



Marko M. Marila FINNISH REACTIONS TO NEW ARCHAEOLOGY

Abstract

The article reviews reactions to the Anglo-American New Archaeology as expressed in publications by Finnish archaeologists since the early 1970s. These reactions, mainly provided by C.F. Meinander, are contextualised within the history of Finnish theoretical archaeology as well as contemporaneous Scandinavian, most importantly Swedish, archaeological theory. In the case of Meinander's ideas about the epistemology of archaeology, special reference is made to the writings of Mats Malmer, whose views as the progenitor of the Scandinavian variant of new archaeology greatly affected Meinander's philosophy of archaeology. As a programmatic set of epistemological principles, the New Archaeology was met with opposition in Finnish archaeology that has in some respect tended to be reluctant or slow in adopting or responding to new theoretical influences. In the article, the tardiness of Finnish theoretical archaeology is not seen as a shortcoming but rather as a deliberate choice that has allowed Finnish archaeologists to incorporate multiple theoretical and methodological approaches liberally, leading to a self-critical attitude toward the epistemology of archaeology.

Keywords: Ari Siiriäinen, C.F. Meinander, deduction, empiricism, epistemology of archaeology, history of archaeology, Mats P. Malmer, New Archaeology, positivism

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INTRODUCTION

Finnish archaeology is often characterised as atheoretical. This general view is partly result of the fact that, in much of Finnish archaeological literature, theoretical reflection has seldom been incorporated in the actual analysis of archaeological materials. Most often, theoretical considerations have been elaborated in further detail in conference talks published in obscure collections. Consequently, in historiography of Finnish archaeology, much of the knowledge of the theoretical position of individual scholars has hinged on disciplinary folklore, or the theoretical positions have had to be deciphered indirectly from a large body of works that do not discuss theoretical matters explicitly in connection

to any actual archaeological materials. As result, much of Finnish archaeology appears as theory-free cataloguing with little regard for theoretical reflection. When elaborating on the nature of the theoretical naivety of the discipline, Finnish archaeologists frequently use the words empiricism and positivism, in speech and in writing (Kokkonen 1993; Asplund 1999; Lavento 2005; Immonen & Taavitsainen 2011; Enqvist 2016). While the terms have a very specific meaning in archaeological theory, as well as in philosophy of science, they are often used liberally and synonymously as a way of highlighting the links between Finnish archaeology and culture-historical, or traditional, archaeology more generally.

In the history of archaeological theorising in general, the 1960s form an important turn-

ing point. The so-called New Archaeology, that emerged in North American and British archaeology at that time, was fashioned as an explicit critique of the empiricism of traditional archaeology. As a theoretical movement, New Archaeology targeted the vagueness and subjectivity of the comparative method of traditional archaeology, and instead promoted the development of conceptual clearness and the use of a clearly defined method of explanation fashioned along the principles of positivism. Positivism, for New Archaeology, denoted the use of a deductive method of inference by which archaeological knowledge can be derived from the archaeological materials. Therefore, the terms theory and method, in this article, are used to refer explicitly to epistemological reflection about the preferred method of inference in archaeology. Whenever the terms are used in another sense, their meaning is further elaborated.

As an explicitly epistemological program, the dissemination of New Archaeology marks a beginning of increasing methodological reflection in European and Scandinavian archaeology and, by that token, a heightened sense of theoretical awareness also in Finnish archaeology. Of Finnish archaeologists, professor C.F. Meinander was one of the first to provide explicit commentaries on New Archaeology as a theoretical program. In general, Meinander remained reserved of New Archaeology's epistemological objectives. On one hand, Meinander's reservations against New Archaeology were influenced by his training in the Finnish tradition that can be seen to have shared an aversion toward intense theoretical or scientific systematisation. Meinander's reactions to the philosophical systematicity of New Archaeology, and its centralisation of deductive logic in particular, were operationalised through an analysis of research on the peopling of Finland, a topic that was especially popular in early (pre-World War II) Finnish archaeology (Meinander 1977). While Meinander shared the nationalistic objectives of the research on the origins of the Finns, he remained reserved of the use of deductive logic toward that end.

On the other hand, by the time of New Archaeology's introduction in Finland in the late 1960s and the early 1970s, Meinander's thinking had already been greatly influenced by the methodological developments that had taken place

in Scandinavian archaeology earlier. Meinander was greatly affected by the so-called Scandinavian new archaeology which developed independently of the Anglo-American New Archaeology. The most important figure in this Scandinavian development was Meinander's Swedish colleague Mats Malmer who, starting in the early 1960s, promoted a degree of epistemological precision in archaeology similar to that endorsed by the Anglo-American new archaeologists (Malmer 1962). Most importantly, in his search for greater degrees of objectivity, Malmer adopted a somewhat positivist take on the philosophy of archaeology. As an alternative to the subjectivism of traditional archaeology, Malmer promoted the use of well-defined concepts and the use of clearly definable quantitative methods, a position he referred to as rationalism (Malmer 1963; 1967; 1984).

Like Malmer, Meinander argued that archaeology should strive for ever greater degrees of objectivity. Cautious of the political uses of the past, Meinander saw that the deductivism of New Archaeology was in fact closer to the political dogmatism of some German and Soviet archaeologists. In order to sidestep the occasional dogmatism of traditional archaeology, as well as the logical reductionism of New Archaeology, Meinander opted for a philosophy of archaeology that he referred to as positivism. However, Meinander never elaborated in writing what he meant with positivism. Malmer, on the other hand, was very explicit about the use of the term. For this reason, Malmer's theoretical writings, which span over a period of 40 years, provide valuable points of departure for assessing Meinander's philosophy of archaeology. Because Meinander's descriptions of his preferred method of inference do not follow those of positivism, and because similar inconsistencies plagued Malmer's philosophy of archaeology, the main thrust of the article is aimed toward the clarification of the epistemological position of these two archaeologists. It is argued that the positivism endorsed by both Malmer and Meinander does not conform to the principles of positivism, but is instead a form of empiricism that can best be characterised as *find positivism*.

In addition to reviewing Meinander's reactions to New Archaeology, the article takes a look at those provided by Meinander's stu-

dent Ari Siiriäinen. Siiriäinen's ideas about the methodology of archaeology followed those of Meinander, but were influenced to a greater degree by anthropology. This connection to anthropology reflects an intensifying need for Siiriäinen to further distance himself from the nationalist objectives of traditional archaeology. Most importantly, Siiriäinen's theoretical reflections on the epistemology of archaeology highlight the central argument of this article; that the seemingly atheoretical character of Finnish archaeology has actually been a deliberate theoretical strategy adopted by individual scholars in order to avoid the possible pitfalls of the use of overarching generalisations in the methodology of archaeology.

NEW ARCHAEOLOGY

New Archaeology was a set of theoretical and methodological objectives that advanced from Anglo-American archaeology to the rest of European and Scandinavian archaeology in varying degrees during the latter part of the 20th century, mainly through the works of Lewis Binford (1968) and David Clarke (1968). Although the epistemological motivations behind the formation of the Anglo-American New Archaeology as a theoretical program can be traced to the 1940s, possibly as far back as the 1930s (e.g. Taylor 1948; Willey & Phillips 1958; Caldwell 1959; cf. Trigger 1989), the aforementioned publications by Binford and Clarke mark the beginning of New Archaeology's worldwide dissemination (Shennan 1989). In general, New Archaeology advanced as a reaction to the so-called descriptive traditional archaeology, and only later became more widely referred to as processual archaeology. Because this article focuses on disciplinary reactions, the term New Archaeology is adopted explicitly.

