of their emotions...when they're happy when they discover something, when they're desperate, which happens sometimes. You can then do the film the same way you'd do a feature film....you have a kind of tension, a quest: will they succeed or not or what will they find? And you have all the ingredients of feature films: you have characters, and all the relationships between people who

> have, sometimes, different considerations about what they are doing. They hope to find something but they find something else which has more value or less value. All the time we have been making these archaeological or palaeontological films you never find what you are looking for, you find something else. It's very easy to get some tension. What I want to avoid is doing films which are just archaeological visits: having someone tell you 'you can see this on your right', etc. It's a tour. Trying to be there when things happen is the best way to do things. It's very difficult sometimes, especially with scientists and archaeologists, because they try to control all their emotions. In archaeology, this was the oldest way of doing things, you cannot express anything because if you let your personal emotions show, then you're not a scientist.

Of course, a feature film needs a heroine, and Honor Frost ably fills this role, her contribution bringing a much-needed female dimension to the story.

The three films also emphasise the same elements of the story, namely:

- the 'rescue' and 'race against time' theme,
- the teamwork needed to conduct such an operation,
- the history of the Pharos and the various interpretations about its appearance and disappearance,
- the different aspects of archaeological work involved, especially the technology, minutiae and thoroughness of the surveying, but also the importance of research, encoding, and drawing,
- the risks involved in underwater work,
- the divers' discoveries of unexpected artefacts and the team's decipherment of and interpretations about them and how they relate to the Pharos site and Ptolemaic Alexandria,
- Frost's visit to the site,
- the new computer-generated recreation of the Pharos, and
- the lifting ceremony and announcement of the 'saving' of the site.

More problematically, all three films are also one-sided accounts, for none of them present viewers with competing voices: no official explaining the government's position, no other archaeologists offering different interpretations. This is no minor point and one to which I will later return. Finally, from the outset the documentaries were not solely intended as propaganda for the site rescue (otherwise the producer would have chosen to make a reportage easily and quickly produced and distributed), yet the argument or political message is clear. In the battles between government and archaeologists, between modern concrete and ancient statuary, it is the latter that needs our support.

Taking the two European films first, they are, with a few notable exceptions, carbon copies of each other. In both, the 'backstage' story takes precedence over the 'detective' story with Snell and Ragobert sticking closely to the chronology of events. This decision was fundamental to the structuring and style of the films, for it allowed them to maintain a more leisurely pace and less 'directive' style than would have been possible or appropriate for the more emphatic detective format. Establishing the premise—the 'rescue' mission—would, for instance, take a full four minutes of screen time. In addition, the director-editors could let conversations unroll more naturally, wait as divers struggled to find the words to describe their amazing finds and devote long sequences to the underwater footage of the artefacts. Clearly for the filmmakers, the goal was not just to produce a reasonably faithful record but to allow viewers to share in the emotional experience. This was reinforced by Millière's choice of music composer, Arnaud Devos, who created a lyrical score, used in both versions, which was an important accompaniment to the silent underwater sequences.

Despite their congruency, the French and British versions differ in two aspects: in their commentary and in their emphasis on the camaraderie and relational dynamics of the diving team. The long filming process, the decision to follow the action as a silent witness rather than direct questions from off-screen and the mixture of languages spoken made it inevitable that a voice-over narration would be needed to pull the films together. As de Cheveigné (1999: 186) notes about French television viewers (although it applies, I would suggest, to all audiences): "we consider that the manner in which things are said, the way in which the viewer is addressed, counts at least as much as the content of what is said. Only if the relationship proposed to the viewer is felt to be satisfactory will they watch a given programme." In Millière's (1998) estimation, French audiences prefer an informative commentary written in a "very poetic" style. Accordingly, he hired a well-known writer, Daniel Rondeau, to compose a lyrical commentary that was read by one of France's leading actors, Philippe Noiret. The BBC's viewers would, in contrast, listen to what Millière (*ibid*) calls a "more journalistic" narration, spoken by Andrew Sachs, an actor who regularly provides documentary voice-overs but is better known for playing 'Manuel' in *Fawlty Towers*. A comparison of a few extracts from the commentaries make these stylistic differences abundantly clear:

Introducing the divers' first dive over the site:
French: Les archéologues se déploient sur un fond de ville engloutie. Ils évoluent par plus de deux hectares entre deux grandes zones immobiles qui ressemblent de loin à des baleines mortes.
(The archaeologists fan out over the seabed of the sunken city. They move through more than two hectares, between two motionless zones that from a distance resemble dead whales.)
English: The divers fan out into the bay following a plan produced after Jean-Yves's brief survey last year. The main target is an area of five acres close to the fort.

Following a sequence in Alexandria's catacombs during which Empereur discusses the mixture of Greek and Pharaonic styles of the Ptolemaic period, we see Jean-Yves in medium close-up looking out 'left' and then a long shot of the Pharos island upon which the new CGI image of the Pharos is briefly superimposed:
French: Alexandrie prospera sur ce mélange des dieux et des hommes. Ici les sages grecs, juives et chrétiens, tentèrent de résoudre le double mystère de la présence de dieu et de son infini distance. Et peut-être le phare fut-il lui aussi dans l'esprit de ses créateurs un pont debout sur cet abîme?
(Alexandria prospered on this mixture of gods and men. Here the wise Greeks, Jewish and Christian, attempted to resolve the double mystery of the presence of God and of his infinite distance. And perhaps the lighthouse was it also in the minds of its creators a bridge standing over this abyss?)
English: The city enjoyed three centuries of unrivalled prosperity and culture. Perhaps the greatest monument to the Alexandrians' confidence and self-expression was the lighthouse itself, revered throughout the ancient world because it seemed to demonstrate humanity's superhuman capacities.

The last lines narrated, in the French version, over shots of the male torso and a sphinx being driven through the traffic of modern-day Alexandria, and, in the British version, over shots of a sphinx being raised from the sea:
French: Si le poète d'Alexandrie, Constantin Cavafy, vivait encore, on peut imaginer qu'il se pencherait de la fenêtre de son appartement de la rue Hypssos et quand voyant passer cette troupe divine à l'heure du midi il saluerait d'un regard stupéfié cet Alexandrie qui revient.
(If the Alexandrian poet, Constantin Cavafy, was still living, one could imagine him leaning out of the window of his apartment on the rue Hypssos and, seeing this sacred troupe passing by at noon, greeting with amazement the sight of this returning Alexandria.)
English: From Cairo, President Mubarak lets it be known that he will halt the building of the breakwater and authorise Jean-Yves and his team of archaeologists to return to continue their work. The site has been saved, and further more detailed excavation can be planned. The next priority is to find the marble cladding of the lighthouse and the giant statue of Zeus which stood at its summit. In time the treasures of ancient Alexandria will at last see the light of day.

The modes of address used here are demonstrably audience-specific and confirm a crude, but undeniable distinction between the 'poetic' French and the 'factual' English. Research later carried out by the BBC about digital viewers' responses to the different commentaries offered to them during *Walking with Dinosaurs* (1999)

confirmed that 20% of viewers "wanted more information than [Kenneth] Branagh's melodramatic narration was giving them" (Kinnes 2001b).

The final cut of the French version ran 54 minutes, and although 52 minutes is the more saleable commercial 'hour' length, Millière and France 2 stood by the longer running time. The BBC, however, wanted the film to conform to the 48-minute length of its 50-minute documentary slots, and so six minutes needed to be excised. Considered expendable by the British was the scene in which the Egyptian dignitaries receive Empereur's report, a scene of obvious political value to the French. Also cut were four scenes that showed the team relating to each other, usually during meals. According to Millière (1998), French viewers like the personal touch of family-like scenes, "intimate scenes where people communicate in French," meal-time scenes where around a table "all the great discussions take place." While two of these are otherwise inconsequential to the story, British viewers who had witnessed the lifting accident would not be shown two scenes where Empereur reviews the footage taken of the accident and then briefs the team over dinner about safety precautions. These differences in mode of address and degree of personalisation are admittedly minor adjustments, especially compared to the changes that NOVA would make in the US version.

