

# Mats P Malmer

## An Intellectual Biography

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The article, which is a biography of the Swedish archaeologist Mats P. Malmer, tries to identify some of the characteristics of Scandinavian archaeology. In particular, Malmer's discussion of the concept of typology is of great importance for this tradition. Another intention of the article is to supplement the historiographic discussions in Swedish archaeology. In these discussions there is a significant need to investigate the ways in which we have come to think as archaeologists.

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### INTRODUCTION

This paper is a reprint of a chapter included in Tim Murray (ed) *Encyclopedia of Archaeology: The Great Archaeologists*. T. Murray first solicited the paper in 1994, and it was published as part of the volumes on significant archaeologists under the title: 'Mats P. Malmer: an intellectual biography', in 1999. I am very pleased for this opportunity to make the paper more widely available to an audience of largely Swedish and Scandinavian archaeologists for two reasons.

First, I hope the paper adds to the appreciation of the disciplinary heritage in which we work. In particular, I believe it can help to identify some of the specific flavors that the Scandinavian (or may be even more specifically the Swedish) tradition of archaeology has. I suggest that Malmer's continuous interest in the nature of the archaeological record, and specifically his discussions of the concept of typology, can be identified as central mile stones in this tradition. Malmer's striving towards clarifying how a type should be understood (and his emphasis upon application) is a central contribution. Through these discussions Malmer both brought the discipline in touch with its founding arguments and at the same time added to these in a manner so fundamental that former intuitive positions were given an explicit and rational base. One can, therefore, argue that the vitality of a specifically Scandinavian tradition of archaeology may to some extent depend upon our abilities to recognize and respond to Malmer's calls that ask us to clarify the fundamental premises upon which we work. In contemporary British

archaeology, for example, the concept of type and thus of typology is considerably weaker than in Scandinavia and it plays a minor role in archaeological reasoning. In contrast, in Scandinavia, typology is used as part of routine practice, and the need for recognizing its theoretical foundation should be self-evident. For these discussions Malmer's works are of central importance.

Secondly, I offer this paper in the hope that it will supplement, and thus potentially challenge the scope, of the vibrant historiographic discussions ongoing within Swedish archaeology. While these have traced institutional and ideological structures in very innovative ways, and also subjected the project of historiography to its own scrutiny, less attention seems to have been paid to the foundation and nature of archaeological investigations and knowledge claims. The recent interest of Swedish historiographic studies has introduced neglected aspects into the core of disciplinary history to great effect. There remains, however, a significant need for investigating the ways in which we have come to think as archaeologists, and the impact this has upon how the discipline is performed.

This paper on Malmer was not written to initiate or contribute in depth to any of these concerns, rather its aim was to inscribe Mats Malmer into the international history of archaeology and archaeologists. The paper has not been updated to include assessment of Malmer's most recent publications, a task which would be very interesting. Hopefully, despite its shortcoming regarding wider and more fully problematised concerns, it may provoke reflections upon the importance of an individual and his impact upon a specific regional tradition.

#### PERSONAL AND ACADEMIC HISTORY

Mats P. Malmer was born in 1921 in Höganäs, Scania. He enrolled as a student at Lund University in 1943 to study history and changed in 1945 to archaeology. In 1950, he began his *licentiat* studies, and he gained his doctorate degree for the thesis *Jungneolithische Studien* (largely researched in 1956-58) in 1962. As is common in the Swedish University system, Malmer worked in archaeology while conducting doctoral research. He was involved with archaeological excavations from 1946 onwards, and this gave him both extensive practical experience of archaeology and a broadly based appreciation of the character of the archaeological record. These influences remain present in his later developments; they have ensured that his theoretical works have a direct relationship to the archaeological record and are of general relevance. The sites Malmer excavated during these years range in age from the Mesolithic to the medieval. His first publication, in 1948, is an excavation report of a leper hospital in Scania (Burenhult *et al.* 1987).

In 1959, Malmer moved to Stockholm to become head of the Stone and Bronze Age Department at the Museum of National Antiquities. During Malmer's years in the museum world, his work on archaeological methodology and theory started to appear in print, with summaries published in several international journals. Malmer's involvement with excavations continued during this time, and in 1969