The central objective of New Archaeology as an epistemological program was to render archaeology explicitly scientific. To this end, new archaeologists saw archaeological theory-building as the construction of law-like explanations (e.g. evolutionary or ecological) for rather than particularistic descriptions of cultural change. The explicit hope was to increase objectivity in terms of making the actual inferential process more transparent, but also to render the disci-

pline more appealing to large research funding bodies that, partly in response to the ongoing space race, tended to favour the natural sciences (Zubrow 1980; 2015: 170–1). In archaeology, the goals of systematising the epistemology of archaeology were furthered by incorporating quantitative methods (*sensu* Clarke) as part of archaeology's core methodology, but more importantly by adopting the hypothetico-deductive method of hypothesis testing (*sensu* Binford) as a guiding philosophy (Gibbon 1989).

The hypothetico-deductive method found its way into archaeology from early 20th century logical positivist/empiricist philosophy of science. In logical positivism/empiricism, scientific knowledge was conceptualised as a system of testable, verifiable, or falsifiable statements. In order for a statement to be scientific it had to be formulated in such a fashion that it could be subjected to testing against future experiences. If a statement could not be subjected to such testing, it was considered false, or meaningless at best. Practically, this meant that metaphysical, or speculative, statements, however fruitful they may be, do not form part of the theoretical system unless they 'represent a world of possible *experience*' (Popper 2002[1959]: 17, emphasis in original). The objective of logical positivism/empiricism, then, was to gradually eliminate from science those statements (including inductive generalisations) that are untestable or unfalsifiable against possible observations or new experiences (cf. Marila 2018).

In archaeology, the deductive method was to provide a clear counterpoint to the inductive method of the empiricist European tradition (e.g. Montelius 1884; Ailio 1923). Unlike New Archaeology's theory-building, the inductive method was based on the idea that, by collecting archaeological evidence systematically, a general insight into the past would eventually emerge. In other words, the collecting should commence without any pre-existing theory. Such dustbowl empiricism was not without its problems. The obvious deficiency concerned completeness: when and how would one be able to tell that the collection is complete? In the most likely case that this would not be possible, the sample, fragmented and distorted to begin with, would not, provided the inductive schema was followed, grant generalising inferences because future ob-

servations might contradict it. The problem of induction and the ensuing failure in establishing any valid logical link between observation of archaeological facts on the one hand and theories pertaining to their larger context on the other led some to deem understanding any past meanings a ‘hopeless task’, and adopt a radical form of idealist skepticism instead (e.g. M.A. Smith 1955). Others opted for a subjectivist conceptualisation of the process of archaeological knowledge production (Childe 1950: 2; Thompson 1956; 1958; Kivikoski 1961: 8; Johansen 1969; 1974).

For New Archaeology, then, the hypothetico-deductive method meant a way around the problem of induction (e.g. Binford 1968). Because, for New Archaeology, the archaeological record was an inherently contemporary phenomenon, it was considered impossible to observe past events directly from the material, but instead only indirectly by recourse to an explicit inferential method based on the existence of cultural laws analogous to their natural counterparts. The objective was to replace the inductive faith with the deductive method of testing possible explanations with the help of covering laws. In other words, archaeology was to transcend the subjectivity of the inductive hunch by subjecting those hunches to a rigorous procedure of testing. In principle, deductive testing was supposed to follow a particular schema (modified after Popper 2002[1959]: 9–10):

1. A testable hypothesis, a law candidate, is formulated that can possibly explain the observed archaeological data (e.g. Neolithic ceramics production is matrilineal).
2. From this hypothesis, given that it is true, test implications (predictions) regarding archaeological observations under similar conditions are deduced (e.g. correspondence between decoration motives and matrilineal DNA should be evident).
3. If the test implications cannot be observed, the initial hypothesis is falsified.
4. If the predicted observations are made, the initial hypothesis is corroborated, and can be considered a law candidate.

This schema became the leading principle behind New Archaeology’s epistemic optimism in one form or another (Fritz & Plog 1970;

P.J. Watson et al. 1971; 1974; Hill 1972; LeBlanc 1974; R.A. Watson 1976; Read & LeBlanc 1978). Although a host of deductive approaches from the Hempelian covering law model (e.g. Fritz & Plog 1970) to Popperian falsificationism (e.g. Randsborg 1982; cf. Klejn 2017) were adopted in archaeology, their applicability was quickly questioned. One of the obvious shortcomings of the deductive method was the circularity between assumed reliance on and the objective of establishing the laws. Binford’s (1977; 1981; Binford & Bertram 1977) vaguely formulated answer to this problem was the construction of mediating mid-level theories which, in his treatment, were seen as synonymous for the process of archaeological inference (Raab & Goodyear 1984 with references). For Binford, middle-range theories were chiefly based on observed formation processes. A similar approach was adopted by Michael Schiffer (1972; 1976) who based his behavioral archaeology on the existence of various natural and cultural transformation processes, mainly established via ethnological observation. Nevertheless, Schiffer saw that the explanation and prediction of cultural change is only possible because formation processes are law-like.

The biggest problem of the deductive method, however, was that the assumed overall form of the inferential process was highly idealised and abstract. Despite the straightforward formulation of the deductive method in principle and the convincing rhetorics that followed (especially Read & LeBlanc 1978; cf. Clarke 1970), new archaeologists never succeeded in demonstrating how archaeological inference actually follows the deductive schema (Meinander 1977: 78). Because deduction is basically a logical form that does not leave room for any ambiguity in the archaeological materials, both the process of drawing predictions, and the process of falsification (or verification) of a hypothesis by data cannot be said to proceed by deductive necessity. In other words, cultural laws, given that they are historical processes with a host of demonstrable exceptions to the rule, do not correspond with how laws are conceptualised within the deductive schema. This leads to a problem regarding the falsification or the verification of a hypothesis. Many archaeological hypotheses, such as the hypothesis of ceramics production as

matrilineal, cannot be categorically identified as nonscientific only because they cannot be falsified (Kokkonen 1982). The validity of many hypotheses may be hard or impossible to establish, but they may still be extremely useful in rendering archaeological phenomena intelligible. Similarly, a hypothesis cannot be thought to be corroborated only because particular test-implications are observed because a number of causes may have similar effects. Instead archaeologists actually entertain a multitude of hypotheses that cannot be verified or falsified.

These contradictions, among others, within the deductive method led many to argue that archaeological explanation relies instead mainly on different forms of inductive and abductive reasoning, such as inference by analogy or inference to the best explanation (e.g. Johnson 1972; Leach 1973; Levin 1973; Morgan 1973; 1974; Plog 1974; Salmon 1975; 1976; B.D. Smith 1977; Dommasnes 1987; Kelley & Hanen 1988; Siiriäinen 1988; Hanen & Kelley 1989; Wylie 1989; 2002; Shelley 1996; Strinnholm 1998; Muurimäki 2000; Binford 2001; Klejn 2001; Fogelin 2007; Marila 2013; 2017; Chapman & Wylie 2016). This criticism effectively put an end to the deductivist objectives of New Archaeology by the end of the 1970s, which resulted in the marginalisation of the epistemology of archaeology for the decades to come.