Treasures of the Sunken City is basically a re-edit of the European versions that condenses the existing material so that new footage can be interwoven without running over-length (it is, in fact, 53 minutes long). The American adapters (producer Julia Cort and editor Stephanie Munroe) clearly felt that the European films lacked sufficient pace, drama and explanation for American audiences. Their new rendering of the story is set out in the 30-second 'prologue' used to introduce NOVA programmes and hook viewers with a précis of the subject:

Sound	**Image**
Announcer: Tonight, on NOVA,	Diver entering water
An underwater adventure.	View of Sphinx appearing on seabed
Beneath the Mediterranean,	Sety I obelisk fragment underwater
history beckons.	same as above
Divers race against the clock	Diver measuring artefact underwater
to save remnants of a lost empire.	Diver cleaning artefact underwater
But danger lurks in the deed.	Sphinx crashing to seabed, Empereur
(Pause)	& Cortegginai looking worried,
	divers being swept off feet by waves
Could this really be	Diver swimming around male torso
the Seventh Wonder of the World?	Sphinx being lifted in water
Corteggiani: "It's very beautiful."	Corteggiani
Announcer: Treasures of the Sunken City	Lifting male torso from water

"Adventure", "race against the clock", "danger", the early 'planting' of the accident, a quest for the "remnants of a lost empire": NOVA's decision to reframe the film as, first and foremost, a dramatic 'detective story' is heavily sign-posted. The 'backstage' ambience is maintained, but NOVA makes little attempt to keep to the chronology of the operation, preferring instead to quicken the pace. They collapse together the two diving seasons, do not hold on the underwater images for as long and rely more on the repetition of images and quick montages. Whereas the Europeans opted for a non-directive style that let the audience share in the experience, the Americans would choose a directive approach that offered more guidance, explanation and drama.

To guide American viewers, NOVA added new material, abridged existing material and wrote a new commentary. It is the only version to include a map of Egypt to show where Alexandria is. Less prosaically, it also superimposes shots of existing structures (like a complete obelisk standing in Luxor) over the images of the underwater fragments so that those unfamiliar with the term or structure could more fully appreciate their significance. The US version also simplifies conversations in order to avoid the language-subtitle problem and to clarify discussions that seem vague or rambling. Once such case is the scene in the European films where Empereur and Corteggiani discuss in French possible theories about what the position of the large blocks on the survey map might mean. This scene is replaced in the US documentary by the narrator suggesting these theories as images of the possible structures appear on the screen.

Of the added material, it was the new on-camera interviews with Empereur and Corteggiani speaking in English that would be employed the most, eleven times, in the film. These interviews—really filmed responses—were shot after the original filming was over and, given the nature and precision of their comments, probably after a rough assembly of the film had been made and any areas needing amplification, edits needing bridging commentary or emotions needing better expression had been identified. Thus, we have Corteggiani explaining to camera the Egyptians' habit of recycling material from other sites, Empereur introducing Frost's arrival with the information that they had worked together in the early 1970s, and Corteggiani speaking of his "personal pleasure" at being the first person in 2,000 years to see the Psamtek sphinx. The language comfort factor and Frost's determination to speak French also explain why NOVA added a scene

unused in the other versions where she discusses in English her 1968 survey with one of Empereur's cartographers.

The amount of re-editing and the changes in pace and emphasis made a totally new commentary a necessity. The American narration, written by the producer and spoken by actor Hal Linden, conforms to the house-style of NOVA documentaries: informative, directive and educational. Instead of the French poet or British journalist, here we have the American professor: leading the audience through the story, pointing and spelling things out, expressing our emotions for us and coming up with the questions that viewers should be asking. Over shots of the divers drawing artefacts, of illustrators re-drawing them back at the Centre and of the Giza pyramids and other structures elsewhere in Egypt, the narrator says (my emphasis):

> Every day, the divers discover more and more relics of ancient Egypt. In total, twenty-six sphinxes will be found, *including this one,* still intact, from the age of Ramses the Great. For a site that was expected to yield Greek ruins, the number of pharaonic statues is *amazing. How did they get there?* Deciphering the hieroglyphics on dozens of blocks, the archaeologists keep finding the names of Atum and Horakhte. These were the gods of Heliopolis, an ancient Egyptian religious center more than a hundred miles south of Alexandria. Some of these blocks were carved a thousand years before Alexandria was founded. *What were obelisks and sphinxes from ancient Heliopolis doing in the Greek city?* The answer may lie deep in Egyptian history, when pharaohs tore down the monuments of their predecessors and recycled the blocks. Even the great pyramids were stripped of some of their casing stones for use in new constructions. Some buildings became a hodgepodge of re-used elements, as statues, columns and obelisks were relocated to new temples in new cities. *Centuries later, did the Alexandrians perform the same kind of recycling act?*

The NOVA version also manages to inject more drama into the story structure and narration through reiteration, 'planting', delaying and sound effects. It refers more often to the threat posed by the concrete-dumping and especially to the dangers faced by the divers, sometimes both, as here:

> Narrator: The construction of the new breakwater just a few yards away, makes the divers' job even more dangerous. It's also a constant reminder that they're racing to uncover crucial evidence before it's obliterated by modern concrete.

The accident with the sphinx is 'planted' twice before it happens, once in the 'prologue' and again in one of Empereur's new contributions used to voice-over the "highly dangerous underwater maneuvers" (the lifting of objects to elsewhere on the site):

> Empereur: The balloon can lift up to two tons, three tons, twenty tons. Of course it's not without danger, suddenly a change in the air of the balloon, and so the stone would collapse again to the bottom of the sea. It could be very dangerous for the divers. They have to have a lot of experience and to be very careful, it's a very critical moment when the stone goes up slowly and more and more quickly to the surface.

The theme of danger is then reiterated near the end in the last of the NOVA-filmed interviews when Empereur speaks of the concerns he had during the final raising of artefacts onto the quayside:

> Empereur: Perhaps until the last moment we were very nervous because you know an accident could happen very easily. It's a problem of the sea, of the weather, of the wind, of the waves and everything could be against us. And so until the last moment, the last second, you are afraid that something could happen.

Whereas the European versions presented these hazards unsensationally, the Americans magnified them for dramatic effect and in so doing showed the archaeologist-divers in an even more heroic light. Unlike its European counterparts, the American documentary also holds off showing the new computer-generated image of the Pharos (see **Figure 7.18**) until the final seconds of the film in order to provide dramatic closure. Of the dramatic techniques employed, NOVA's use of sound effects (the rumbling of earthquakes, the crashing of stones) was easily the least successful, mainly due to its literalness.

Having condensed events and sped the pace, NOVA also gained space for almost two minutes' worth of motion picture and artefact references early in the documentary to the only Ptolemaic ruler—"the most famous of all"—with whom audiences in America (or anywhere else for that matter) might be familiar: Cleopatra. Although her connection to Alexandria is appropriate, what she looked like (the presumably obligatory extract of Elizabeth Taylor arriving in Rome and winking at Caesar from *Cleopatra* [1962] followed by close-ups of the 'real' Cleopatra's image on coins and statues) has no relevance to the Pharos story. Less spurious is the 13 seconds of footage from the British (not "Hollywood epic" as claimed here) film *Caesar and Cleopatra* (1945), for it shows the film set of the Pharos, the set designer's interpretation of its appearance, based, as the narrator says, "on little more than speculation." Of course, the Cleopatra and movie references were exploited here both to make the audience feel more comfortable with and connected to the story and to lighten the tone of what was very much an educational lesson.

Figure 7.18: The 3-D Computer-Generated Reconstruction of the Lighthouse of Alexandria Presented in the 3 Documentaries

(Source: La Riche 1996: back of dust jacket)



All three films argue convincingly for the protection and preservation of the Pharos site and do not shy away from showing the Egyptian government in a bad light over its truculence. They all, however, claim unambiguously that the site was saved in October 1995 (when it wasn't), although this was the government's putative position in the spring of 1996 when the French film aired. The three documentaries present a detailed account of the exacting, varied, difficult, exciting and frustrating nature of both rescue and underwater archaeology. Their accounts give equal emphasis to the process of surveying and on its results, both artefactual and interpretational, with the European films offering the more meticulous record of events. They emphasise, too, the teamwork and different expertises needed in such an operation, and, in a very male environment, give pride of place to a female archaeologist. Above all, they convey the notion of archaeological discoveries being about finding not what you expect, but something else that can be equally as valuable. Producing for France 2 and BBC2 audiences, Millière, Snell and Ragobert were able to let events unroll with less apparent authorial intervention and put their trust in the power of the underwater images to hold and reward viewers' attention, allowing them to partake vicariously in the experience of the search. NOVA took a more interventionist approach, focusing on the adventure, providing more background and contextualisation, but leaving little room for viewers to evaluate or respond individually to the film. The American film does have its supporters—including apparently Empereur himself. As Carole Lazio (*pers. comm.*, my translation) recounts:

> On November 15, 1997 during a Q&A session following the screening of the French version of *The Seventh Wonder of the World* at the biennial Kinéon Festival International du Film Archéologique in Brussels, in the course of responding to a question, Empereur mentioned that there were three versions of the program and that, personally, he preferred the American one, "même si—à la rigueur—it fallait expliquer où se trouve l'Egypte" ("even though, admittedly, it had to explain where Egypt was").

