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978-1-107-41908-7 - The Mesolithic Settlement of Northern Europe: A Study of the Food-Gathering Peoples of Northern Europe During the Early Post-Glacial Period

J. G. D. Clark

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THE FOOD-GATHERING PEOPLES OF
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EARLY POST-GLACIAL PERIOD

By

J. G. D. CLARK, M.A., PH.D., F.S.A.

*Bye-Fellow of Peterhouse, Cambridge
(1932-1935)*



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PREFACE

THE general character and scope of this book will be indicated briefly in the Introduction; in this Preface I shall say how it came to be written and express my indebtedness to the scholars of many lands whose learning and whose friendship have made possible its production.

An outline of the purely archaeological side of the book was communicated to the Society of Antiquaries of London on May the 4th, 1934, but already my material was too unwieldy for publication in the form of a paper. It was furthermore clear that, divorced from its background of natural history, the archaeological story was too abstracted from reality to have very much meaning. My plan has, therefore, been to introduce the reader to the sequence of natural events in Northern Europe, as revealed by modern research, and to proceed from this to synthesise the findings of prehistory in the light of an ever-changing environment. It may be hoped that in presenting my material in this way I may not only assist archaeologists to appreciate the assistance they may derive from the related sciences of geology and palaeo-botany, both in the interpretation of their cultures and in their synchronisation, but that I may also make available to students generally the results of modern archaeological research on the food-gathering peoples of the earlier half of the post-glacial period in Northern Europe. The subject-matter of the book was covered in a course of lectures in the faculty of Archaeology and Ethnology at Cambridge during the Lent Term of 1934.

To obtain an intimate knowledge of the archaeological material, travel in the Low Countries, in Germany and in Scandinavia has been essential, and I have to thank, first of all, those who have made this possible and those who by their kindness have made it fruitful. My first view of the glories of Scandinavian archaeology was obtained when I visited Denmark and Sweden as the guest of the late Dr John af Klercker in 1929. My memories of this journey are of impressions rather than of detailed observations; I shall always remember a chance meeting with Sophus Müller in one of the Bronze Age galleries at Copenhagen, a walk on the Jära Bank in Scania—on the beach of the *Litorina* Sea, and my handling of the Ystad antler sleeve with the fine-etched cervids. At this time, also, I met Dr Arne of Stockholm and Dr Rydbeck of Lund, with both of whom I have retained close contact.

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A second journey, made in the Long Vacation of 1933, could not have been undertaken, were it not for the generous action of the governing body of my College. Starting in Holland, I visited J. Butter of Deventer, whose collection of Tardenoisian flint implements I was able to examine, and in whose company I bicycled over the heaths of Overijssel, the habitat of Tardenoisian man. I made a passing visit to Hamburg, but it was at Kiel that I made my first prolonged stay. The services that Professor Gustav Schwantes has rendered, not only to German but, also, to European archaeology, are widely recognised; in this place I should like to acknowledge the personal kindness and attentions that he found time to pay me in Kiel. The collections at Kiel are now being re-housed in a new building more appropriate to their importance; it would be quite impossible to imagine greater facilities to the visiting student than were offered in the old building. I remember the kindness of Karl Kersten, who was working for his doctorate at that time under Professor Schwantes. From Kiel I went to Copenhagen, where Dr Brønsted, though ill in hospital, secured every facility for me in the museum; I appreciated this the more, since the extension of the museum and the rearrangement of the collections must have made the presence of an exacting student the more burdensome to the authorities. At Copenhagen, also, I met Eric Westerby with whom I visited kitchen-midden sites on Mariager Fjord. Going south, by way of Langeland Island, Laaland and Falster, I visited Berlin; the authorities at the Museum für Völkerkunde were good enough to let me examine their Mesolithic material, and have subsequently placed me further in their debt by supplying a photograph. The work of Herr Gumpert of Ansbach on the Tardenoisian drew me south to Franconia and Bavaria. Herr Gumpert was most kind and hospitable. I examined his collections and visited some of his sites in the neighbourhood of Ansbach. In studying the material from the excavations at Ensdorf I had to encounter some difficulties as it was widely scattered. Dr Pils kindly sent what he had from Vienna to Ansbach, where some had been retained by Herr Gumpert; the rest I found at the Dom Bosco monastery at Ensdorf, where I was given shelter for the night, and in the Provincial Museum at Munich, to which Professor Birkner gave me special access.

A third journey, made by road in the company of my brother during the Long Vacation of 1934, enabled me to fill in many of the gaps left by earlier journeys in Germany. I am indebted for courteous assistance at the museums of Münster, Hanover and Magdeburg; at Bielefeld Herr Adrian showed

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me his collections; at Halle I was fortunate to meet Dr Bicker and see some of the Mesolithic material from Fienerode in the museum; finally, I have to thank Professor Reinerth for facilitating my study of his work on the Tardenoisian settlement of the Federsee, and for the courtesy of his assistants at the museums of Buchau and Tübingen.