FINNISH (AND SOME SWEDISH) REACTIONS TO NEW ARCHAEOLOGY

New Archaeology in the European and Scandinavian context

Discussions over the minutiae of the deductive method were almost exclusive to the North American continent, conducted mainly on the pages of *American Antiquity* by a rather small theoretical elite with additional degrees in philosophy, while a more ambiguous view of the deductive method was shared by the majority of new archaeologists, both within and outside the American tradition (Gibbon 1989: 94). In Europe, the objectives of New Archaeology were incorporated against a strong tradition in comparative culture-historical archaeology with its own advancements in ethnographic as well as scientific methods. The European tradition

favoured wide-ranging intuitive knowledge of archaeological materials, and the narrow model of hypothesis-testing would have seemed superficial and dogmatic to many (Audouze & Leroi-Gourhan 1981; Kristiansen 1984; Sørensen 1984; Hodder 1991; Fernández 2016; Ribeiro 2016).

Similarly, the view that New Archaeology filled a theoretical gap that had formed in European and Scandinavian archaeology as result of the Second World War is misguided (Bertemes 2011; Hofmann & Stockhammer 2017). Although the New Archaeology entailed a general theoretical attitude in matters of inference in archaeology, increasing reliance on statistical and natural scientific methods, as well as interest in global instead of national questions of ethnicity, similar development had taken place in Scandinavian archaeology in the course of the 1950s independently of Anglo-American influence and regardless of the insularity that resulted from the Second World War (cf. Myhre 1991: 162).

One defining difference between the Scandinavian and the Anglo-American traditions was that, while the Anglo-American movement, especially the American branch, was motivated by philosophy of science, logical positivism/empiricism in particular, the Scandinavian variant was based on objectives of conceptual clearness and methodological precision (Malmer 1962; 1993: 146; Meinander 1973a: 11). In the Scandinavian context, then, New Archaeology should be taken to imply a general interest in archaeological methodology in terms of conceptual clearness and objectivity rather than an unambiguously formulated and explicitly applicable logic of explanation.

Therefore, when assessing these peripheral reactions to New Archaeology, it should be kept in mind that Finnish archaeology developed in close contact with the rest of Scandinavian, mostly Danish and Swedish, archaeology, and that the objectives of the early Scandinavian new archaeology were recognised and shared in Finland to some extent, only not discussed as explicitly as in the other Scandinavian countries.

Due to these historical reasons, Scandinavian reactions to New Archaeology can be characterised as vague, gradual, and partial, rather than as explicit rejection or acceptance (cf. Moberg

1981). Furthermore, especially in the case of Finnish archaeology, reactions to New Archaeology should also be evaluated within a political frame of reference and in light of a strong history of archaeology's nationalistic objectives (Kokkonen 1984a: 163). Therefore, before discussing the reactions to New Archaeology, a brief exposition of the development of earlier Finnish archaeological theory is in place.

The Tallgrenian heritage

One of the reasons behind the development of and fascination with New Archaeology into a theoretical program oriented toward more explicit formulations of archaeology's epistemology according to the positivist ideals of objectivity was the way in which political uses of the past in Europe escalated during the 20th century (Kristiansen 1981: 37; 1989: 211–2; Cassel 2000: 41; Chapman & Wylie 2016). This development has its roots in 19th century European enlightenment and nationalism, which also greatly affected Scandinavian archaeology, especially in Denmark and Finland (Kristiansen 1981; Sørensen 1996; Salminen 2006; 2007; 2014; 2016). The leading forces behind the development of Finnish archaeology in the scientific sense from the 1860s until the Second World War can therefore be seen primarily as nationalistic and educational (e.g. Aspelin 1870; 1875; 1877; 1910; Appelgren 1895; Europaeus 1910; Tallgren 1918; Ailio 1923; cf. Nordman 1959; Meinander 1968; Muurimäki 1981; Kokkonen 1984b; 1993; Fewster 1999; 2006; 2008; Nykänen 1999; Salminen 1993; 1998; 2003a; 2003b; 2006; 2007; 2009; 2012; 2013; Immonen & Taavitsainen 2011; Núñez 2011).

Oscillating between Danish ethnohistory (Müller 1884; 1897) and Swedish evolutionary typology (Hildebrand 1873; Montelius 1884), early Finnish archaeology adopted elements from both traditions (Nordman 1968; Gräslund 1987; Baudou 2005; Petersson 2005; Salminen 2006; 2012; 2013). In actual research, these approaches were often combined somewhat effortlessly, but their shortcomings were also subjected to critique. In Finland, this critique was mainly put forward by C.A. Nordman (1892–1972) and A.M. Tallgren (1885–1945), both intimately knowledgeable in both the Swedish and the Dan-

ish tradition. Through his position at the National Museum of Denmark in Copenhagen between 1912 and 1919, Nordman was an insider to the methodological discussion in Scandinavian archaeology. Although Nordman has not been considered a theoretician, for a long time his 1915 paper *Den förhistoriska arkeologins metod* (The method of prehistoric archaeology) was the only Finnish contribution solely devoted to theorising (Nordman 1968: 58; Meinander 1991: 31).

In his paper, Nordman (1915) sets out to define the method of an archaeology that seeks beyond mere description of archaeological finds. In regard to the then normalised conception of the methodology of archaeology as consisting of the Kossinnean identification between archaeological culture and ethnic group, as well as the use of evolutionary typology toward that end, Nordman remains critical of both (cf. Muurimäki 1978). Instead, Nordman goes on to highlight the role of the individual as an important aspect of archaeological research. Nordman's inclination to see artefacts as expressions of the lives of past individuals reflects Müller's idea of free will rather than Montelius' view of human action as bound to the laws of evolution (Nordman 1915: 176; see Müller 1884: 188; Montelius 1899: 268).

For a long time, Tallgren was the only internationally widely recognised Finnish archaeologist, mainly because of his theoretical article published in *Antiquity* in 1937 (originally published in Finnish as Tallgren 1934). The topics addressed by Tallgren in his paper follow those brought up by Nordman 20 years earlier. Like Nordman, Tallgren gained his archaeological training partly in Sweden, where he studied under Montelius (Nordman 1968: 60; Kokkonen 1985: 5). Although influenced by Montelius, Tallgren never adopted the natural scientific ethos of Montelius' typological approach, and was both philosophically and methodologically closer to Müller (Nordman 1968: 60–1). Rejecting both formal typology and Kossinna's settlement archaeology, Tallgren (1937: 159) favoured a social approach to culture: 'I regard culture as a human product and not as a natural product. It is a social product and it should be studied as such.'

The main focus in Tallgren's article is on archaeology's reliance on evolutionary ideas

of culture change and the ensuing tendency to treat archaeology as an exact science. Tallgren (1934: 201–4) writes that, although archaeology's development into a solid science since the late 1800s is due to its natural scientific methodology, more precisely a methodology based on the theory of evolution, such systematising entails a methodological *cul-de-sac*; little could be gained by it (Tallgren 1934; cf. Salminen 2003a: 150). In Tallgren's view, archaeology is too dependent on the construction of systematic formal chronologies and has lost sight of the past living human.