While accepting that these films are commendable examples of often breathtakingly beautiful archaeological filmmaking, it must be said that their uncritical stance towards the project and its results raise certain doubts and concerns. Millière's decision that the crew should stay as close as possible to the team in order to capture their emotions and not interfere with their work meant that there would be little or no critical distance established between filmmaker and subject. Proximity, in and of itself, does not automatically equate with a loss of

objectivity, just as 'balance' does not automatically guarantee its presence. Yet when proximity is combined with other decisions—like not to include discordant opinions and to focus on the 'experience' and the 'something else' found—it is clear that these are partisan accounts, presented as captured reality, that blur the results, neatly tie up loose ends and thus leave the films, filmmakers and archaeologists vulnerable to criticism, less able to defend themselves against a host of questions. Did Empereur, in fact, find the Pharos? Despite Empereur's and the films' emphasis on the 'colossi' as constituent elements of the Pharos, how could two, later six, colossal statues have stood in front of the Pharos and never once in 1,600 years be mentioned in historical sources? Is it possible that they formed part of another Ptolemaic structure on the island? Was the interpretation too hastily made to bolster the mission's success?

Linked to these concerns are doubts about the image of archaeologists that was put forward in the films. The uncritical approach and 'detective' framing did foster an idealised portrait of heroic and dedicated archaeologists, commensurate with the 'Nelkin frame' in newspaper coverage of science discussed in Chapter Four. The British and especially the French versions offered some counterbalance by showing archaeologists in normal situations: eating, talking together, making jokes. But the overriding impression given was of stalwart and determined archaeologist-divers. By dwelling so much on the risks, the American film in particular fostered the notion that underwater archaeologists are exceedingly brave individuals. Even Honor Frost, at 75 years of age, contributes to this portrait of underwater archaeologists as a special breed.

Finally, putting the three films side by side has underscored the malleability of documentary filmmaking, of film itself. By appending a new commentary or re-shaping the material, the filmmakers were able to turn the basic footage into very different viewing experiences. This is the "magic wielded" by producers and scientists when they work together about which Collins (cited in Hargreaves and Ferguson 2000: 24) was cautioning the public. There is no question that the story told in all three films was the story that Millière and Empereur wanted to tell. These films were intended, to be sure, to record events, but they were also propaganda pieces made to convince the authorities, sponsors and the public of the need to protect and invest in Empereur's archaeological work. To do justice to this analysis, one needs, however, to take the story forward.

Aftermath and Conclusion

It is important to look beyond the timeframe of this case study, for what happened afterwards would have repercussions on the Pharos search and on some of the issues about archaeological mediation raised earlier. This epilogue is framed around three questions. What was the ultimate outcome of the Pharos survey in archaeological terms? What impact did the Millière-Empereur partnership have on later media coverage of events in Alexandria? And what are the ramifications of this mode of archaeological mediation on the public communication of archaeology?

With regard to the archaeological outcome, there is no question that the surveying of more than 2,500 objects over four years and the lifting and preservation of even a fraction of them was a significant achievement, but did the mission add significantly to our knowledge about Alexandria's past? What is also in question is the speed at which connections were made between some of these objects—especially the six 'colossi'—and the Pharos. As often the case in rescue operations, this haste was primarily caused by the government's increasing pressure on the team to produce results, but the filmmakers' and sponsors' similar needs contributed to this pressure.

It is notable that in later accounts (NOVA 1997; Empereur 1998a, 1998b) Empereur would offer more measured evaluations of his results than viewers received from the documentaries. When asked by NOVA (1997: 2) whether "some of these blocks might belong to some other type of monument, such as a temple", Empereur replied:

> Of course. They're from more than 2,500 architectural pieces. And we believe that most of them—about 99 percent of them—belong to other monuments of the city....what we think belongs to the lighthouse itself—it's only a few, a dozen of the architectural pieces, which are more than 70 tons. And there are very few.

In *Alexandria Rediscovered* (Empereur 1998b: 80), he elaborated, with caveats, his case for these few blocks being from a specific part of the lighthouse:

> In view of the location the ancient writers give for the lighthouse, and taking into consideration the technical difficulty of moving such large objects, it is probable that these are parts of the Pharos itself which lie where they were flung by a particularly violent earthquake. Admittedly, Strabo says the lighthouse was built of white stone—doubtless the local limestone—but it is likely that for the parts which needed extra reinforcement, such as the window- and door-frames, the

> builders had recourse to a more solid building material that could be cut into larger units. They resorted to their ancestral skill in the cutting of granite, thus combining Egyptian tradition with Greek building techniques.

In a later Gédéon co-production about Empereur's work in Alexandria, shown on Channel 4 as *Lost Worlds: Ancient Alexandria* (2002), computer-generated reconstructions would be shown that demonstrated how these granite door-frames could have fallen into their discovered location.

Empereur (1998a: 95) would continue to maintain his conviction about the relationship between the 'colossi' and the lighthouse in his book on the Pharos:

> Le bilan des fouilles sous-marines peut paraître maigre en ce qui concerne la reconstitution même du Phare. Certes ont été mises au jour des pierres qui ont appartenu à la tour, dont les colosses retrouvés par les plonguers. Ces trois couples royaux, qui n'étaient pas mentionnés par les sources antiques, ont été ajoutés à l'image du Phare, mais on ne dispose pas pour autant d'indices qui porteraient à modifier grandement le dessin de Thiersch, si ce n'est peut-être sur l'aspect mixte—grec et égyptien—du monument.
> (The evaluation of the underwater excavations as they concern the reconstitution of the Pharos may appear thin. Certainly some stones that belong to the tower have been brought to light, like the colossi discovered by the divers. These three royal couples, not mentioned by ancient sources, have added to the image of the Pharos, but there is little to suggest that the Thiersch design needs major modification, except perhaps in the mixed Greek and Egyptian aspect of the monument.)

Empereur no where considers that the colossi might have served as decoration for a structure other than the Pharos, presumably based, as with the large blocks, on their size and location. With respect to the older pharaonic artefacts, whose discovery played such a key role in the documentaries, Empereur (1998b: 75) later admitted that "these numerous products of the pharaonic period...do not make any significant difference to what we already know about the history of Alexandria." As to the smallest, but potentially most relevant find, the piece of marble with traces of an inscription on it, Empereur would remain cautious about claiming it as part of the dedication stone. As he told NOVA (1997: 3), "with five letters it's difficult to complete the inscription and to have an idea of the general text. But there is an American scholar who wrote an article about this inscription...saying that in fact we discovered the inscription of the lighthouse itself."

Reading these later accounts, it is clear that Empereur recognised that the success of the Pharos search rested on very few objects (a dozen blocks, ten colossi fragments) and that most of the finds, even those 'assigned' to the Pharos, added

little to "what we already know". The mission and the publicity around it did to some extent 'save' the site. Although the breakwater reinforcement did not stop, the city authorities finally recognised the site's tourism potential. The city's "plans to turn the harbour site into an underwater archaeological park where visitors could explore the seabed in glass-bottomed boats or on guided diving tours" (Empereur 1999) were partially achieved when diving tours were authorised in 2001 (Hanna 2001, Sprott 2004). There are also, according to Stille (2000: 98-99), "at least six plans afoot to rebuild the ancient lighthouse." One "would copy a famous engraving of the monument, adding shops on the lower floors and a revolving restaurant at the top" and another "sponsored by the French clothing designer Pierre Cardin" would involve "laser projections."