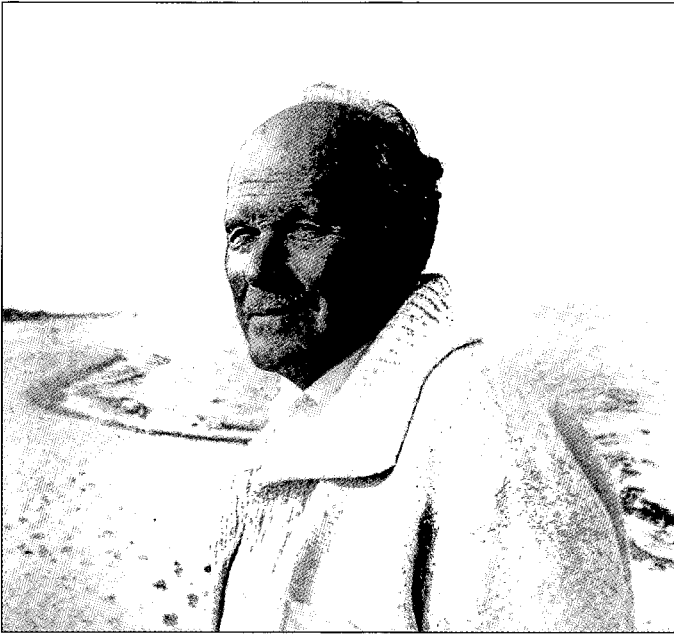


Fig. 1. Mats P. Malmer. Photo: Brita Malmer.

he published the important excavation report of the Jonstorp settlement, a Pitted Ware site. In 1970, he was offered the chair of the archaeology department, at Lund University, where he stayed until 1973, when the chair of archaeology at the University of Stockholm became his. He remained in this position until he retired in 1987. During his years in Lund, he published in two new areas, rock carvings and museums studies, and his inaugural lecture at Lund shows his awareness of the destruction and reduction of the archaeological record and his concern for the preservation of the past. His tenure at Stockholm added two projects to his broad range of interest – the large excavation project of the Alvastra Pile Dwelling (1976-1980) and his synthesising works on the Battle Axe Culture.

Malmer is a key figure in discussions within Scandinavian archaeology on quantitative and taxonomic methods and the interpretation of archaeological data. Since 1967, this discussion has been made international, facilitated by *Norwegian Archaeological Review* and more locally by *Fornvännen*. Malmer's most significant influence has been to introduce and argue for the rational replacement of the predominant inductive approach with a rational use of hypothesis and verification, a method in line with the hypothetico-deductive methods of logical positivism.

#### THE CONTEXT OF MALMER'S CONTRIBUTION

Although Scandinavian archaeology acknowledges and often stresses its roots in the nineteenth century, substantial changes have taken place since the Second World War, both in its administrative framework and its conceptual basis. Malmer

played a central role in this development, and his work can be seen both as the products of the long tradition – for instance, refining the typological method of Oscar Montelius – and a contribution to recent developments in the same tradition. Above all, Malmer continues the traditional commitment to understanding the nature of the archaeological record. Source criticism, typology, and investigation of distributions and densities have been long-established concerns in Scandinavian archaeology. Malmer has not challenged these basic aims, rather he has refined these intellectual tools and demonstrated how new standards could be reached. Without rupturing the sense of disciplinary cohesion and tradition, his work set new agendas for many areas of the discipline. His importance in Swedish and Scandinavian archaeology is far-reaching on both practical and theoretical levels. He is also an important and very early contributor to the development of a specific European positivistic and scientific approach to archaeology.

#### MALMER'S EPISTEMOLOGICAL OUTLOOK – “ARCHAEOLOGICAL POSITIVISM”

An emphasis on objective knowledge runs as a consistent and strong theme throughout Malmer's works, and it is expressed in response to many different aspects of the archaeological record and the work of archaeologists. Malmer has repeatedly stressed that logically correct, verbal definitions of archaeological entities should be the basis for all archaeological research. For him, knowledge arises from the use of models and testing, through verification and falsification of well-formulated hypotheses. The construction of hypotheses is not prescribed by any rules; Malmer has even acknowledged that researcher can unknowingly be influenced by their expectations of the result (e.g. Malmer 1986b: 17). Nonetheless, he has also stressed that precise definitions are needed so that tests can be repeated and be open to scrutiny, arguing that this scientific procedure is equally relevant to all types of archaeological inquiry.

Malmer has elaborated upon the context of knowledge, stating that the limits to knowledge are twofold. An inner limit is decided by the quantity and quality of the archaeological sources. An outer limit is set by that which can be verified. The knowledge defined by the inner limit is secure and unambiguous; knowledge that falls under both the outer and inner limits is more insecure but at the same time is also more essential (Malmer 1986b: 8). That testing has the central role in Malmer's methodology is well demonstrated by his case studies (most noticeably Malmer 1962 and 1963) and by his suggestion that the difference between a scientific hypothesis and a fable is that the former can be verified or falsified while the latter cannot. According to Malmer, positivism is not a new discovery of the post-war generation but has been the basis for archaeological reasoning since the beginning of the nineteenth century; he sees C. J. Thomsen as the first rationally working archaeologist (Malmer 1984; 1993).