Archaeology should cease to be a 'natural science', founded upon the study of objects and forms, and should become an economic-social, historical science. As a starting-point one should take the elucidation of the economic system, of the economic and social *basis*, of which the objects are manifestations. To the extent to which the student relies upon material culture, the essential material will consist of such objects as play a decisive part in the genesis of the culture stage; not ornaments but the instruments of production – implements, *necessary* things; in regard to such it is their *function* which is decisive, not their *form* or analogies. (Tallgren 1937: 158)

Because Tallgren took the artefacts' function to be more important than their form, or analogies thereof, he has on occasion been labelled as a functionalist. On a similar notion, his rejection of ethnos as the reason behind cultural change in favour of what almost seems like a form of systems theory has led some to interpret Tallgren's theoretical views as precursory to those of New Archaeology or even post-processualism (Binford 1968: 6–7; cf. Immonen & Taavitsainen 2011: 148). Eero Muurimäki (2000: 162), for example, has characterised Tallgren's materialistic functionalism as socio-economical. However, keeping in mind Tallgren's denouncement of cultural evolution and his aversion toward systematisation, a far more fruitful reading is to see Tallgren's approach as an understanding of the multitude of causes behind cultural change rather than pure functionalism (cf. Salminen 2013):

Archaeology is now beginning to take much more interest in the motley and many-sided aspects of life. The whole mechanism concealed behind phenomena is a complex; the men of ancient times were not just 'scientific specimens'; a cultural region by no means always coincides with that of a single people, nor is its frontier a national frontier. (Tallgren 1937: 159)

In addition to the dangers inherent to the straightforward, top-down, and systematising use of natural sciences and typologies, Tallgren expressed worries of the ways in which archaeology was used to advance nationalistic political agendas in Germany and the Soviet Union (Tallgren 1931: 12; 1934; 1936a; 1939; cf. Kokkonen 1985; Fewster 1999; Salminen 2003a: 15; 2011; 2013; Immonen & Taavitsainen 2011: 148). The accusations presented in the theory article – practically the French version (Tallgren 1936b) – were followed by heated discussions (summed in Kokkonen 1985). Tallgren's accusations were toned down in the 1937 English version, but the argument remained the same. By renouncing political authority as well as theological and racial dogmatism, whether in reference to Aristotle or the Bible, Tallgren hoped to show that conceptual openness is the driving force behind good science (Tallgren 1934: 210).

The views put forth in Tallgren's visionary article represent the pinnacle of Finnish theoretical archaeology before the Second World War. His criticism of the nationalistic uses of the past, as well as the straightforward use of formal analogy in correlating archaeological cultures with ethnic groups, can be seen to reflect dissatisfaction with the nationalistic agenda of early Finnish archaeology as founded upon the writings of J.R. Aspelin toward the end of the 19th century. However, in his intuitive and generalising approach to archaeology as well as his fascination with the question of the roots of the Finnish people, Tallgren can be seen as the final heir of Aspelianism (Kokkonen 1985; Salminen 1993; 2007).

As the extensive network of international connections developed by Finnish archaeologists, mostly by Tallgren himself, were severed due to the war at the end of the 1930s, Finnish archaeology went into a type of disciplinary iso-

lation (Salminen 2014). The Second World War resulted in a totally renewed experience of history and time in general (Olivier 2011). As result, Finnish archaeology, it is argued by many, came to favour a type of theory-free naive empiricism over the synthesising romanticism of pre-war research, a situation that some say lasted well into the 1990s (Kokkonen 1984c; 1993; Rankama 1984; Siiriäinen 1990; Asplund 1999; Herva 1999; Lavento 2005; Fewster 2006: 311–3; 2008: 104; Immonen & Taavitsainen 2011; Enqvist 2016: 85–119). By reviewing Finnish reactions to New Archaeology as an explicitly theoretical program, the remaining part of the article will aim to show that this view is only partly correct.

C.F. Meinander and the new archaeologies

As an influential figure in Finnish archaeology in general, as well as the professor of archaeology at the university of Helsinki, Tallgren's attitudes were no doubt also passed on to his student Carl Fredrik Meinander. Meinander (1916–2004), professor of archaeology at the University of Helsinki between 1971–82, can be regarded as the main figure in introducing New Archaeology in Finland. While relatively unimpressed by the deductivism of New Archaeology, Meinander was particularly fascinated with the use of quantitative methods in archaeology, and was quite taken by David Clarke's (1968) *Analytical Archaeology* (Edgren 2013: 180). For example, Meinander adopted Clarke's definition of culture as 'the most attractive' (Meinander 1981: 101–2). In terms of the use of quantitative and statistical methods in archaeology, the works of Swedish archaeologists Carl-Axel Moberg, Bertil Almgren and, most importantly, the father of Scandinavian new archaeology Mats P. Malmer were of particular inspiration to Meinander (Edgren 2013: 4, 174, 180). For instance, Meinander served as Malmer's opponent at the defence of his dissertation in 1962 (Welinder 2016: 17). Although Meinander was critical of Malmer's work (Meinander & Malmer 1965; Edgren 2013: 171–4), he was nevertheless greatly influenced by its goals of objectivism. Because Malmer can be seen as the progenitor of the Scandinavian variant of new archaeology,

Meinander's attitude toward the ideals of this tradition deserve special attention. Part of this chapter will therefore review the key points of Malmer's philosophy of archaeology, and aim to connect those with the less explicitly expressed views of Meinander.

Inspired by the type of archaeology endorsed by Malmer, Meinander was one of the first Finnish archaeologists to explore the possibilities of quantitative and computational methods, and experimented with the statistical analysis of archaeological artefacts (Edgren 2013: 174–5). Meinander's vision of the future use of big data and computer-aided methods in the service of a scientific archaeology were perhaps most vividly described in his *Rannsaking med arkeologin* (Research with archaeology):

The future vision looks like this. A newly found stone axe arrives in a museum in Peräseinäjoki. The museum manager, usually a school teacher, immediately notices specific details about the find. He then dials a number on his telephone – that connects him with the European antiquities central in Frankfurt am Main. Then, on his number disc, the manager feeds in data about the new find. While the central registers the data, they respond with a find number that is given to that axe. On request, the central also gives information regarding other similar stone axes – the response is delivered via a teleprinter in the school teacher's office – printed in the desired language, also, for example, in Finnish. (Meinander 1968: 66, author's translation¹)

In practical terms, Meinander was never able to systematically apply the methods in his own research, possibly due to lack of sufficient computational resources, and none of the conducted experiments reached publication (Edgren 2013: 179). Nevertheless, in order to promote the use of quantitative methods in archaeology, Meinander was the first to introduce radiocarbon dating to his Finnish colleagues and the first to apply the method on Finnish archaeological materials (Meinander 1951; 1971; cf. Edgren 2013: 168).

It has been noted that, while the scientific atmosphere in Finland at and after the time of New Archaeology's introduction might have favoured more theoretical reflection, Meinander

never integrated its explicitly theoretical style in his own research (Edgren 2004). In some ways, Meinander can be seen as the last remaining link between pre- and post-war Finnish archaeology, and the Tallgrenian heritage remains evident in his approach to questions concerning the roots of the Finns, for example (Edgren 2004: 3). Derek Fewster, however, sees Meinander as a ‘non-ideological’ archaeologist, a trait through which Meinander wanted to distance himself from the politically charged objectives of early 20th century nationalistic archaeology (Fewster 2008: 105–6).

In this respect, it should be kept in mind that, as a ‘non-ideological’ archaeologist, Meinander was also influenced by the natural scientific tradition of Finnish archaeology. The use of osteological, metallurgical and petrochemical analyses, as well as the use of land uplift in constructing ceramics chronologies, for example, were developed very early by such Finnish archaeologists as Hjalmar Appelgren-Kivalo (1910), Julius Ailio (Ax 1896; Ailio 1913), and Aarne Äyräpää (Europaeus 1923). While Meinander can be seen to continue the tradition in which archaeology is seen first and foremost as a historical discipline, his multidisciplinary approach is a variation to the theme in which archaeology is seen as a balancing act between natural sciences and humanities.