To assess the long-term media impact of Empereur's Pharos search, one needs to go back to the autumn of 1998 when the first rumblings appeared in the UK press that Empereur might not have found the Pharos. In a *Sunday Times* article (Hellen and Barot 1998) about Franck Goddio's reported discovery of Cleopatra's palace in Alexandria's eastern harbour (see **Figure 7.19**), a graphic of the harbour would mark the Pharos site with the caption "Discredited site of Pharos lighthouse." The text included a dismissal of Empereur's findings by one of Goddio's team. It quotes an "insider" as saying: "The location is entirely wrong. If the lighthouse was where he [Empereur] says it was, the whole shoreline would have been littered with shipwrecks." Despite the fact, according to Empereur's shipwreck excavations in 1997, that the shoreline *is* littered with shipwrecks, this attack on Empereur was the first public surfacing in the UK of a feud that would tarnish the Pharos project and Alexandrian archaeology.

In the following years, Goddio would 'mediatise' his Egyptian discoveries using a style and iconography distinctly taken from that used by Stéphane Compoint in illustrating the Pharos search (Figure 7.19). He would also follow the Milliĕre-Empereur model by linking up with Discovery who produced two documentaries about his work (*Cleopatra's Palace* and *Napoleon's Lost Fleet* [2001]). Increasingly, the work of Empereur and Goddio would become conflated in the UK press. For instance, when books about Alexandria by both of them came out at the same time (1998), images from one would be used to illustrate the other (see **Figure 7.20**). To understand what went wrong in the communication of archaeological news

Figure 7.19: Attempts to Discredit Empereur's Pharos Search and to Imitate its Iconography

THE SUNDAY TIMES · 25 OCTOBER 1998 3G NEWS 1·9

Sea gives up Cleopatra's treasures

by Nicholas Hellen and Trushar Barot

SECRETS of Cleopatra's fabled royal palace, in which she wooed Julius Caesar, have been retrieved from beneath the waves of the Mediterranean sea, where they have lain for more than 1,600 years.

The silt and effluent of the modern harbour of Alexandria have yielded a ship, believed to be the vessel in which the queen sailed up the Nile. The well-preserved wreckage, whose age has been confirmed by carbon dating, lies in Cleopatra's private harbour.

The ruins of the lost city, which was engulfed by a tidal wave in AD365, have been uncovered by an international team of archeologists with satellite imaging, radar and high-powered dredging equipment.

The discovery of the ship marks a spectacular breakthrough in the search for archeological evidence of the life of Cleopatra, the last of the Greek Ptolemys who succeeded the pharaohs. The archeologists, led by the French underwater explorer Franck Goddio, have proved that the ship dates from the 1st century BC. It sank after a collision in the royal harbour.

Peter Jones, an authority on ancient Egypt and a former historian at Newcastle University, described the discovery of the ship as "scholarly gold dust". He believes it may be the ship described by Plutarch and Shakespeare in which she seduced Mark Antony.

Plutarch, the Roman historian, described how Cleopatra responded to an order to visit Antony by arriving in a barge laden with gold, purple sails and oars of silver. "Instead of a crew, the barge was lined with the most beautiful of her waiting-women attired as nereids and graces, while an indescribably rich perfume was wafted from the vessel to the river banks."

The first picture of the ship is to be revealed on Wednesday in a book, Alexandria: The Submerged Royal Quarters, to be published in London by Periplus. Excavation work has already shown that it sank after being holed in the hull.

Goddio has also found marble floors on the seabed that he believes establish for the first time the precise location of Cleopatra's palace. Lumps of red granite and broken columns, also on the underwater island of Antirhodos, provide further evidence of the site of the royal quarters, situated across the sea from Antony's residence.

Although the divers have recovered jewellery, none of it can reliably be attributed to Cleopatra. One team member said this weekend: "Her treasures would have been looted after her death."

Researchers are deciphering inscriptions found on hundreds of stone blocks that are too heavy to raise to the surface. Divers have pioneered new techniques to take casts underwater, and they provide tantalising clues to the history of the city founded in 331BC by Alexander the Great.

A detailed street map recaptures the intricacies of the city. Wooden posts, miraculously preserved in the seabed, prove for the first time that the settlement of Rhakotis had previously existed on the site for 300 years. George Rosenbauer, a member of the Liechtenstein-based Hilti Foundation, which has funded the excavation, said: "Carbon dating takes us back to at least 600BC."

Even in its ruins, the decadent old city, the hub of a trading network extending from India to Ireland, has yielded a fabulous treasure trove. A granite statue representing a priest of the goddess Isis was found head-first in a sand bank; elsewhere divers found a vase to the pharaonic god Osiris and several sphinxes.

An obelisk that bears comparison with Cleopatra's Needle, now standing on the Thames Embankment, and shattered stone columns chart the transition from the early Greek kings to the period of Roman rule.

Historians have struggled for centuries to disentangle the story of Cleopatra's scandalous affair with Julius Caesar.

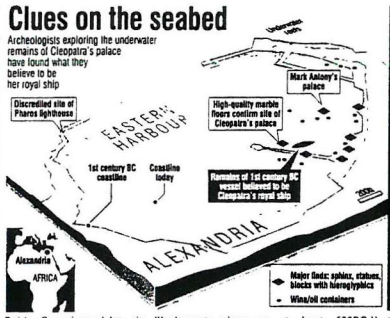
When he was assassinated on the Ides of March in 44BC, she switched her affections to Antony, bearing him twins. But in 31BC the couple were defeated in battle by Augustus and committed suicide — she by having an Egyptian cobra sent to her in a basket of figs.

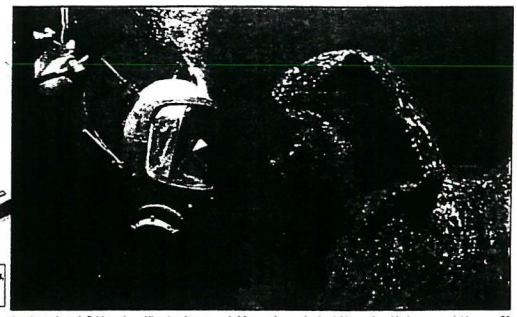
The quest for the Lighthouse of Pharos, one of the seven wonders of the ancient world, may now have to be reopened. Suggestions in 1996 by a rival archeologist, Jean-Yves Empereur, that huge stone blocks, some weighing up to 75 tons, are the remains of the 452ft tower, have been dismissed by Goddio's team.

"The location is entirely wrong," said one insider. "If the lighthouse was where he [Empereur] says it was, the whole shoreline would have been littered with shipwrecks."

Clues on the seabed

Archeologists exploring the underwater remains of Cleopatra's palace have found what they believe to be her royal ship





Top: Article in *The Sunday Times*, 25 October 1998 about Goddio's search for Cleopatra's palace. See map and last paragraphs.

Bottom: Article in the *Daily Record*, 8 June 2001, about Goddio's discovery of Herakleion.

Daily Record *Friday, June 8, 2001* Page 27



COLOSSAL: A huge statue of an unknown Pharaoh is hauled aboard a barge

Sunken city treasures rise again

By MARK ELLIS

THESE are the first glimpses of Egyptian treasures unseen since the fabled city of Heracleion sank into the Mediterranean more than 1000 years ago.

The ancient finds include everything from colossal statues of pharaohs and gods to gold earrings.

French archaeologist Franck Goddio is leading an exploration team diving near the Egyptian port of Alexandria.

Yesterday, he presented some of the treasures from the city he found after years of searching.

Heracleion, at the mouth of the Nile, was a key Egyptian port and renowned across the ancient world.