In his works, Malmer has argued for and has aimed to develop the methodological and theoretical autonomy of archaeology (Klejn 1982: 11). Arguments

must be build on material remains, and the similarities and dissimilarities between objects is the primary concern and data of archaeologists, the source of their knowledge. One of the main theses of his methodology is that “physical similarity entails a probability of every other form of similarity, i.e., similarity in respect of time, use, name and environment. A correctly defined type corresponds to a concrete historic situation” (Malmer 1963: 264). But while believing that knowledge is to be found in the material, he has also recognized the quantitative problem that few archaeological analyses will satisfy all statistical demands. This has caused him to emphasize the importance of relative or proportional values. His comments on the importance of carbon-14 dating for the discussion of the cultural relationship during the Middle Neolithic in Scandinavia are revealing; he has argued that radiocarbon dating has largely confirmed the results that Nordic archaeology had reached through its own methods (Malmer 1963: 264).

It is worth noting that while Malmer aims to overcome the subjective element in scientific reasoning through the application of rationalistic and scientific methods, he does not deny its presence (1968: 37). As argued below, this acknowledgement of subjectivity makes Malmer’s positivism subtly different from some other approaches within processual archaeology. The subjective element in knowledge generation and, in particular, its central role in the formation of hypotheses (note that Malmer does not prescribe how hypotheses are formulated) has long been acknowledged in archaeological discourse. Differences emerge when some see this element as a necessary evil and others consider it part and parcel of the role of contemporary archaeology. For Malmer, acknowledging subjectivity does not alter the importance of forming hypotheses and testing; on the contrary, it strengthens it. This also influences his very strong argument for arbitrary (rationalistic) definitions and boundary formations, as opposed to the school of typology that aims to define a priori existing types (Klejn 1982; Malmer 1984: 264). These, of course, are some of the areas where current archaeology is most divided.

Our ability to formulate sophisticated hypotheses relevant for comprehending the complexities of prehistoric societies has certainly been questioned. In addition, verification is philosophically a complex concept – can any hypothesis be verified? Verification, as well as falsification, is difficult to attempt for any but the simplest propositions. The basic problem of these concepts of verification and falsification is the expectation of a repeated, constant, and reducible relationship between elements. This proposition has been questioned in the various critiques of logical positivism. As many have argued, an archaeology driven by testability risks being reduced to banalities. Malmer’s epistemological position has thus been subject to much critique, both within archaeology and in the social sciences generally. However, Malmer’s works partly escapes both this critique and the downfall of much of so-called New Archaeology, because the aim of his work has been to make the archaeological data more understandable rather than aiming to promote his own methodology.

Malmer's case studies and the elements that he selects for analysis are therefore particularly well suited to the procedure of testing. For instance, his large work on the Battle Axe Culture (Malmer 1962) progressed through a falsification of the current explanation and then the formulation of a new hypothesis; in 1984 he could look back and see that for more than twenty years his hypothesis withstood all attempts at its falsification. He also allowed for aspects of untested interpretations the falsification or verification of which would be more complex. For example, he assumed that the value of two-edged battle axes at the Alvastra Pile Dwelling lay in their aesthetic and ideological properties (Malmer 1986: 97). He acknowledged the problem indirectly: "... the simplest hypotheses, requiring the least number of supplementary hypotheses, usually stands the best chance of being correct." (Malmer 1986a: 91).

This account of Malmer's place within processual approaches to archaeology is confirmed in his article on theoretical realism. He observed: "Evidently also the Scandinavian variant of new archaeology was influenced by positivism, but only in so far as source criticism, clearness and precision in the treatment of archaeological material was demanded. There was no attempt to introduce a formal deductive-nomological model for explanation into archaeology" (1993: 146).

Another contested issue is whether observation and knowledge can be neutral. Malmer has strongly argued that "As long as we move within the field of archaeology there exist a theory-neutral knowledge-potential and probably also a theory-neutral observation-language" (Malmer 1984: 263, my translation). For Malmer, data has an inherent (informative) value, and this is demonstrated or may be even verified by the fact that data collected to test one hypothesis often can be used for testing others as well (1984: 262). His position is in direct opposition to the view that pre-existing knowledge and agendas are embedded in our entire interaction with the data and thus affect them. This embeddedness does not mean, however, as Malmer implies in dialogue with Swedish colleagues, that the lack of neutrality would make the data useless for any other but their original purpose. Alternative and less polarized views are possible. One could argue that the contemporary social construction of data, while setting conceptual and physical constraint, easily allows for a range of alternative investigations, or that to some extent data resist the influence of the researcher.