The origin of the Finns as an epistemological problem – Meinander against deductivism

In his theoretical writings, Meinander showed special interest in the philosophy of science behind New Archaeology, and expressed his ideas about the epistemology of archaeology by using an explicitly philosophical language, a style that was radically new in Finnish archaeology. In addition to the few Anglo-American proponents of New Archaeology that Meinander refers to in his theoretical texts (Meinander 1973a: 9, 11, 12; 1977: 76, 78), namely Lewis Binford, David Clarke, Colin Renfrew, and Fred Plog, Meinander was introduced to the sources and writing style of analytical philosophy through his friendship with Finnish philosopher Georg Henrik von Wright. In his 1970s writings on the epistemology of archaeology, Meinander adopts many

concepts, such as the term *subsumption-theory* as synonymous for covering-law theory, directly from von Wright (von Wright 1971).

Although New Archaeology formed a key inspirational theme in C.F. Meinander’s theoretical writings, he remained highly reserved as to its epistemological underpinnings. In explaining the reasons for his reservations toward New Archaeology, Meinander writes that archaeologists are content with the current situation because they socialise mainly with historians and geologists, ‘and other sensible people’, who do not pose ‘scientific questions’, but are more interested in the way things really were (Meinander 1973a: 11). With scientific questions, Meinander was clearly referring to methodological questions posed by philosophers of science, and he was especially worried about New Archaeology’s deductivism and the use of covering laws in explaining cultural change. For Meinander, deductivism meant the interpretation of the archaeological material from a predetermined set of axioms, rather than letting the materials speak for themselves. Meinander expressed these worries in two thematically related articles in the 1970s, both based on conference papers (Meinander 1973a; 1977). Following what Nordman (1915) and Tallgren (1934) had written earlier about the dangers of a systematic approach in archaeology, Meinander remains skeptical as to the top-down use of nomothetic frameworks, such as linguistic models or evolutionary theories, like Montelian typology, and even Thomsen’s three-age system, in explaining cultural change.

In a seminar held in 1973, Meinander (1973a) presented his explicit views of the methodology of archaeological inquiry. Meinander is skeptical about archaeology’s methodological objectives so far as they focus on the methodology of proof. He rejects the view that archaeology should strive for law-like explanations of the past. For him, archaeology and history, as well as geology, palaeontology, and even cosmology, do not seek universal explanations, laws, or predictions. Instead, Meinander sees archaeology as a historical discipline that strives for an objective description of what actually or essentially happened (*wie es eigentlich gewesen*) in a particular area in a particular time.

Following the well-established characterisation, Meinander (1973a: 12) sees the distinction

between induction and deduction as one defining point of contrast between what he refers to as history oriented traditional archaeology and scientific New Archaeology. New Archaeology seeks to deductively establish universal laws of cultural behaviour, whereas traditional European archaeology seeks to inductively enumerate local phenomena *wie es eigentlich gewesen*. However, Meinander also saw deduction as a point of connection between New Archaeology and certain strands of traditional archaeology. He points out that, whereas New Archaeology claims to have adopted a deductive methodology as means to establishing cultural laws, European archaeology has always been exposed to Marxist philosophy, including its deductive point of departure in matters of cultural theory (e.g. Klejn 1991; Guidi 2016; cf. Bulkin et al. 1981). Meinander contrasts Western and Eastern or European and Soviet archaeologies in terms of their conception of ethnos. Whereas Western archaeology understood ethnos as a historical lineation of a lingual or national entity, in early 20th century Soviet archaeology ethnos meant something ideal and unchanging. This leads Meinander to state that Marxist archaeology, due to its politically charged take on matters of ethnicity, is basically deductive (Meinander 1973a: 14):

Marxist deductive thinking is a characteristic that connects Russian and American archaeologies, although their theses regarding society differ substantially. Compared to these, Western European research is agnostic. (Meinander 1973a: 16, author's translation)

European research is more rational – the Western archaeologist rejects everything that smells of philosophy: the Russians on the other hand love it. (Meinander 1973a: 14, author's translation²)

Due to these historical reasons, Meinander evidently had a hard time in seeing anything of novel value in New Archaeology's deductivism. In fact, Meinander (1977: 76) maintains that new archaeologists, especially those of the Binford school, say they do a specific type of archaeology, while what they actually do is similar to traditional European archaeology. In Meinander's

view, new archaeologists have forgotten the history of archaeology insofar as publications in French or German go: 'The prophets of New Archaeology are totally oblivious of Scandinavian archaeology' (Edgren 2013: 182, author's translation). Deductivism, for Meinander, then, evoked ideas of the nationalistic agenda and were closer to, for example, Aspelin's dogmatic views of the roots of the Finns than an explicitly scientific or methodologically neutral archaeology (Meinander 1973b: 4).

One particular theme that Meinander explored deductivism through, then, are theories on the origins of the Finns, a topic he had explored in light of linguistic models and archaeological materials since the 1950s (Meinander 1954; 1959; 1967; 1969). Meinander's talk at the meeting of the Finnish Academy of Science and Letters in early 1976 (Meinander 1977) addressed the topic explicitly as an epistemological problem. His main interest lies in defining whether the highly generalising migration theories are result of inductive or deductive inference, or, in other words, whether they are based directly on archaeological materials or used as predetermined points of departure (i.e. covering laws) to explain the materials in question.

In his talk, Meinander (1977) discusses Alfred Hackman's (1905) migration theory. In Meinander's view, Hackman's theory according to which the Finns migrated from Estonia in the early centuries AD is not based on archaeological materials but instead derived deductively with recourse to a linguistic theory. While Kivikoski (1958) has stated that Hackman's hypothesis is based on the existence of similar types of tarand graves in Estonia and Finland, according to Meinander, this grave type was not known in Hackman's time in either country. Meinander's statement is only partly correct. In Finland, the first possible tarand grave, the Nakkila Penttala site, was excavated by Hackman between 1910 and 1912, and the first unambiguous tarand grave of Finland was excavated in the early 1930s (Cleve 1932; 1937). In Estonia, however, tarand graves had been found and dated to the 3rd century AD already in the 1870s (Lang 2006). More convincing, however, is Meinander's argument that in 1905 only one Finnish artefact had been dated to 0–200 AD, and, based on this single artefact, Hackman devised the theory of

Baltic origin that took place in the fourth century (300 AD). This is why Meinander (1973a: 15; 1977: 80) deems Hackman's hypothesis as deductive: explanation of extremely scarce archaeological evidence with similarity between language groups.

Similar view of Hackman's reasoning is held by Kokkonen (1978) and Núñez (1984: 182–3; 2011) who argue that Hackman's argumentation rested mainly on Vilhelm Thomsen's linguistic theories. Immonen and Taavitsainen (2011: 146) on the other hand have argued that, in contrast to previous studies, Hackman's migration theory was based purely on archaeological evidence, and that philological argumentation played only a secondary part in this theory. In any case, by 1912 the number of Early Iron Age finds had increased enough to warrant Hackman a revised presentation (Hackman 1912). Here Hackman (1912: 65) admits that the eastern Baltic influence that he sees in the archaeological record, most importantly in the newly-found Penttala materials, can, depending on the researcher's preferred position, as easily be interpreted as Germanic, reflecting settlement continuation from the Bronze Age. At least in this revised exposition, Hackman combined linguistic and archaeological evidence in forming a generalisation.