PRESERVED: Divers discover an image of the god Hapi in a sunken temple

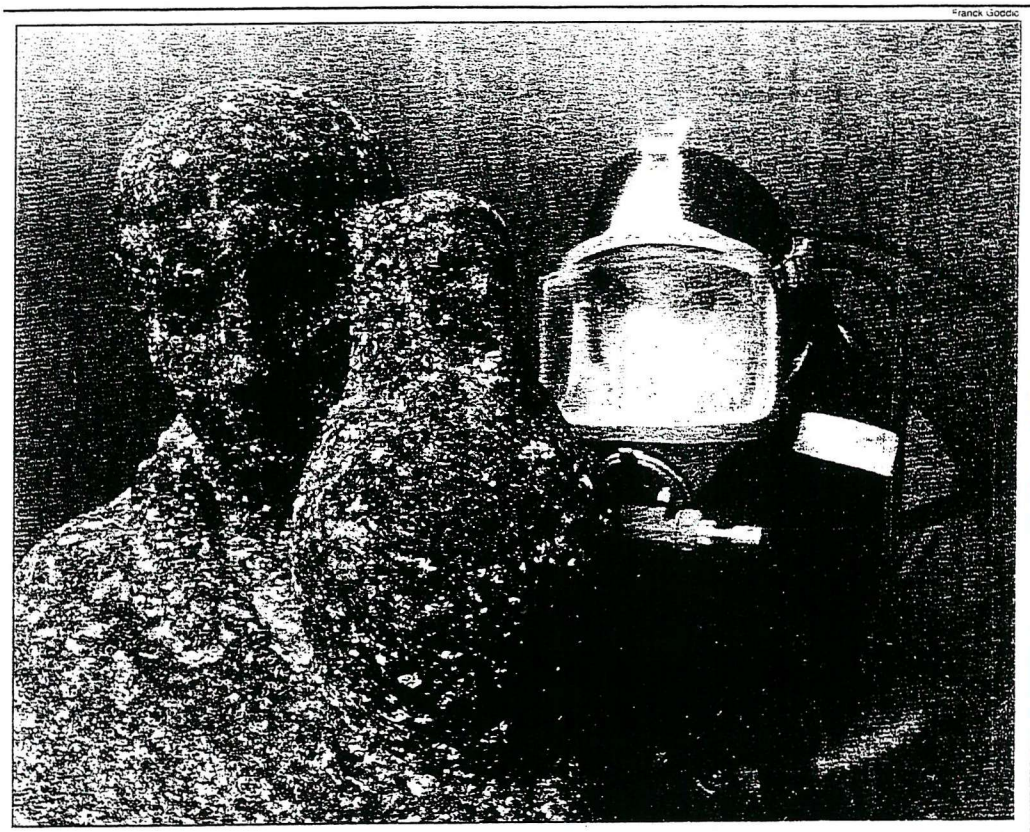
Figure 7.20: The Conflation of the Work of Empereur and Goddio

In the Travel section of *The Sunday Times* (8 November 1998, page 4), a photo from Goddio's underwater exploration of the royal quarter of Alexandria's eastern harbour is captioned with a reference to Empereur's book *Alexandria Rediscovered* that is reviewed two pages earlier.

DIRECTIONS

edited by Susan d'Arcy

Franck Goddio



There is much more to Alexandria than meets the eye, and Anthony Sattin discusses its underwater assets in his review of Alexandria Rediscovered in Books of the Week (page 2). But its ancient relics may not be out of sight for long, as there are plans to turn the submerged royal quarters into the world's first underwater antiquities museum. Visitors could use glass-bottomed boats or walk along glass-walled undersea tubes or tunnels to see the remains of the ruined city that lies 20ft beneath Alexandria Bay. Egypt's Supreme Council for Antiquities argues that the plan makes perfect sense: "The basic principle is simple. You cannot bring a town from under water, so you have to take people down to see it." What may prove less simple is obtaining government approval and a sufficiently large source of finance

out of Alexandria, one needs to understand the rivalry and the role that the desire for media exposure played in it.

The first UK journalist to expose at length the 'feud' between Empereur and Goddio was Stuart Wavell. In an article in *The Sunday Times* entitled "Cleopatra's needle match", written ostensibly to promote the British Museum's forthcoming Cleopatra exhibition, Wavell (2001) explains:

> It is a classic rivalry as bitter as that between Menelaus and Paris. For two embattled Frenchmen, the prize is not Helen of Troy, but the credit for unveiling the lost glories of Alexandria, the Egyptian city of Cleopatra.
>
> The adversaries could not be more different. Jean-Yves Empereur, a Sorbonne-educated academic dedicated to traditional archeology, is pitted against Franck Goddio, a flamboyant amateur who loves high technology and has both corporate backing and media savvy. [...]
>
> No love is lost between the two men. "Since 1995, the knives have been out," says a French observer. Each seeks to belittle the other's work. Empereur, with limited funds, scorns Goddio's high-profile image and television specials and doubts that he found Cleopatra's palace: "If they had found a skirt, they would call it the skirt of Cleopatra."
>
> For his part, Goddio has cast doubt on Empereur's claim and says he found a few large stone slabs rather than the lighthouse: "I don't want to criticise, but maybe we see it is not the lighthouse." [...]
>
> [Susan Walker, organiser of the BM's Cleopatra exhibition] wishes Empereur and Goddio could find a way to co-operate. [She says] "They keep out of each other's hair. It's a pity they are separate bodies, because they are both doing a terrific job...." [...]
>
> A reverential Discovery Channel film, Cleopatra's Palace...suggests Goddio actually found the place where the Egyptian queen seduced Caesar and Mark Anthony. Empereur has been sceptical, contending that Goddio had merely found a submerged building unconnected with Cleopatra.
>
> Eventually, Goddio admitted it was not the palace, but was probably its foundations. "There's no such thing as Cleopatra's palace," says...his spokeswoman. "The film is in the style of Hollywood. We didn't find any building."
>
> Undaunted, Goddio bounced back last year to announce the discovery of the submerged lost cities of Herakleion and Canopus ... [...]
>
> But his hoopla, television crews and rich trophies are not likely to win over Empereur. "Amateurish," he scoffs. "We are not here to create a happening."

It would be hard not to question the "limited funds" available to Empereur or not to see the lifting ceremonies at Qaitbay as media "happenings" and the success of the Millière-Empereur partnership as having started a oneupmanship between the two men. It is clear that the archaeological community tends to stand behind Empereur and that Goddio "has his detractors in the archaeological establishment, and has been described as no more than a modern-day pirate or treasure-hunter" (Murphy 1997). Yet both men have contributed immeasurably to Alexandrian

archaeology and their feud does little credit to either. What has undoubtedly fuelled the feud is Goddio's copying of the Millière-Empereur formula. In other words, an already uncomfortable rivalry has been exacerbated by their reliance on the press and television as essential ingredients in their campaigns for recognition. One could, of course, say that such rivalries and the conflation of information that arises is irrelevant to the public, who will not be concerned about the pedigree of the finders, or argue that it is ultimately healthy that opposing views about archaeological claims are aired.

This aspect of the aftermath to the Pharos search provides a cautionary tale about the interdependence between the media and archaeologists, but, seen from a wider perspective, there were positive outcomes as well. The original Millière-Empereur deal had a considerable impact on TV's coverage of Alexandrian archaeology, spawning directly or indirectly some eight documentaries in a six-year period. Although one cannot credit the British Pharos documentary for launching the trend for underwater archaeology programmes on UK television that followed it, one can link the French version to a increase in French television's commitment to archaeological programming. As Millière (1998) explained:

> [the film] really started something in France. Even in the press, you can see archaeology everywhere. It's really started a new way of putting science [on television] and getting a magazine about science on different channels. Now Arte has opened for one year a new prime-time slot on Saturday night about human adventure and especially about archaeology...Arte have specifically asked us to produce documentaries on archaeology...[and] France 2 has commissioned a magazine programme which is based on expeditions and about a third of these will be archaeological.

As Millière (*ibid*) also pointed out, the Pharos project earned his company a good reputation amongst archaeologists: "People know that we are able to help them in getting money for financing their research. They know that we are able to do films that go all over the world, but they also know that we can work with them in a very close way, especially for the French [that's] important." It seems that both producer and archaeologist gained from the deal struck in 1994, but what are the wider implications of this symbiotic deal?

From the archaeologist's perspective, handing over the public mediation of a project to a television producer who, in return, obtains the funding needed to undertake the work, seems an ideal scenario. A partner who takes over responsibility for the media and for finding and placating sponsors, allows

archaeologists to concentrate on the archaeology and to disclose results at appropriate times. Perhaps a key lesson of the Millière-Empereur partnership was that it was envisaged from the start as a medium- rather than short-term commitment. Recently Ascherson (2004: 156) has suggested—citing cases like the BBC's sponsorship and filming of excavations at Silbury Hill in the 1960s (where the lack of results didn't "justify the expenditure")—that archaeologists have gained more from their exclusive deals with the media than the media has. Kershaw (2003: 17) has elsewhere claimed that "producers need professional historians...more than the historians need television." I believe this case study has demonstrated that assessments of who needs whom most or who gains most from a deal cannot be simplistically reduced. Both parties need each other, and TV producers understand the risks in archaeology and know, as Millière did, that the objective of a project is more often than not likely to change, to become the "something else" one didn't expect to find.