There are few references to the sources of Malmer's methodology and epistemology as published in 1962 and 1963. Bjorn Myhre has argued for influences from the Continental positivist tradition of the Vienna school, including Ludwig Wittgenstein, and from the Finnish philosopher G.H. von Wright (Myhre cites for example Malmer 1963: 11, 222), and points out that Carl Hempel and Karl Popper, so influential for the American New Archaeologists, were not known to Malmer at the time (Myhre 1991: 167). There is, however, no explicit reference to philosophers of science in Malmer's early works, and none are listed in the bibliographies. In a much later article on archaeological positivism, Malmer referred to Hempel's philosophy and equated his own concept of rationalism with the logical

positivist approach of Lewis Binford and the New Archaeology. Here he wrote that he “always shared the neo-archaeological conviction about the archaeological material’s potential for knowledge: the information is there” (Malmer 1984: 265, translation in Myhre 1991); in particular, he expressed strong agreement with Hempel’s notion that hypotheses are invented rather than deduced from data (ibid 264).

In this same article, Malmer referred to “Die Philosophie des Als Ob” (The Philosophy of “As If”), a work by the German philosopher Hans Vaihinger from 1911. This reference may be an even more significant indication of Malmer’s philosophical orientation than allusions to Hempel or Wittgenstein. Vaihinger was the main “architect of fictionalism”, a philosophical view that Malmer assumed was known and understood by his readers. Indeed, he used it as a guideline for working “*as if* total objectivity was possible” (1984: 267, my emphasis). Malmer explained that fiction differs from hypothesis in that it is neither verifiable nor falsifiable but is justifiable by its valuable or sometimes even necessary role in research. Embedded in this reference is a notion of pragmatism, which adds interesting nuances to Malmer’s positivism and rationalism.

Fiction in this sense can be seen elsewhere in Malmer’s work, particularly in his discussion of Neolithic rituals (Malmer 1986a), and the notion creates an interpretative dimension that takes untestable hypotheses into consideration. Malmer seems, however, to have acknowledged a role for fiction only in interpretation and not in the observation of similarities, for Malmer the essence of archaeological work. In one of his more recent papers Malmer introduced Theoretical Realism, and referred to the philosophers Rom Harré and Roy Bhaskar (1993). This marks a move away from positivism in that Malmer accepts the ontological status of theoretical terms, but at the same time he maintains the centrality of observation as the only source of sure and certain knowledge and continues to demand a science that is objective and neutral. In this reflection we see both continuity, in Malmer’s emphasis on observation, objectivity and neutrality, and a subtle change towards a more explicit theoretical acknowledgement of the fictional element. According to Malmer, these philosophers have provided him with an explicit approbation of his and other archaeologists own way of working (1993: 148).

Various more or less explicit theoretical influences may be traced in Malmer’s positivism, but an additional and obvious influence seems to have been the history of archaeology itself. For Malmer, objectivity means that we do not suppress facts that are contradictory to our political ideology or archaeological hypotheses, and this is openness presents a direct contrast to the politically subservient and subversive archaeology in central European archaeology during the 1930s (Malmer 1984). To the question of what we want to know, Malmer answers simply “We want to know about all”, and then he adds, not so simply, “but not to suppress that which does not please us” (ibid 267, my translation).

Malmer's positivistic approach, however theoretically grounded, is valuable because it makes the archaeological material understandable, and it has provided a constructive and innovative approach to the practical task of enticing the information from the data and the data from the soil. Throughout Malmer's work, practice and theory are linked, and theory for its own sake is neither granted a role nor considered interesting (1980: 260; 1984: 260f). Early on, Malmer labeled early his approach *Saksforskning* "object research" (1963: 11), and he made it clear that its objectives were to understand the physical sources. He has continuously defended this positivistic archaeology by demonstrating it in practice, which is literally argument through testing, and he has only engaged in purely theoretical discussions when highly provoked. Even then, he has preferred to demonstrate rather than posit (e.g. Malmer 1984 and various commentaries).

Malmer's most unique contributions were his two core methodological publications *Jungneolithische Studien* [Late Neolithic Studies] (1962) and *Metodproblem inom järnålderns Konsthistoria* [Methodological Problems in the History of Art during the Scandinavian Iron Age] (1963). These volumes are used as classic textbooks by universities in Scandinavia, and they are amongst the most important methodological contributions arising from Scandinavian Archaeology in this century. Their underlying theme is the development of methods aimed at objective and rational analysis of vast quantities of artifacts. Malmer's methodology was developed prior to the use of computers in archaeology, but it argues for the types of systematic data analysis that can now be done routinely. It aims to develop tools for the classification and analysis of data, especially with regard to typological seriation and distributions. As his students and colleagues have stressed, however, his "... strict and logical treatment of the source material is always connected with a human dimension and a sense for historical reality" (Burenhult *et al.* 1987: 1).