In Meinander's view (1973a: 13), Hackman nevertheless used a covering law in explaining the existence of an artefact type of Estonian origin in Finland. Meinander sees the sharp Aspelinian and Kossinnea identification between cultural provinces and lingual groups as the defining framework behind Hackman's reasoning. The fact that Kossinna, together with other archaeologists with philological background, such as M.A. Castrén and N.Y. Marr, had used a straightforward identification of archaeological material based on linguistic theories most likely played a role in Meinander's skepticism toward the use of linguistic models as evidence or auxiliary hypotheses (see Meinander 1967; 1981: 107). The Tallgrenian aversion toward overarching generalisations (Tallgren 1934: 204–5) is evident in Meinander's reluctance to adopt the cultural law thinking of New Archaeology, but Meinander's approach can at least partly also be explained by his association of deductivism with Soviet archaeology which, to some extent, was

based on Marr's Japhetic theory (Bulkin et al. 1981; Kokkonen 1985).

Meinander (1977) was similarly critical of Aspelin's (1885) theory according to which the Finns migrated to Finland from the Baltic in the 8th century, prior to which the archaeological material from the area reflects only Germanic or Scandinavian influences. Meinander claims that Aspelin's theory was not based on the observation of similarities between the archaeological materials in Finland and the Baltic (inductive inference), but instead on Aspelin's nationalistically inspired *a priori* acceptance of the general view that the Finns are not descendants of Germanic or Scandinavian tribes, and therefore must have originated from the east (deductive inference). Eero Muurimäki (1981: 96–7), however, has noted that the logical form of Aspelin's reasoning does not conform to simple induction or deduction, but is a more complicated matter of combining relevant data across multiple evidential domains intuitively. Interestingly, then, Muurimäki (1996: 21) argues that Aspelin's migration theory was based on the archaeological material available at the time and, furthermore, that his combining of historical and linguistic models with archaeological material was not only in accordance with the requirements set by the scientific community of his time, but a groundbreaking insight to begin with (see also Salminen 2002; 2007; Baudou 2004; 2005; Núñez 2011). Meinander (1977: 81–2) also acknowledged this, and his goal seems to have been rather to highlight the theory-ladenness of seemingly objective observations (Meinander 1977: 78–9). Ironically, then, in discussing the theory-ladenness of observations, Meinander refers to Arne B. Johansen's (1969; 1974) explicit deductivism as a fitting model for archaeological interpretation.

In his preferred model, Meinander (1969) has assumed a continuing population of the area since the Early Neolithic. Despite his insistence (Meinander 1977: 82) that the formation of the earlier migration theories does not conform to it, Meinander argues that his hypothesis is the result of *dialectics* between archaeological observations and philological theories. Meinander's division between induction and deduction is based on the idea that archaeological finds (observations) form the material basis of inductive

inference, while the sociological or linguistic theories that are used to group the facts are covering laws without justifiable material basis. It is noteworthy that Meinander's dialectic model does not conform to either the inductive or the deductive schema, and that the lack of conceptual terminology is the biggest reason Meinander struggled to define the logical form of his inferential process. Similar reasons can be identified behind New Archaeology's troubles in defining the form of archaeological inference as either inductive or deductive. The inductive and deductive schema simply do not take the nature of archaeological evidence and the form of the ensuing logic into account (Dommasnes 1987; R.A. Watson 1991; Strinnholm 1998; Norton 2003; Marila 2017).

Besides these strictly methodological considerations, political, and social reasons led Meinander to adopt the model of continuous population as an alternative to migration theories, just like his predecessors had done when supporting the opposite view (cf. Kelley & Hanen 1988: 279–86). For Meinander, there simply was no need for the validation of the Finnish identity by tracing the ancestry of the people to a specific point of origin. Furthermore, methodological advances and new archaeological finds such as pollen data led to a situation where continuous inhabitation came to be the better explanation. The interplay between existing theories and accumulating finds is what Meinander (1973a; 1977) means when he refers to his model as result of a dialectics: new discoveries will eventually lead to a situation in which the existing model has to be revised (Meinander 1977: 82).

The quest for objectivity – Malmer and Meinander on positivism

Meinander's pessimism toward the deductivism of New Archaeology and the use of borrowed linguistic theories in service of archaeology begs a further question. In order to sidestep the troubles that deductivism leads to, Meinander wanted to highlight the importance of objectivity in archaeology. In his attempts to attain objectivity, Meinander turned to positivism (Edgren 2013: 180). According to oral tradition in Finnish archaeology, Meinander would often be heard to explicitly proclaim 'I am a positivist, what is

the shame in that!?' Meinander, however, never elaborated in writing the nature of his positivism. Because, in epistemological terms, the objectivism of New Archaeology hinged on the positivism of logical empiricism, and because Meinander explicitly rejected the positivism of Americanist New Archaeology, it is worth exploring how the empiricism of Meinander's traditional view of archaeology is compatible with his self-proclaimed positivism and his quest for objectivity.

If we follow the definition given by Meinander's friend von Wright (1971: 9) of positivism as 'a philosophy advocating methodological monism, mathematical ideals of perfection, and a subsumption-theoretic view of scientific explanation', it is clear that Meinander cannot be called a positivist. Firstly, through his critique of deductivism, Meinander explicitly rejects the subsumption of individual cases under a covering law, instead opting for the dialectic model for the formation of archaeological knowledge. By the same tactics, Meinander also rejects the idea that the epistemology of archaeology could be reduced to mathematics. Although Meinander experimented with statistical methods himself, he had reservations about the conversion of archaeological materials into numerical data, stating that it only has the tendency to hide subjectivity under rows of numbers (Meinander & Malmer 1965: 77; Meinander 1973a: 10). Secondly, Meinander can hardly be seen to have promoted any kind of methodological monism. While deeply sympathetic with the use of natural sciences in the service of the discipline, Meinander saw archaeology firstly as a historical discipline. Technical advances may have changed the practice of archaeology, but they will not change the nature of archaeology as a historical science, Meinander argues (1973a: 11). This view is not in line with positivism's view of the natural sciences as closest to the proper conception of science in their methodology.

One thing, however, that connects Meinander to the positivist tradition is his idea of scientific progress in form of increasing objectivity. Even though Meinander renounces deductivism, he is explicit in his statement that archaeology as a descriptive science strives toward ever greater objectivity (Meinander 1968: 65; 1973a: 10). In placing emphasis on the somewhat positivistic

description of archaeological materials as indicators of how things really happened instead of relying on predetermined theoretical models in explaining them, Meinander hopes to demarcate between science and pseudoscience, or objectivity and dogmatism. This remains one of his biggest objectives in terms of elaborating on the archaeological method (Meinander 1973a: 17–8). In Meinander's view, the fact that one view of Finnish Early Iron Age society dominated for so long can be explained by the subsumption-theoretic model: new finds were simply subsumed or explained with reference to an existing theory. In order to avoid the situation where a particular theoretical model will have dominance over the actual data, Meinander wants to further stress the role of archaeological materials (Meinander 1977: 78).

