Archaeological constructs

An aspect of theoretical archaeology
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AN ASPECT OF THEORETICAL ARCHAEOLOGY

JEAN-CLAUDE GARDIN

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‘The critical scrutiny of patterns of archaeological reasoning immediately exposes the basic importance of archaeological logic within archaeological philosophy and theory. Archaeological logic should outline for us the theory of correct reasoning within our discipline, without making any unwarranted assumptions that the principles of logic and explanation are simple universals which may be transferred from one discipline and level to another . . . It raises the problem of the nature of the logical relationships between archaeological conclusions and the ground for those conclusions.’ (Clarke 1973: 15)

‘There is a gorilla in your closet whenever no one is looking for him.’ (Miller & Johnson-Laird 1976: 164)

‘An anarchist is like an undercover agent who plays the game of reason in order to undercut the authority of reason.’ (Feyerabend 1978: 433)
Contents

Preface xi

1 The analysis of archaeological constructions 1
1.1 The scope of archaeology 1
1.1.1 Areas 1
1.1.2 Goals 2
1.1.3 Objects 3
1.1.4 Definition 4
1.2 Intellectual processes in archaeology 5
1.3 Analysis under the terms of logicism 7
1.3.1 Example 1: cataloguing 7
1.3.2 Example 2: classification 8
1.3.3 Example 3: pattern recognition 10
1.3.4 Example 4: historical inference 12
1.3.5 The approach of logicism 13

2 Compilations and explanations 17
2.1 The relative uniformity of archaeological constructions 17
2.2 Two poles of construction: compilation and explanation 22
2.3 Compilations, $C_a$ 23
2.4 Explanations, $C_e$ 26
2.5 Other formulations of the distinction, $C_a/C_e$ 28

3 The analysis of compilations 31
3.1 The structure and function of Compilations 31
3.2 The selection of materials 36
3.3 The representation problem 38
3.3.1 Representations in an information language (IL) 42
3.3.2 Data processing in natural language (NL) 47
3.3.3 Information language and scientific language (SL) 50
3.3.4 Conclusion: IL, the language of Compilations 53
3.4 The ordering of IL representations 55
3.5 Evaluation problems: the genesis and updating of Compilations 58
4 The analysis of explanations
4.1 Typological constructions
4.1.1 Intrinsic and extrinsic attributes
4.1.2 The intermediate status of typologies
4.2 Logicist analysis of typological constructions
4.2.1 Free constructions: taxonomic orders
4.2.2 Guided constructions: induced typologies
4.2.3 Imposed constructions: deduced typologies
4.2.4 Synopsis
4.3 Interpretative constructions
4.3.1 Primitive interpretations: convergence, influence, inheritance
4.3.2 Normative interpretations: ideas, beliefs, cultural values
4.3.3 Dynamic interpretations: behavioural systems
4.4 Logicist analysis of interpretative constructions
4.4.1 Architecture of propositions
4.4.2 Logico-semantic organizations: a case study
4.4.3 Problems of formalization
4.5 Validation of Explanations
4.5.1 Validation of typological constructions
4.5.2 Validation of interpretative constructions
4.5.3 A synoptic view of validation procedures

5 Schematization
5.1 The general diagram of constructions \( C_e \) and \( C_c \)
5.1.1 Objectives
5.1.2 Selection
5.1.3 Description
5.1.4 Ordering
5.1.5 Interpretation
5.1.6 Validation
5.2 Cyclical aspects of the process

6 The form of archaeological publications
6.1 Rhetorical implications of the \( C_e/C_c \) dichotomy
6.2 Access to data in Compilations
6.3 Towards a new rhetoric in Explanations
6.3.1 The inflation of Explanations
6.3.2 A few shortcomings of published Explanations
6.3.3 Normative suggestions

7 The limitations of theoretical archaeology
7.1 Is theoretical archaeology new?
7.1.1 In relation to the new archaeology
7.1.2 In the history of archaeology
7.2 Logicist perspectives in the sciences of man
7.3 The limitations of logicism
7.3.1 Theoretical limitations 176
7.3.2 Practical limitations 176
7.3.3 Philosophical limitations 178

Synopsis 181
Glossary and abbreviations 182
Bibliography 185
Index 197
Preface

This book is an analysis of intellectual processes in archaeology, as we may observe them through the writings which form the literature of this discipline: excavation reports, catalogues, monographs, etc. The reasons which led me to take an interest in this subject were twofold. The original one was the ineradicable feeling of monotony which came upon me from the day I first had to read this literature, despite the variety of its topics and my taste for many of them; at the risk of raising doubts about my own intellectual processes, I confess that I spent no less than twenty years trying to understand the causes of this contradiction. The second reason was that in doing so, I came to a schematization of archaeological reasonings which not only 'explained' monotony, but somehow excused it, provided that we were ready to draw a few lessons from the exercise.

My purpose is to present this schematization as well as certain aspects of the lessons to be drawn from it as I see them, regarding for instance the scientific status of archaeological constructions, the opposition, real or forced between traditional archaeology and the so-called new archaeology, the virtues and limitations of formal procedures derived from mathematics, computer science, and systems analysis, in handling archaeological data, the need for reform of publication patterns in archaeology, etc. The apparent diversity of these questions should not be misunderstood: I am not proposing a new handbook on archaeological theory, from which students can learn the techniques of observation and interpretation now current in our trade; a number of substantial books of recent date already meet that purpose (see p. 1). My goal is only to present a personal appreciation of one aspect of archaeological science that logically precedes the study of specific methods or techniques, namely an analysis of the mental operations carried out in archaeological constructions of all sorts, from the collecting of data to the writing of an article or book in published form.

Dealing with abstract operations, this book may be found less easy to read than publications concerning the material entities with which
Preface

archaeology is concerned (objects, sites, monuments, remains of the past in general), their physical handling, or the historical speculations which they bring forth. I have tried nevertheless to remain as close as possible to the actual modes of archaeological thinking by providing examples from the literature in support of my argument. The reader may, however, regret that many of these examples are cited in reference to earlier publications which are not all easily accessible, rather than fully developed in this book. In adopting this course, I have been moved by the desire to devote all the space available to a presentation of what may be regarded as a synthesis of these earlier works, without having to do more than cite or summarize them in their due place.

This book was originally announced under another title, ‘Formal Methods in Archaeology’; and such indeed was the heading which I had myself given to a short outline submitted many years ago to the late David Clarke, after he had kindly invited me to present my views on this topic. Then, while I was preparing the book, I realized that formal methods were only one part of the subject, since I was led to give as much consideration to the non-formal ones, in so far as they often manage to produce empirically valid conclusions, despite their formal weaknesses. Faced on the one hand with concepts verified by observations, but without any explicit mathematical or logical foundations, and on the other hand with theories obtained through a formal calculus, but poorly correlated with empirical data. I decided to include both categories of constructions in the scope of the book, as I became convinced that they each had something to teach us with respect to the requirements of a Theoretical archaeology.

The substance of this book was first presented as a course which I was invited to give at the University of Geneva in 1975/6: without the incentive received from my friends in the Department of Anthropology and in the museums of that city, the patience of the Cambridge University Press would have been tried for a few more years.

I am grateful to Micheline Sourigues for her pains in typing the original manuscript; to Gerard Paul for the drawings from which the printed figures have been made; to Joan Bernard and Francis Brooke for their efforts in bringing my text closer to standard English. The whole has benefited from the suggestions of George L. Cowgill, who kindly agreed to referee an earlier version of the book.

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J.-C.G.