From the media's perspective, it seems likely that television companies will increasingly have little choice but to seek out the kind of deal represented here, especially if the archaeological project is a high profile one. It is also likely that, at least until the fashion for TV archaeology passes, the sums needed to secure an exclusive deal will continue to privilege the major players, who will be able to squeeze out all but the wealthiest of independent companies. This could lead to an even more standardised approach to archaeological programming than is already discernible, to an environment where, for instance, the kind of long-term backstage filming done by Gédéon is no longer possible. Another problem with exclusive deals is that they interrupt the free flow of information, which is antipathetic to the way modern communication is developing, and that they further encourage the homogenisation of information.

It is when one turns to the public's perspective that the most worrying aspect of the Millière-Empereur model of mediation becomes apparent, for it is hard to argue that the public ultimately benefited from having Empereur's work filtered through only one mediator. Clearly, there might not have been a Pharos project for the public to respond to at all without television's intervention, and the resulting films were thoughtful, beautiful and exceptional examples of archaeological programme-making. Yet, as discussed in relation to the stage-management of news release to the press in Chapter Six, is it in the public's

interest that archaeological projects are kept under wraps until a TV producer decides to release the information? Having originally considered this model to be an exemplary one, I now find myself having to acknowledge that the closeness and interdependence of the partnership created a cocoon around the project and produced a partisan account of its achievements that, one has to say, was not in the public interest. Is, in fact, the model inherently unsound, or is it a good model with weaknesses that both archaeologists and media professionals need to address? I would like to think that the merits of the model outweigh its flaws, but one would need to undertake more research on similar (and other) models of mediation before coming to a final decision.

Notes to Chapter Seven

[1] For congruency with the analysis of science journalism in Chapter Four, I have focused here on archaeology as a 'scientific' subject, although much of what is said about TV's science mediation applies equally to TV's mediation of 'historical' subjects.
[2] Archaeologist Bettina Arnold (2001: 465) suggests that "network television has to be handled with even more care than documentary films, mainly because the time pressures involved obviate control over the form of the presentation to an even greater extent."
[3] According to Norman (1983: 30), before the 1980s, *Chronicle* could afford to start a documentary about a promising archaeological subject and then abandon it, "if it wasn't, from a programme point of view, sufficiently interesting." By the 1980s, this was no longer economically possible, leaving producers in the 'Catch-22' situation where they could only film once something significant had been discovered, by which time it was too late to capture on film the moments of discovery.
[4] TV critic John Dugdale (2004) has, for instance, noted a change in the attitude towards science of BBC2's science strand *Horizon*, away from its original aim "to offer great scientists reverent 'platforms'" to a more populist and critical approach.
[5] It is, I would suggest, access to these rights (rather than professional ego) that lies at the heart of why archaeologists take umbrage at non-professionals being used as presenters of archaeological programmes, despite the facts that many programmes *are* fronted by archaeologists, that not all archaeologists are natural communicators and that non-archaeologists provide a more appropriate link to the audience in some formats.
[6] Since the mid-1990s, only one such complaint involving an archaeological documentary has, to my knowledge, been lodged, by Graham Hancock and Robert Bauval over how their views were presented in BBC2's *Horizon* documentary, *Atlantis Reborn* (1999). Only one of their eleven complaints was upheld by the investigating committee (BSC Adjudication, 31 October 2000). Although not required to do so, *Horizon* re-edited the programme and re-broadcast it as *Atlantis Reborn Again* in 2000, the first time in its history that *Horizon* had taken such a step. According to Highfield (2000), this re-editing was done because *Horizon* was concerned that the adjudication "would give the impression that the central thesis of the original programme was wrong." Comparing the transcripts of both, it is clear that the revisions were minor and that the programme's critique of Hancock's and Bauval's theories remained intact and persuasive. Paul Pettitt (2001: 467), whom the committee had asked to comment on the complaints, sees this as "a good illustration that programmes are not inviolable, like academic papers they are subject to peer review, criticism and even retraction."
[7] In fact, BBC2's *Chronicle* covered six underwater subjects in the 40 programmes it made between 1979 and 1983: three were devoted to the Mary Rose, and the other three also concerned shipwrecks (Norman 1983: 31).
[8] Over the *Mighty Hood*, there had been negative publicity about the appropriateness of filming the discovery, *The Times* headlining one article: "Relatives say filming would desecrate graves" (Lee 1998).
[9] At the 1995 Titanic exhibition at the Greenwich Maritime Museum, 72% of visitors polled were unconcerned at the propriety of such exploitation, voting that "more should be brought up" (Blot 1996: 158). Prior to its opening in Chicago, however, the *Chicago Tribune* headlined a story: "Titanic exhibition: History or grave-robbing?"(Mullen 1999).
[10] In brief, the archaeological stance is that wrecks should be left *in situ* and explored in adherence to archaeological practice (including recording and publication), and that retrieval of artefacts should be minimal (for research or preservation). Salvors counter that they should be allowed to salvage wrecks whose history, construction, etc., are already known through historical records, that retrieval, selling or exhibiting artefacts is fair recompense for their risks and investments, and that their exhibition promotes public interest. Museum curators are left in the middle, not wanting to condone 'plunder', but aware that "authentic artifacts from historic events make history 'come alive' for people more viscerally than almost any other mode of presentation" (Mullen 1999: 6). See also

Standage (1997), Laurence (1996), Throckmorton (1996: 11-12), Rees (2001), Blot (1996: 156, 162), Lambrick (2002a), and O'Keefe (2002).

[11] Since 1989, Robert Ballard has promoted 'virtual' museums as an antidote to the 'salvage-and-exhibit' mindset. Via the internet, his Jason Project "allows children all over the world to watch live transmissions from his expeditions and even to operate the robots. In the future, he wants to have real-time cameras mounted around underwater sites sending live pictures to the internet" (Hulse 2000). In 1995, Ballard approached the Greek government and Merseyside Museum about setting up such a facility to give the public access to the Britannic, which sank in the Aegean in 1915 (Highfield 1995).

[12] In 2002, for instance, US investors in the $2m salvage of a wreck off Panama (presumed to be a ship abandoned by Columbus in 1503) made it clear that their intention was to make money "either through film rights or the selling of artifacts" (Miller 2002). When faced with an uproar over the latter, the investors "dismissed concerns that historical artifacts would be sold off" and "said the group was focused on making money from film rights" (*ibid*).

[13] Smaller Greek towers with fire beacons are known to have existed in the 5th and 6th centuries BC on the Aegean island of Thasos and at Piraeus (Empereur 1998a: 33).

[14] Herakleion and Canopus were on the Bay of Abukir, 15 miles east of Alexandria, at the mouth of the Canopic branch of the Nile, the main artery for Greek ships to access their trading colony of Naucratis. They had been important ports for several centuries before the establishment of Alexandria, but were superseded by the new port and eventually disappeared completely, probably due to a combination of river silting, flooding and earthquakes. Their underwater remains were discovered by Franck Goddio and his team in 2000 (see Moynahan 2000, Evans 2000 and Mullen 2002).

[15] According to Lucian (cited in Fraser 1972: 18; Clayton 1988: 143), the inscription read: "Sostratus, the son of Dexiphanes, the Cnidian, dedicated this to the Saviour Gods on behalf of those who sail the seas." The 'saviour gods' have been interpreted as an intentionally ambiguous reference to both Castor and Pollux, the patron gods of navigation, and to Ptolemy I and his wife Berenice (*ibidem*; Bevan 1968[1927]: 96; Marlowe 1971: 62-63). However, Fraser (1972: 18-19) and Empereur (1998a: 34-35) argue for a Zeus Soter and Ptolemy I Soter connection ('soter' meaning 'saviour').

[16] As the Thiersch plans show, the Pharos was different heights at different periods in its history. In the phases he depicts, its height (without platform base) was 120m, 124.2m, 120m and more than 115m (calculated from reproduction in Empereur 1998a: 82).

[17] Thiersch was of the opinion that the Pharos foundations were under the dungeon of the later fort, and French engineer Gaston Jondet's survey of the Alexandrian harbours in 1916 apparently confirmed that the fort and Pharos shared the same footprint (Empereur 1998a: 84).