In this respect, however, Meinander's theoretical writings provide little clarification to what he might have meant with positivism. It is likely that the idea of archaeology as positivism reached Meinander's thinking through the writings of his Swedish colleague Mats P. Malmer (1921–2007). It is also likely that, as an early proponent of the Scandinavian new archaeology that developed independently of the Anglo-American tradition (Myhre 1991: 162; Malmer 1993: 145; Sørensen 1999; Baudou & Jansson 2015), Malmer's philosophy of archaeology greatly affected Meinander's thinking of objectivity as a central goal of archaeology. As already noted, Malmer and Meinander's conception of the possibilities of archaeology had multiple points of connection, but their writings were also plagued by conceptual inconsistencies. For instance, both promoted the idea that archaeology should strive toward ever greater degrees of objectivity, but both had a hard time in using consistent terminology when describing the methodology of archaeology. Whereas Meinander's theoretical writings fall short in providing further clarification on the topic, Malmer's output was much more extensive. Aspects of the milieu of post-World-War-II Scandinavian archaeological theory, and thereby also Meinander's epistemological position, can be greatly illuminated by a brief analysis of the epistemological views expressed by Malmer.

In his dissertation, *Jungneolithische Studien*, Malmer (1962) was among the first Scandina-

vian archaeologists to put forward the view that archaeology should strive to be an exact science. In general, for example, instead of grouping finds according to some general aesthetic criteria and vague typological concepts as had been common in archaeology, archaeological classification should be based on clearly defined concepts and numerical categories (Malmer 1962; 1967; cf. Malmer 1997: 9). In epistemological terms, this systematic approach, characterised by Leo Klejn (1977: 6) as 'war against impressionism', should prevent the archaeologist from getting caught in the vicious circle of naive empiricism in which the research ends up relying on the very argument it is trying to establish (Meinander & Malmer 1965: 83; Malmer 1967; Meinander 1967). In Malmer's research into the Late Neolithic, this meant constructing the inner chronology of the Swedish-Norwegian Battle-Axe Culture before relating it to the outer chronology of other contemporary Northern European cultures. Moreover, the construction of the inner chronology should begin with the study of one particular category of finds, such as ceramics, before moving on to other types of finds. Malmer's final conclusion was that the material culture of Swedish-Norwegian Battle-Axe Culture was result of autochthonous development rather than migration.

Malmer's ideas about the epistemology of archaeology, however, were plagued by inconsistencies which undermined his goals of objectivism. For example, in Malmer's view, archaeological artefact types do not reflect a reality recognised by past people themselves, but are artificial products that are created at the moment of its definition (Malmer 1962: 881). According to Malmer, 'logically correct verbal definition' rather than the archaeological material itself is the prerequisite for the existence of a type (Malmer 1967: 376; see also Malmer 1963; cf. Baudou & Jansson 2015: 74).

Malmer himself referred to the philosophy behind his method of exact categorisation of archaeological materials as rationalism, distinguishing his position from empiricism which, for him, takes the artefact types as representative of past realities. Malmer (1967) clearly saw empiricism as naive empiricism that would ultimately lead to the problem of induction, and not as logical empiricism that is based on the deduc-

tive method of hypothesis testing. How, then, are rational categories connected to the reality of the past in any way?

Interestingly, Malmer himself hints toward the reality of a type in his discussion over the genesis of a new artefact type:

We can define the concept ‘genesis of a new type’ by saying that it is a point in a typological series at which the points of similarity between the groups arranged in time sequence are few, possibly so few that we are not certain whether there is continuity or no. [...] New types must in former days as now have been created not by bad craftsmen but by good, by men who were well aware of their artistic means of expression. Badly executed examples are certainly more common toward the end of a type’s period of production, but this is because the type is then produced mainly by plagiarists, while the good craftsmen have already gone over to producing a new type. The continuity, in both typological and find combination series, depends on the average person’s tendency to repeat what they themselves or someone else has previously done. The breaks in the typological series, on the other hand, the genesis of new types, depends on the original minds, the creative artists. (Malmer 1963: 265–6)

In the above analysis, Malmer hints toward some kind of correlations between the typological definition and past activity, and therefore also for the reality of the artefact type as a prerequisite for scientific objectivity.

There is therefore an inherent contradiction between Malmer’s repeated idea that types as verbal definitions are arbitrary and have no correspondence to reality, and his insistence on the objectivity of that very same typology through the assumed reality of archaeological objects (e.g. Malmer 1967: 376). Klejn has criticised Malmer for being vague on how subjective definitions can lead to objective knowledge. As noted by Klejn, such logic would only make sense if Malmer saw the objects, and not only types, as ideas about those objects (Klejn 2010 cited in Baudou & Jansson 2015: 76–7).

The guiding principle behind logical positivism was that, however arbitrary the categorisa-

tion may be, it could be bettered by testing it against real phenomena by following the hypothetico-deductive method. Malmer (1993: 146) explicitly denounced the hypothetico-deductive method and stated that ‘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 of explanation into archaeology.’ Stig Welinder (2016: 13), however, sees that *Jungneolithische Studien* contains ‘hypothesis-testing archaeology, following the lines of positivist science, in a way similar to the New Archaeology’. Similarly, Myhre (1991) and Sørensen (1999) have characterised Malmer’s rationalism as hypothetico-deductive. Contrary to Malmer’s repeated criticism and denouncement of logical positivism, it is clear that his philosophy follows its ideals, especially as put forth by early Wittgenstein, early von Wright, and Bertrand Russell (Malmer 1963; 1984; 1995; cf. Myhre 1991; Baudou & Jansson 2015: 74; Welinder 2016: 12–5). Malmer simply opted for the term rationalism instead of positivism (Malmer 1984: 265).

However, taking into consideration Malmer’s (1967: 377) explicit characterisation of the process of archaeological inference as proceeding from a hypothesis through its testing to a revised definition, a process in which ‘the *comparison* of the results’ is where most reliable knowledge is to be found, his philosophy seems to follow the ideals of phenomenology and hermeneutics rather than strict positivism (cf. Malmer 1997). In this sense, especially the phenomenological concept of *epoché*, the process of bracketing a point of view in order to let other perspectives gain significance, can be seen to characterise Malmer’s view of the relationship between materials and theories (cf. Lavento 1998; Balaban 2002). This would also be one conceptualisation for the process of obtaining objectivity through subjectivity, and a direct answer to Klejn’s critique. After all, hermeneutics may not be totally incompatible with the quantitative methods, and one of the biggest reasons why Malmer’s philosophy remains seemingly conflicted is that he does not make a distinction between various forms of empiricism (i.e. empiricism as phe-

nomenology or empiricism as positivism), and ends up denouncing the very position he adopts (cf. Zimmermann 2011). While Malmer does not make a substantive distinction between rationalism and positivism either, he contrasts them with empiricism as a research strategy doomed to failure under the auspices of Hume.

The inconsistencies in Malmer's philosophy led Klejn to argue that Malmer's (1962) overall conclusion that the Swedish-Norwegian Battle-Axe Culture was result of autochthonous development rather than migration was not based on the actual archaeological materials, but instead on preconceived ideas of migration as an unfitting explanation for cultural change (Klejn 2010: 172 cited in Baudou & Jansson 2015: 79). In Klejn's opinion the actual archaeological material supports both hypotheses, so what made Malmer to opt for autochthonous development rather than migration if not a preconceived idea of these two particular models as possible explanations (Klejn 2010: 178 cited in Baudou & Jansson 2015: 79)?