#### CHOROLOGICAL (SPATIAL) STUDIES

In 1957, Malmer published the first of many papers concerned with developing and applying quantitative and cartographic methods to archaeology – in particular the chorological method. Malmer was the first archaeologist in Sweden to use advanced chorological methods in an archaeological context. The approach he advocated is now a standard method in Swedish archaeology, but at the time, it was innovative in its systematic emphasis on behavior within set constraints and its new methods of approaching the spatial distribution and configuration of objects and assemblages. The ideas and methods underpinning the approach were adopted from human geography, especially the work of the Swedish human geographer T. Hägerstrand. Malmer's most important applications of the method were to the study of rock carvings and Neolithic battle axes. In using chorological methods to investigate archaeological traces in the landscape, Malmer made subtle but significant changes to archaeological studies. His goal was to apply spatial methods to settlement studies and to use them to research prehistoric society through data that could be objectively recorded.



For instance, in his 1957 paper, Malmer demonstrated how the Battle Axe Culture could be interpreted on the basis of the distribution patterns of its different material traces. The analysis was based on density maps that showed the distribution of material culture over a grid system of hexagons, and the grid system was used to draw isolines that connected points of equal density. Density distribution was furthermore related to variables such as soil conditions. Analysis of types, chronology, and density were used to locate innovation centers. Malmer introduced the concept of the *pleion*, the positive anomaly, and he used isarithms as a new technique in chorological studies (Burenhult *et al.* 1987: 1). Malmer used the *pleion*, for example, to definitively show that the Neolithic Battle Axe Culture and the Funnel Beaker Culture did not occupy different areas and did not represent different economies but were in fact different chronological phases, thus solving a long-running dispute in Scandinavian archaeology. This point was taken up again as a major theme in Malmer's 1962 publication. As he developed this method further Malmer saw chorological studies both as important in themselves and as "a basis for – and often a prerequisite condition of – chronological discussions and cultural-historical interpretation" (Malmer 1981: 1). He has applied the method to several object types and to rock art, as well as to the study of innovation processes, defining the center(s) of innovation and following their spread.

## TPOLOGY

Another substantial contribution has been Malmer's discussion of typology as the theory of types. Typology, for Malmer is about the selection and definition of independent elements. In this form, typology stands very close to the theory of statistics, and it can be considered as or likened to an early stage of statistical analysis. It is therefore interesting to note that Malmer also contributed to the early discussion of the use of statistics and mathematics in archaeology. For Malmer, typology is primarily a method for clarifying links within archaeological evidence, for ascertaining connections between types, and for interpreting types. Typology is not just about artifacts; as a method it encompasses all comparative analysis of types (Malmer 1962; 1963; 1984). Thus, it applies equally to all elements, including artifacts, monuments, settlements, social forms, and distribution patterns. Thus, typology is of paramount importance to the nature of archaeology as an autonomous discipline, and it sits at the foundation of archaeological thinking and investigation.

## EXCAVATIONS AND ROCK ART STUDIES

Malmer's great influence arises from his very precise and systematic understanding of methodological issues. This understanding is coupled with a vivacious ability to generate and test new ideas. This ability to think *and* apply has meant that many of Malmer's papers are important both as methodological contributions and as applied research. His close cooperation with specialists on many projects (Burenhult *et al.* 1987: 10) is another indication of his understanding of the subject,

its demands and limitations. He encouraged specialists to participate in field projects, often with exceptionally rewarding results, such as the use of dendrochronology at the Alvastra Pile Dwelling.

This site is a fine example of Malmer's contribution to the archaeological record through excavation. A superbly preserved wood construction, Alvastra is composed of more than 1,000 piles over approximately 1,000 square meters in a mire in Östergötland, Sweden. The piles formed no detectable pattern, but by using dendrochronology it was possible to unravel the phasing of the construction and through that to augment a functional interpretation of piles as a ritual site (Malmer and Bartholin 1983; Malmer 1986a). This expansion of the use of chronology from absolute dates to phasing and functional interpretation is now almost taken for granted, but in the early 1980s it was a real innovation in the use of the technique.

Malmer also pioneered the chorological study of north European rock art. This work relates to his interest in how we interpret, and how we understand innovation processes and chronology. In his rock art studies, Malmer departed from traditional approaches by replacing an absolute interpretation with a relative approach, echoing his emphasis on rationalistic type definitions rather than empirical ones. Malmer has argued that absolute interpretations of rock art are problematic as they must be anchored in contemporary sources, as each motif is interpreted using comparative studies of other motifs. A relative interpretation, on the other hand, would be directed instead at physical properties, such as variability, chorology and chronology, that can be objectively observed.