[18] Schliemann excavated in Alexandria for 17 days in February 1888, looking for evidence of Cleopatra's palace, but recorded finding only a few stairs. He popped up three months later with a bust of Cleopatra, a find now widely accepted to have been an earlier purchase, and not of Cleopatra (Thraill 1996: 37, 267-272). It wasn't until the 1960s that a Polish team would start a 35-year systematic land-based excavation of the city (Empereur 1998b: 28).

[19] Alexandrian marine archaeologist Emad Khalil (*pers. comm.*) dismisses this idea, believing that the reasoning was more transparent: that the sea damage to the fort was visible and obvious, whereas the underwater remains and their location were neither.

[20] For instance, in the mid-1980s, a normal BBC2 *Horizon* documentary was "expected to take some seventeen consecutive weeks to produce" (Silverstone 1985: 161).

[21] In 1997, Millière was instrumental in convincing France 2 to invest the $100,000 that Empereur needed to conduct a rescue excavation of Alexandria's Greek necropolis, discovered during and threatened by the construction of a new road, "the first time they ever financed an archaeological mission" (Millière 1998).

[22] As a co-production, the documentaries would also have a host of 'executive producers', looking after each broadcaster's interests: Max Soussana from Gédéon for the French, Alan Bookbinder of BBC Bristol the British and Paula Apsell from WGBH the American.

CONCLUSION

At the turn of the third millennium, the relationship between archaeologists, the media and the public in Britain became a timely subject for examination due to a convergence of numerous factors within and outside the archaeological profession. The most notable of these were the re-awakening of archaeologists to the necessity of public outreach, the high visibility of archaeology in the British media, especially in the press and on television, and the increase in public interest in archaeology. Although this was not the first time that such a convergence had occurred—the relationship having been similarly robust in the middle of the 20th century—the current synergy would appear unique because it followed a period in which the three partners had paid scant attention to each other. By the late nineties it was clear that the public communication of archaeology and the role that archaeologists, the media and the public play in it—topics that had previously received little critical study—needed to be examined in some depth using a holistic and interdisciplinary approach. This dissertation represents a significant step forward in ascertaining and contextualising the dynamics of this important relationship and in understanding archaeological communication.

The analysis offered here has demonstrated that the current relationship is indeed a symbiotic one, one in which all three partners value and benefit in various ways from each other. As portrayed in the early chapters, the defining feature of the relationship has been, in fact, its growing interdependency. As a consequence of the commercialisation of their profession and of wider debates about public understanding and social inclusion, most archaeologists today accept that their work and results must be fed back to and must engage with a number of disparate 'publics'. They also acknowledge that the media offer them a variety of outlets for achieving this outreach, although their mistrust of the press and television has made them still reluctant to incorporate these media in their public communication strategies. The media have, in turn, rediscovered the virtues of archaeology as a subject, a subject that has helped terrestrial broadcasters in particular to re-brand their image, to retain their audiences and thus to accommodate better to the changes brought about by deregulation, competition

and new patterns of public consumption. Distrustful of the traditional sources from whom direction and purpose have been sought, like religion and politics, the public have likewise found in archaeology a subject that can provide some answers to their spiritual or existential needs, a subject that locates them in the human continuum, gives them a sense of identity and allows them escape or respite from the fear-obsessed, globalised present.

Yet, despite these reasons why the relationship is valued, all three partners seem to be holding onto out-dated perceptions of each other. More paradoxically, it could be said that all three 'care about', but do not fully 'understand' each other. This is certainly the conclusion reached by those who have surveyed the public's attitudes towards archaeology, and is a fair assessment of what some archaeologists would say about the media's attitudes to archaeology. For their part, archaeologists may care about public communication and media representation, but they seem to be stuck in old frames of reference. They do not tend to see the public and the media as collaborators in the process of defining and communicating archaeology and are reluctant to engage them in a dialogue, to canvas their opinions or to research in depth their contributions to archaeological communication. By trying to outline what each partner brings to the relationship and how they value it and where they mistrust it, this dissertation has attempted to add some much-needed 'understanding' to the equation.

Another defining feature of the current relationship has been greater diversity. There is greater diversity today in the archaeological profession, in its ever-expanding specialisations, as well as in the ways that archaeologists can communicate. The public are now acknowledged to be more diverse; they have a variety of reasons for responding to archaeology; and they have more choice in how they prefer to consume it. As demonstrated here, the media represent a diverse community, and are equally diverse in their ways of exploiting archaeology (for instance, in the archaeological subjects and time periods that they cover). Yet, here, too, there is a paradox, for despite this diversity, the way that the communication process functions today means that archaeological information tends to be homogenised. Journalists' reliance on the pre-digested information of specialist journals and, as was shown in the case studies, source's increasing use of stage-managed information release and the intimate relationship sometimes built

between sources and TV producers can all too often lead to uniformity in both the content and form of archaeological information.

These characteristics of the present archaeologist-media-public relationship affect archaeological mediation in two different ways. On the one hand, archaeological mediation has become richer, more polysemic and less elitist, and on the other hand, it has become more homogenised, as both archaeologists and media practitioners try to maintain control in a more democratic information environment. As the analysis and models in Chapter Five demonstrate, the process of archaeological communication is a complicated system in which a number of different mediators and media interact. Thus the responsibility for constructing archaeological 'meaning' is not the sole preserve of either archaeologists or media professionals, but rather it involves the public and many other agents (like employers, sponsors and publicists). Mediation itself is not one thing, but involves several different kinds of activities (like gatekeeping, rule-making, editing and adapting). This means that trying to apportion blame for any failures in the process, or to identify who is most in control of it, are beside the point: 'for communication today is simply too complex and multidirectional, too mediated, for any one answer to be convincing.'

The case studies in Chapters Six and Seven show how this process works in practice and how different sources and means of information release affect the media outcome. Here we saw how the means chosen for releasing information by sources (or by the media itself in Chapter Seven) achieved a high degree of consistency in the content of the resulting press articles and documentaries, leaving journalists, editors and broadcasters with only formal presentation as their means for stamping a distinct identity onto the material. The comparisons of these media artefacts did offer some telling insights into the British press's reliance on illustrations to provide readers with different ways of consuming news and into the differences in 'directiveness' between European and American documentaries. The press case studies also demonstrated that British newspapers invest heavily in covering archaeological stories (as heavily as British terrestrial channels, as shown in Chapter Four, invest in archaeological documentaries). Nevertheless, the uniformity of the outcome in these studies did pose questions about whether such stage-management of the communication process is, in fact, in the best interests of the public, the media or the archaeological profession.

Having chosen to compare press articles and documentaries about the same discoveries may have, however, overemphasised the issue of homogeneity. It is clear that more case studies comparing different types of artefact collections will be needed before one can make definitive conclusions about how the British press and television cover archaeology. In fact, the clearest message to come from these pages is the urgent need for more research in the whole field of archaeological representation. With literally thousands of unanalysed media artefacts in existence and with public interest such a high priority today, there is much work that needs to be done. With more up-to-date and in-depth public opinion surveys, one would have better data on which to ascertain the levels and parameters of public interest and public understanding. Archaeologists and media practitioners also need to be surveyed about their attitudes towards and experiences of archaeological communication. More surveys and case studies would create a body of more archaeologically-specific research, and this would mean that one would not need to rely on, as I have here, analogies to science journalism and science-media research. It is only with more research that one will be able to assess whether the analyses and conclusions offered here are further substantiated or need amending.

In a field that has so far produced too little research, too few surveys and texts, this dissertation can only be seen as a beginning, as an opening shot in what one hopes will be an active and productive debate. Returning to the aims mentioned in the Introduction, I do feel that my work has contributed to a rethinking of the relationship between archaeologists, the media and the public and to the repositioning of the media and public as collaborators alongside archaeologists in the process of archaeological mediation. By offering the subject an historical context and theoretical framework and by providing a template for the analyses of media artefacts, it has also encouraged a shift away from concerns about media misrepresentation and confronted certain preconceptions that have hindered the serious and in-depth analysis of media artefacts. Whether it has (or could, or even should) 'transform the anxiety-ridden relationship' between archaeologists, the media and the public and 'improved archaeological communication itself', only time will tell.

Having started this research at what appeared to be the beginning of a renaissance in the public communication of archaeology, I little expected that, six years later, I might find that this fertile period in the relationship between archaeologists, the public and the media might already be over. It is possible that what I have described in this dissertation is not just the beginning and middle of an era, but also perhaps its end. Several developments since the end of my survey period have led me to this conclusion.