Many museums that I was unable to visit have sent me photographs, and I should like to thank the authorities of those at Danzig, Kalmar, Lübeck and Saint-Germain in this connection. The line blocks have been made from my own drawings, in some cases of the original objects, in others of photographic or other illustrations from published sources; by this method some measure of uniformity has been achieved, which facilitates comparisons. I have, however, to acknowledge Figs. 11, 14, 13 and 73, drawn by Dr H. Godwin, the two former reproduced by courtesy of *The New Phytologist*.

I am indebted to all those whose writings are listed in the Bibliography for the material they have provided in their publications. Among the most distinguished names that I must mention are those of the Danish archaeologists: Madsen, Sarauw, Sophus Müller, Thomsen, Friis-Johansen, Broholm and Westerby; the geologists A. and K. Jessen and V. Nordmann; and the zoologist Winge. Among the Germans, Schmidt (R. R.), Schwantes, Reinerth, Gumpert, Andree, Birkner, Adrian and Zotz are prominent as archaeologists, with Weber, Bertsch, Rudolph and Gams among the natural historians. Norway can claim Shetelig, Bøe, Bjørn, Nummedal, and Brøgger (A. W.), with the geologists Brøgger (W. C.) and Øyen. Sweden has contributed the archaeologists Montelius, Lindquist, Niklasson and Rydbeck, and, among a body of brilliant natural historians, such men as Sernander, Munthe, de Geer, Anderson and von Post. Other men whose work has laid the foundations of our study are the Finnish archaeologists Europaeus and Nordman, and the geologist Sauramo; Tallgren of Esthonia; the Poles Kozłowski and Sawicki; Butter of Holland; Rahir, Hamal-Nandrin and Lequeux of Belgium; de Mortillet, Breuil, and Octobon of France. In Britain the archaeologists Burkitt, Crawford, Peake, Buckley, Armstrong, Burchell, Raistrick and Childe, and the natural historians Geikie, Skertchley, Clement Reid and Godwin, have contributed most directly to the subject.

From my association with the Fenland Research Committee at Cambridge I have experienced directly the extreme value of a co-operative approach to the problems of post-glacial history. I have been much encouraged in the

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work of investigating the post-glacial deposits of the Fenland by Professor Seward, F.R.S., who has led the work of the Committee. The association of archaeologists, palaeo-botanists, geographers and geologists has been most stimulating, and I should like to thank especially Dr Godwin for the many talks we have had together, and particularly for reading my first chapter and making most valuable comments.

Finally I must thank my teachers. In a very real sense all those whose names I have mentioned in this preface I count among my teachers, but I must remember, especially, my friend Miles Burkitt, from whose lectures I learnt the elements of prehistory. To my professor, Dr E. H. Minns, F.B.A., I am indebted not only for help in preparing this book, but also for a benefit that oversteps the bounds of archaeology; it was under his skilful guidance that I was first introduced to the German language.

J. G. D. CLARK

PETERHOUSE

May 1935

I should like to acknowledge gratefully my indebtedness to those who have made the publication of this book financially possible. The Syndics of the Cambridge University Press very kindly undertook a substantial share of the cost, the balance of which was most generously advanced by my friends and colleagues in archaeology—Mr C. W. Phillips, F.S.A., and Mr M. C. Burkitt, F.S.A.

It is a pleasure to add that in seeing the work through the press my task has been lightened at every turn by the efficiency and understanding of the staff of the University Press.

J. G. D. CLARK

November 1935

INTRODUCTION

THIS book is concerned with the cultural development, during the earlier half of the post-glacial time, of the food-gathering peoples of the western end of the plain of Northern Europe, a region defined to the west by the mountain backbone of Britain, to the south by the highlands of Southern Germany, and to the north by the mountains of Scandinavia, but to the east lying open to the vast expanse of Russia and Siberia.

The great influence exercised by physical environment on the development of primitive cultures has for a long time been a commonplace of anthropological and archaeological research; it is less generally recognised that this environment has undergone changes in the last few thousand years so profound as to alter its influence on cultural development and so rapid as to afford a natural time-scale for the dating and synchronising of human cultures. The area of Northern Europe is one in which most has been learnt of the development of environment in the post-glacial period, and is, therefore, peculiarly favourable for such a study of Mesolithic settlement. A general account of the factors of change, the nature of the evidence from which their history can be traced, and the ways in which they are relevant to archaeology, are outlined in chapter I of the present work.

The fact that archaeological remains can be related to different phases in the history of environment by such methods as pollen-analysis, determinations of associated fauna or the relation of the finding-places to ancient sea-levels, implies the possibility of a natural chronology. In my first chapter I suggest a triple division of early post-glacial time in Northern Europe into periods I, II and III, which are used throughout the chapters that follow. This natural chronology is valuable, not only for elucidating the internal development of culture-groups, but also for synchronising cultures which have never been found in contact with one another.