Malmer does maintain that through physical variations we may learn something about the ideas associated with the objects in the rock carving. Each of Malmer's rock art studies consists of a typological, chronological, and chorological analysis of the motifs based on proportional studies and on percentage. He placed the rock art in its ecological, economic, and social context and saw it as a reflection of and product of these contexts. He also identified centers of innovation and mapped their influence, as well as suggesting the possible impact of the combination of more than one tradition (Malmer 1975a and 1981). In his most recent work on rock-art this position has changed somewhat since he investigates rock art as writing thus introducing a potentially absolute or at least a specific interpretation of them (Malmer 1993).

#### MALMER IN AN INTERNATIONAL CONTEXT

Malmer's work on archaeological methodology clearly has themes in common with New Archaeology. This is generally agreed, although his work is not used as extensively as it deserves to be and its importance is internationally acknowledged by only a small circle of theoreticians such as the Russian archaeologist Leo Klejn (1982). Malmer work does, however, play an important role in the ongoing attempts to define an archaeology with theories and methods of its own. Malmer is part of "the loss of innocence" generation (Clarke 1973), and appreciation of

the contribution of his work and its relationship to the wider archaeological discourse has obvious importance for understanding the different roots and directions of contemporary archaeology. One may, for example, propose that the particular reception and impact of the New Archaeology in Scandinavian archaeology (Myhre 1991) can be understood by appreciating the differences between Malmer's version of a humanistic science and the Anglo-American approach. Malmer's key role in our understanding of the influence and congruence between modern Scandinavian archaeology and the Anglo-American processual archaeology can be documented in many ways.

First, Malmer had independently come to philosophical views that were similar (but not identical) to those motivating the New Archaeology, and his was clearly a strongly held and informed view rather than merely a received one. Malmer understood the full implications of the approach, both in its effect on how we interact with the archaeological record and in its demands for regulation of the generation of knowledge. In short, as far as it is possible for a Scandinavian archaeologist to do so, Malmer has thought as a processualist. Secondly, of no less significance is the fact that Malmer could incorporate this way of thinking into the Scandinavian tradition of artifact and settlement studies. This immediately gave his work a true distinctiveness, as in his emphasis on a theory of types that include both definitions and descriptions, the importance of context in his works, and the lack of general system theory. Thirdly, Malmer's work continues to contain a strong humanistic element, and its hypotheses relate consistently to cultural-historical sequences or contexts. There is a focus on people or cultures rather than systems or societies, and although these may appear to be insubstantial differences, such emphasis suggests a difference of scale and concerns. In commenting on his methodological contribution Malmer himself sees it as the culmination of "a very specific Scandinavian research tradition, one intimately linked to the archaeological material itself, but now provided with a firm and carefully founded theory as well as an interdisciplinary approach considering chorological and environmental factors. The aim of this tradition was to create an objective and exact description of life of people in the past" (Malmer 1970).

A similar link between the objective, measured, and observed, on the one hand and the human individual on the other is found in Malmer's emphasis on normative behavior (conventions, rule-bound behavior, e.g., Malmer 1986b: 11). Normative behavior lies behind the groups within typologies, it sits in the chorological studies, and it is reflected in his assumption of universal human traits such as the desire for values and the need to measure. At its core, Malmer's work, despite its scientific outlook, shows a striking interest in the human that makes it truly unique. His is a positivistic approach that as a program is simple, but as a practice becomes at times complex and dense through its logical precision and its recognition of people and their initiatives as the most influential variables. Malmer's is an archaeology that strives towards a humanistic scientism; he sees

archaeology as belonging neither with the natural sciences nor with the humanities; it is a third subject (Malmer 1984: 266; 1993: 146).

While Malmer's approach is clearly exercised within a Scandinavian archaeological and intellectual context, its parallels to the New Archaeology are nonetheless obvious. It is particularly noteworthy that Malmer's works on defining archaeology as an explicit scientific study took place during the late 1950s (published 1962 and 1963), and thus was earlier than and independently of the publications that ushered in the New Archaeology. It has even been argued that David L. Clarke must have been influenced by Malmer (Burenhult et al 1987: 2). But Malmer's early works were published in German and Swedish, respectively, and the language barriers and the Scandinavian subject matter may have made its assimilation in America more difficult. Malmer's approach is not the same as that enshrined as the New Archaeology; it is less programmatic, and it inquires more deeply into the nature of both the discipline and the archaeological record. It is also more aware of the irrational in human behavior, and it may be characterised as a scientific archaeology that is culture inclusive. Another difference is that although Malmer's ideas about the discipline and its methodology are extremely innovative, they do not constitute a paradigm shift, as the concern with typology and archaeological knowledge claims were established elements of Scandinavian archaeology. Rather than rejecting the former archaeology, as New Archaeology did, Malmer carried forward and enhanced an existing framework of inquiry.