One is the decrease in archaeological programmes shown on BBC2 and Channel 4 in 2004, a 5% downturn that would have been 19% if one discounted BBC2's endless repeats of abridged versions of *What the Romans Did for Us* that were used as schedule 'fillers'. By the end of the year, these channels' pre-eminence in archaeological programme-making was, it seems, being taken over by channel Five (with a concomitant shift towards more predictable fare, as witnessed by their 'Egyptology week' in December). Other signs include the phenomenal audience (over 10m) achieved by BBC1's *Pompeii: The Last Day* (2003) and the critical success of C4's series *Ancient Egyptians* (2003). The success of these programmes, all dramatic reconstructions, may encourage broadcasters to concentrate in future on this format as a way of presenting archaeology to the public, a format which may rely on archaeological evidence as a basis for the programmes, but which does not deal with archaeological practice. If this were to happen, it might well be at the expense of the backstage format that dominated my survey period and undoubtedly served well the interests of the profession, the public image of archaeology and the public's desire to understand the subject.

A more recent development that may affect TV archaeology was the announcement in December 2004 of cuts at the BBC which include 400 jobs being axed from its factual programming department (Leonard 2004). It seems that the intention is to hand over more factual programme-making to independent producers, rather than cut the amount of programmes aired. This may be welcome news to independents, but it may also be a sign of a faltering commitment to documentary production by a major broadcaster. Another

development of some concern, especially given what occurred in the 1990s, is the return to the TV schedules of programmes and series about art and culture. Perhaps this is merely an adjustment, an attempt to redress an imbalance in the factual output, but it might be a harbinger of things to come, with history, science and archaeology being banished from terrestrial schedules, as art and culture were in the late 1990s.

Turning to the UK press, one notes with some concern the demise of the broadsheet version of *The Times* and the news that *The Guardian* may soon follow suit with a smaller-sized edition, leaving only *The Daily Telegraph* and *The Financial Times* as 'broadsheets'. Newspaper editors are keen to imprint on us that these are 'compact' editions (in order to avoid calling them 'tabloids'), but there can be no denying that these editions reduce the amount of text used in stories. Thus, a further 'tabloidisation' of the UK press, beyond what I have identified here, may be on the cards. As *The Guardian*'s editor Alan Rusbridger said on *The Culture Show* (BBC2, 9 December 2004): " I fear that what's going to happen now is that everything is going to converge into a kind of soggy tabloid middle ground, and I think this is a serious moment in public life, and, if one wants to be high-minded about it, it will have an effect on public discourse." How will the public discourse on scientific subjects like archaeology fare when fewer papers have enough words to devote to them?

Some archaeologists may be unconcerned about the media losing interest in covering their field or the capacity to cover it as abundantly as in the past, for they may prefer to be less in the media limelight than they have been over the past decade. However, not all archaeologists will rejoice in this outcome, nor will TV producers of archaeological programmes, science journalists or researchers in archaeological representation. Certainly, from my perspective, I now appreciate more than ever how privileged I was to have turned to the subject when I did and to have had such a rich body of evidence on which to work. But what more can be said of the future?

As far as TV archaeology is concerned, producers may find themselves in a more deeply divided broadcasting environment, where the more popular subjects, especially those with the most dramatic or computer-animation potential, are exploited by mainstream channels and the more esoteric subjects become the preserve of niche channels like BBC4. Such a split could bring some dividends,

like providing greater scope for more profound or challenging studies of archaeology deemed suitable for niche audiences. But there are problems as well. With smaller budgets, niche channels have less to invest in their own productions and pay less for bought-in programmes. Ideas or formats that cost too much might simply not be commissioned or bought by these channels. Similarly, archaeological subjects lacking sufficient dramatic and visual potential will not satisfy the demands of mainstream broadcasters. If this split were to take place, the most likely casualty would, again, be backstage documentaries, for they might be seen as too expensive for niche channels and too un-dramatic or visually-challenged for mainstream ones. A less flexible environment may put additional pressure on international co-productions. More partners may be required to generate production costs (leading to more compromises or 'one-size-fits-all' documentaries), and independent producers may be further marginalised, unable to compete with the major players. A foreign-based, underwater archaeological project shot over many months and re-adapted by the co-producers, like the one in Chapter Seven, may not be possible in the future. This bodes ill for television's investment in archaeological work and in archaeological programme-making. A future in which programming is even more segregated than it already is also provides little comfort for those of us who believe that mixed-diet, public service broadcasting is healthier for public discourse, for engaging a wider audience in archaeological debate. Of course, this may not happen.

In the case of the press, the loss of broadsheets as an entity may prefigure changes in how archaeology will be covered. However, given that the UK press already offer up archaeology in a highly visual, telegraphic way, as we saw in Chapter Six, perhaps the loss in column inches will be less damaging, or even apparent, than one might think. The likely casualty here, as I see it, will be those archaeological stories that cannot be explained succinctly or illustrated easily or at all, for they will find it hard to obtain any exposure. So, as with TV, the press's selection of archaeological stories to cover may become more circumscribed, and this cannot be beneficial for the profession, the media or the public. Again, this may not happen.

Even if these forecasts were to become reality, the strength of the bonds between archaeologists, the media and the public, as developed in recent years and described in these pages, give us some hope for the future. One would hope, for

instance, that the public, whose archaeological appetite was so generously fed around the millennium, would not overnight lose their hunger for, or understanding of, archaeology. As the public's choices in media consumption further expand—more channels and news sources, more digital and interactive options—so will the importance of their role as mediators. Less dependent on or 'directed' by sources, journalists and producers, the public will increasingly be able and even required to seek out, select and evaluate archaeological news and information for themselves. Having established such a large public constituency for archaeology in advance of this further democratisation of archaeological communication may prove to have been essential for archaeology's future.

Equally, one would hope that archaeologists have learned enough during the last decade about the public and its interest in and value to archaeology (and about the media and how it operates), that they would be able to build on this knowledge in order to keep public communication flowing. But perhaps the time has come for this task to be addressed, co-ordinated and supported more vigorously by the profession. The profession needs to implement, as Lazio (1996: 7) suggested a decade ago, "an integrated series of initiatives that would help archaeologists to educate themselves effectively about media representation and to develop strategies for responding to the volatile...media environment." Such initiatives could include courses on public communication within university departments or organised by professional bodies; regular liaison between archaeologists and media professionals, as well as forums that bring archaeologists, the media and the public together; support for more research, surveys and study in the field; nation-wide information campaigns; and perhaps more carrots (like the British Archaeological Awards) for 'best practice' in public communication.

But will the existing bond between the three partners be strengthened or weakened if the trend towards more employer-generated communication continues or grows? In the foreseeable future, it is unlikely that employer-led communication will diminish or that the means that employers use to feed the media (and that journalists use to source their stories) will change dramatically. Even with the internet gaining in importance, its usefulness as a news source is not yet proven. Even an increase in peer-reviewed articles appearing on the net does not overturn the existing pattern where pre-packaged information—whether through science journals, press releases or press conferences—so heavily

determine the selection and reporting of stories. The casualty here already is enterprise journalism, for there is frankly very little of it left even to mourn. This is perhaps the single most worrying trend identified in this dissertation and one that affects the mediation of all news, not just archaeological news. Without the criticism and scrutiny of investigative reporting in the press or on television, all subjects become defined by those with the largest resources, and information becomes not just homogenised, but pasteurised: free of any damage to us, but also free of the questions, doubts, inconsistencies and consequences that challenge us and allow us to move forward. For all its inherent difficulties, a more democratic environment where different voices are heard and all are scrutinised has to be preferable to a totally stage-managed one.

Will archaeologists fight back? Will they fight to regain control over the public communication of their profession and its work from their employers, encourage journalists to investigate and criticise their work, and play their role of 'first mediator' more vigorously? I have my doubts. Archaeologists are certainly capable of organising and running their own communication strategies. They are also keenly aware that the stakes are high, that if they abandon the public and the media as they did forty years ago, they are undermining their own future. But it has happened before, and although the world outside and inside the profession has changed immeasurably since then, we can neither be too arrogant nor too complacent to assume it could never happen again. No one can be sure that, once the media spotlight is turned off and the public and media find other subjects to focus their attention on, archaeologists will not once again retreat to their offices, labs, lecture rooms and excavations, and breathe a sigh of relief.

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