Three groups of cultures, three traditions, distinguished by differences of origin and by adaptation to differing types of environment, can be recognised during the early post-glacial period in Northern Europe. The tanged-point cultures (chap. II) derive from origins distinct from those of the axe cultures (chap. III) and reflect different environments. Again,

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although the axe and the microlithic cultures (chap. v) possess one element in common, the former has its roots in origins more diverse than the latter and illustrates adaptation to forests in contrast with open country.

Food-gathering—hunting, fishing, fowling, and collecting—formed the economic basis of all these cultures, which therefore stand on the same general level as the Palaeolithic cultures of the Pleistocene period. Industrially, also, many features, such as the flint burin, ally them with the earlier cultures. These circumstances have led some writers to classify them as Epi-palaeolithic.¹

On the other hand certain features, such as the flint core axe, were destined to play an important part in the Neolithic cultures of the area, which has led other writers to classify them as Early or Proto-neolithic.

A third school has sought to reconcile both these views by dividing the cultures into two groups—an earlier Epi-palaeolithic and a later Proto-neolithic group. In so far as this school recognises the inadequacy of either of the preceding outlooks it is correct, but it breaks down on the fact, amply demonstrated in this book, that the so-called ‘Epi-palaeolithic’ and ‘Proto-neolithic’ flourished contemporaneously throughout the whole of early post-glacial time and were sometimes combined in a single culture.

The school, to which most modern writers and workers belong, recognises the existence of the two elements, but insists that the cultures under discussion are best considered as forming a separate civilisation—the Mesolithic civilisation. In employing this term nothing more is implied than that the Mesolithic flourished in the main between the Palaeolithic and Neolithic civilisations in point of time; it may be emphasised that it is not intended to suggest an evolutionary stage between the two.

The origins of Mesolithic civilisation may be traced to the changes of environment associated with the close of the Pleistocene period, the contraction of ice-sheets and the replacement of tundra and steppe by forests in Northern Europe, and a progressive desiccation, caused by the northward movement of the cyclonic rain-storms, in North Africa and parts of the Near East.

The progressive desiccation of Afrasia was accompanied by a gradual degeneration of the Capsian cultures until they became microlithic in aspect, and ultimately gave rise to considerable overflows of population from North

¹ The term Epi-palaeolithic is best reserved for delayed Palaeolithic cultures, as indicated in a later paragraph of this Introduction.

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Africa into South-western Europe and probably also from Palestine and Syria into South-eastern Europe. The Tardenoisian culture of our region of study finds its origin in these human overflows from the zones of post-glacial desiccation. In Northern Europe these Tardenoisian people may well have come into contact with degenerating provincial Aurignacian cultures, the two together forming our microlithic culture-group. It was these peoples who settled in sandy regions and exposed uplands, their material culture being ill-adapted to coping with forests.

On the other hand, the invasion of the plain of Northern Europe by the forests of post-glacial time gave rise to the development of the axes and adzes, at first of antler and later of flint. It was on this axe tradition, cradled in Northern Europe, that the incoming microlithic element impinged, and it was from the union of these two traditions, possibly in conjunction with elements from Magdalenian sources, that the Maglemose culture developed and flowered in the forest environment of the lowland area.

It is difficult to classify in current terminology the various tanged-point cultures that flourished in Northern Europe during the post-glacial period. It is fairly clear that those of the Low Countries, of North Germany and of Poland derive from Upper Palaeolithic cultures of which the remains are found on open stations within the same area. Apart from a slight microlithic element (which does not, however, reflect the micro-burin technique) the cultures of this group differ in no fundamental respect from those of the pleistocene period. They should properly, therefore, be classed as delayed (or 'epi' in Menghin's sense) Palaeolithic. The Fosna and Komsa cultures are even more Palaeolithic in general appearance, and they survived to a later date; to some extent, these can be regarded as even more delayed (or 'opsi' in Menghin's sense) Palaeolithic, though certain features of these Scandinavian cultures give good evidence of contact with the Mesolithic axe tradition.

The period of time during which Mesolithic cultures were dominant (the Mesolithic period, as we shall call it for short) obviously varied in length in different regions, according as they were central or peripheral to the ancient centres of food-production. In Northern Europe, where the Neolithic arts were established late, the Mesolithic period is commensurately long. On current chronology it would occupy nearly six millenia, a period rather longer than the rest of prehistoric and the whole of historic time in the area taken together. Such a span of time does not seem too great when

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one recalls the profound changes in geography and in animal and plant life that unfolded themselves while the cultural developments examined in this book were proceeding.

The persistence of each of the three main traditions throughout the Mesolithic and into later periods is one of the most striking features which emerges, and it is clear that no fruitful study of Neolithic civilisation in Northern Europe can be made without adequate consideration of the material examined in this book. It may, indeed, be emphasised that many of the local features of Neolithic civilisation can be satisfactorily explained only in terms of local differences rooted in the Mesolithic. The Neolithic arts were diffused among the food-gathering peoples described in the following chapters, peoples who neither vanished nor were extinguished, but who survived to form the human basis of the later civilisations.