Malmer's independent development of a processual approach has been recognized, if not fully. His work has also influenced other developments within archaeology, and these are worth a brief comment. A consistent feature of many of these contributions is that Malmer reached his conclusions early and independently. It is interesting, for example, to notice that Hägerstrand, who influenced the development of Malmer's chorological method, is one of the central sources behind recent archaeological interest in space-time geography. Although Hägerstrand's work is used within different theoretical frameworks, it is nonetheless noteworthy that already in the 1950s Malmer understood the value of these types of spatial analysis. Likewise, his methodological works introduced a perception of the material as a continuum rather than as an assemblage of discrete elements. This is an idea that recently has reappeared in post-structuralist attempts at understanding material objects as the effect of discursive actions and time. Malmer's long-term interest in weights and constant variables, which guides his interpretations of both Bronze Age figurines and axes as units of weights and value (Malmer 1992), has in recent years been strengthened by similar arguments for other metal objects in various parts of Europe. Malmer also argued (1988b) that changes in the technology of agriculture are only of cultural significance if and when the people are mentally and culturally prepared to accept them "That which we call the beginning of the Neolithicum must entail that Neolithicum becomes understood ("*medvetet*") for the people at the time through the import of a verbalised ideology: rules for agriculture, rules for artifacts, rules for cult,

rules for grave rituals – in short rules for a social system” (Malmer 1988b: 94). This is essentially similar to interpretations that were to be proposed later during the 1990s. In these and many other examples Malmer’s ability to think independently, to pursue other avenues of interpretation, and to sustain them by a precise methodology is impressive, and although he formally ascribes to the processual archaeological approach, he is essentially a unique individual with his own very specific beliefs and insights. His contribution has already been significant, and his spatial studies and his work on the theory of types will remain core contributions to archaeology.

#### MALMER AS A SCHOLAR AND A TEACHER

Among Malmer’s comments, obituaries, and reviews of other archaeologists, two give an interesting insight into Malmer himself. These are his papers about C. J. Thomsen (Malmer 1989) and C-A. Moberg (1988a). Malmer declared that Thomsen’s true contribution to archaeology was not the Three-Age system but Thomsen’s understanding that archaeology is basically a study of similarities, and that the material can be both organised and interpreted through its inherent properties. Malmer summarises his evaluation of Thomsen as: “The most remarkable thing about Thomsen, seems to me to be that he never *fantasises*, whether with or without inspiration from the literary tradition. Thomsen, who lacked academic exams, is quite simple the first archaeologist who worked scientifically” (Malmer 1989: 175 [emphasis in original, my translation]).

This and other similar comments suggest that Malmer acknowledges Thomsen as an intellectual ancestor, and it is striking how much overlap in research interest there is between the two. In his discussion of Moberg, Malmer generously and with warm feelings recognised very different qualities. He characterised Moberg as the type of scholar who will always dispute and discuss and can deal with no subject without searching for further problems (Malmer 1988a: 61), and he emphasised the far-reaching influence such scholars have on the milieu and mentality of the discipline. He associated Moberg with a search for truth – and this seems a truth beyond the limits of the discipline. Knowledge and truth of course, are not synonymous, and their distinction suggests different emphasis and may imply different epistemological foundations. Malmer’s own contribution has mainly been about knowledge, but the humanism of his work reveals that the importance of truth has also shaped his archaeology, and this duality gives it an interesting depth and complexity that often belies its apparent formality.

Malmer’s long career in professional archaeology has given him a broadly based understanding of the discipline, and to this he has added his own personal style. Characteristically, he has used this knowledge to encourage cooperation between the universities and the antiquarian authorities (Burenhult *et al.* 1987: 1), as a separation between theory and practical archaeology is alien to his archaeology.

Malmer is a very egalitarian person, and this has influenced both his leadership style and his way of interacting with others. Despite his considerable accomplishments, he is never imposing and treats both students and well known scholars as colleagues. The positive research environment that developed in Stockholm during the 1970s, is attributed to Malmer's seminars at the University (Burenhult *et al.* 1987: 1). His students and colleagues describe him as a stimulating and involving person, an open-minded humanist, curious about different approaches to archaeology and receptive to new ideas from related sciences but steadfast in his own beliefs about what archaeology is.

Swedish and Scandinavian archaeologists in general openly acknowledge Malmer's importance (e.g., Myhre 1991). Whether they agree or disagree with his methodological studies, they consider his approach a firm basis from which archaeological ideas must evolve. Malmer's works have had an important position and he is clearly acknowledged in all works concerned with the essence of what archaeology is.

The list of Malmer's published work is impressive, and he has been editor of several Swedish archaeological periodicals. The Festschrift *Theoretical Approaches to Artifacts, Settlement and Society* edited by Göran Burenhult *et al.* (1987) was produced in his honor upon his retirement from the chair at Stockholm University. The volume gives a potent impression of Malmer's wide contacts with the discipline and its people. It contains several papers that directly reflect Malmer's work and a bibliography of his published work from 1948 through 1987, compiled by his wife, the numismatist Brita Malmer. Retirement has, however, not meant inaction, and another bibliography from 1987 to the present would be an impressive list demonstrating Malmer's continuous active engagement with several aspects of the discipline and his versatile intellect, which has stimulated generations of Scandinavian students and scholars.

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# REFERENCES

## Primary

- Malmer, Mats P. 1957. Pleionbegreppets betydelse för studiet av förhistoriska innovations-förlopp. *Finska Fornminnesföreningens Tidskrift* 58. Pp.160-184.
- 1962. *Jungneolithische Studien*. Acta Archaeologica Lundensia, series altera no 2. Lund.
- 1963. *Metodproblem inom järnålderns Konsthistoria*. Acta Archaeologica Lundensia, series altera no 3. Lund. (with English summary)
- 1965. Die Hauptthesen der “Jungneolithischen Studien”. *Helinium V*. Pp.139-142.
- 1967. Symposium i Rom om matematik och datamaskiner i samhällsvetenskaperna. *Fornvännen*. Pp. 57-61.
- 1968. Problems of storage and communication of information in the study of bracteates, *Norwegian Archaeological Review* 1. Pp.36-44.
- 1969. *Gropkeramiksboplatsen Jonstorp RÅ* (Kungliga Vitterhets Historie och Antikvitets Akademien, Antikvariskt Arkiv 36, Stockholm.
- 1970. Comments on “On Artifact Analysis” *Norwegian Archaeological Review* 3. Pp.42-29.
- 1975a. The rock carvings at Nämforsen, Ångermanland, Sweden, as a problem of maritime adaption and circumpolar interrelations. In: W. Fitzhugh (Ed). *Prehistoric Maritime Adaptions of the Circumpolar Zone*. Pp.41-46, Chicago: Aldine.
- 1975b. *Stridsyxekulturen i Sverige och Norge*. Lund.
- 1977. Alvastra pålbyggnad. (Kungliga Vitterhets Historie och Antikvitets Akademien) *Årsbok*. Pp.204-212.
- 1981. *A chorological study of North European rock art*. (Kungliga Vitterhets Historie och Antikvitets Akademien, Antikvariskt Arkiv 32). Stockholm.
- 1984. Arkeologisk positivism. *Fornvännen* 79. Pp.271-274.
- 1986a. Aspects on Neolithic ritual sites. In: G. Steisland (Ed). *Words and Objects. Towards a Dialogue Between Archaeology and History of Religion*. Pp.86-88. Oslo.
- 1986b. Vad kan vetas om Stridsyxekulturens kronologiska och sociala förhållanden? Teoretiska betraktelser. In: C. Adamsen and K. Ebbesen (Eds). *Stridsøksetid i Sydsandinavien*. Arkæologiske Skrifter 1. København.
- 1988a. Carl-Axel Moberg, *Norwegian Archaeological Review*, Vol. 21, 2. Pp.61-64.
- 1988b. Konstanter och variabler i det förhistoriska samhället. *Fornvännen* 83. Pp.89-97.
- 1989. “Et mere levende billede af oldtiden”. In: *Mänsklighet genom Millennier. En vänbok till Åke Hyenstrand*. Pp.173-179. Stockholm.
- 1992. Weight systems in the Scandinavian Bronze Age. *Antiquity* 66. Pp.377-88.
- 1992. Rock art and writing. In. Arwidsson, G. et al. (Eds). *PACT 38. Sources and Resources. Studies in Honour of Birgit Arrhenius*. Pp.551-560. Court-Saint-Etienne: Council of Europe.
- 1993. On Theoretical Realism in Archaeology. *Current Swedish Archaeology*, Vol. 1. Pp.145-148.
- Malmer, Mats P. and T. Bartholin 1983. Pælebygning. *Skalk* 3. Pp.18-27.

## Secondary

- Burenhult, G., Carlsson, A. and Å. Hyenstrand 1987. *Theoretical approaches to artefacts, settlement and society: the archaeologist Mats P. Malmer*. BAR International Series 366. Oxford.
- Clarke, D.L. Archaeology: the loss of innocence. *Antiquity* XLVII. Pp.6-18.
- Klejn, L. 1982. *Archaeological Typology*. B.A.R. International Series 153. Oxford
- Myhre, B. 1991. Theory in Scandinavian archaeology since 1960: a view from Norway. In: Hodder, I. (Ed). *Archaeological Theory in Europe. The last 3 decades*. London.