Such critique, and the trouble in establishing any logical link between the mute archaeological materials and the more nuanced aspects of past life-ways no doubt made Malmer to revise his philosophical views over the course of his career. Eventually Malmer turned from typology to actualism, the position that presupposes the reality and continuity of certain (formation) processes. For Malmer, actualism formed the philosophical backdrop for his objectivism (Malmer 1997). Malmer's philosophical views were, however, most convincingly expressed in his article on theoretical realism (Malmer 1993), a philosophy according to which some rather vague and unobservable concepts such as culture can be adopted as reflecting the past as a reality rather than as a construction (for theoretical realism in archaeology see also Muurimäki 1982; 1986; 1995; 1998). Through his adoption of theoretical realism, Malmer was able to reconcile between positivism and relativism (Malmer 1993; Baudou & Jansson 2015: 81).

Furthermore, in more explicitly epistemological terms, theoretical realism allowed Malmer to conceptualise the process of inference beyond the binary of inductive and deductive logic. In other words, it allowed him to conceptualise the theoretical as a speculative realm but neverthe-

less as connected to the material realm through a specific logic. In elaborating on the form of that logic, Malmer does not give it an explicit name. Instead, he writes that

If we observe footprints on the snow-covered ground, do we doubt that somebody walked here? If the footsteps lead to a house, do we call in question that the person arrived there? Of course not. The proof is not absolutely conclusive: somebody might have invented a cunning device to cheat us. But such things happen very rarely; it is overwhelmingly probable that our first inference is correct. Almost all inference in applied sciences is of this type: more or less probable, but not absolutely conclusive. (Malmer 1993: 147)

Malmer had earlier (1984: 267) explored this type of logic under the banner of fictionalism, referring to Hans Vaihinger's (1911) 'as if logic'. Interestingly, Sørensen (1999: 780) sees this reference to contain a pragmatist notion. Sørensen leaves her remark rather vague, but the most probable sense in which Malmer's reference to Vaihinger can be seen as a move toward pragmatism is the way in which as if logic can be seen as analogous to Charles Peirce's abductive inference where speculative hypotheses are given an important role as part of the scientific process. Baudou & Jansson (2015) see that Malmer's adoption of actualism and theoretical realism actually reflect fictionalism as his underlying philosophy between 1980 and 2002 (see also Sørensen 1999: 780).

In light of the type of analogical or abductive logic that assumes the reality of certain processes as connecting the past and the present, a logic endorsed by fictionalism, theoretical realism, and actualism, this view is well-justified. Interestingly, then, Malmer (1984: 266) likens the archaeological excavation to crime scene investigation where the investigator has to approach the scene of crime with no particular theory (hypothesis) in mind, but instead with as broad a collection of experience and range of vague hypotheses as possible. In Malmer's (1984: 266) view the only theory that the archaeologist should have when interpreting materials is that humans have acted here. Needless to say, this approach is closer in

formulation to empiricism than rationalism or positivism.

Two aspects, then, characterise the epistemology behind Malmer's archaeology:

1. Archaeological materials and certain constant processes form the foundation for the pursuit of objectivism in archaeology. Malmer is quite explicit in his view that the only source of archaeological information about prehistoric times, regardless of whether they come in the form of measurements or aesthetic impressions, 'is exclusively in the form, substance and location of artefacts' (Malmer 1997: 8), and, that 'Archaeological artefacts are 100% substance, even if they express psychological or ideological realities' (Malmer 1997: 10).
2. Ideas about both materials and processes can be tested against empirical observations, most importantly new archaeological finds, and reformulated accordingly, leading to real scientific progress (Malmer 1993: 147; 1995). Despite his denouncement of empiricism, its leading ideas seem to have been guiding epistemological principles behind Malmer's archaeology as *sakforskning* (material research) throughout his career (cf. Sørensen 1999: 781; Welinder 2016: 11, 16, 37).

Malmer's positivism can therefore be characterised as *find positivism*. Malmer credits Swedish archaeologist Carl-Axel Moberg as the first to have used this characterisation, but they both treat it as a contrasting position to logical positivism (Moberg 1978: 226; Malmer 1984: 261; 1993: 146). Malmer (1984: 263) is quite explicit that because the archaeological material can be used to test or verify a host of different and even conflicting hypotheses it has 'theory-neutral knowledge potential' (translation from Welinder 2016: 74). This statement further distances his position from that of logical positivism and connects it to the somewhat vague theme of empiricist find positivism. While Malmer's ideas about positivism oscillated between Wittgensteinian logical positivism and finds positivism, he nevertheless held that data and theory are intimately interconnected. Although Welinder (2016: 28–9)

has argued that Malmer had absolutely no interest in post-processualism or hermeneutic archaeology, in some sense Malmer's philosophy shares certain characteristics with hermeneutics, such as the objective to 'make the archaeological data more understandable rather than aiming to promote [the archaeologist's] own methodology' (Sørensen 1999: 778).

How then does Malmer's pursuit of objectivity pertain to the question about the positivism of Meinander? Meinander was never as explicit or productive as Malmer in expressing his epistemological views, and, unlike Malmer, Meinander never elaborated in writing what positivism means for him. Unlike for Malmer, distinguishing between impressionistic or phenomenological subjectivism on the one hand and objective strategies such as positivism's categorisation on the other was not central to Meinander's philosophy of archaeology. Meinander's positivism clearly follows the ideals of positivism insofar as they were formulated as such for the Scandinavian new archaeology by Malmer, but not those of logical positivism. In this sense, for Meinander, the hypothetico-deductive method was not the objective but, following Malmer, source criticism, clearness and precision, however, were. Nevertheless, the similar type of tension between archaeological facts and hypotheses or materials and theories characterises both Malmer's and Meinander's writings (cf. Malmer 1967). Ultimately both end up in a position that prioritises the actual archaeological materials rather than theories, and both hold a firm view that archaeology studies a real, singular, and continuous past, therefore making at least the *pursuit* for objectivity feasible (e.g. Meinander 1973a; 1977; Malmer 1984; 1995; 1997).

Following Malmer's idea of the power of archaeological finds as sources of new knowledge, Meinander's positivism should similarly be seen as a form of find positivism (cf. Lavento 2005). In this sense, Meinander seems to have adopted positivism as a type of epistemic optimism through which he attempts to sidestep the problem of inductive justification by conceptualising existing theories as necessary points of departure open for adjustment on the basis of new finds. In Meinander's view, covering laws, regardless of how they were initially formed, are not explanations that apply in every situation and

have to be followed religiously, but instead are operative instruments or models that are adopted as necessary points of reference and used in order to make sense of the facts (Meinander 1977: 77–80; cf. Johansen 1969; 1974). The discovery of new finds in turn will lead to a situation where the theoretical framework will have to be modified or replaced in order for it to correspond with the new facts. Meinander (1977: 82) therefore adopts a somewhat Kuhnian idea of the process of knowledge production.

In general, as became evident in Malmer's case, Meinander's arguments can similarly be seen to reflect ideas put forward in anti-positivism, most notably hermeneutics and phenomenology. These philosophies argue that any narrow conception of the scientific method tends to leave out phenomena that do not conform to that methodology. It is evident that in Scandinavian, or in this case Swedish and Finnish, archaeological theorising, philosophical standpoints have been adopted quite liberally, and that at times this liberality has, contrary to its objectives, not resulted in conceptual clearness. Following this line of thinking, the fact that the majority of post Second World War Finnish archaeology did not follow an explicitly formulated theoretical framework or conceptualisation of the inferential method cannot be seen as symptomatic of a straightforward adoption of naive empiricism or positivism, as has been suggested so frequently by Finnish scholars. By the same token, any vague characterisation of Finnish post-war archaeology as simply positivist or empiricist and therefore atheoretical can be misleading. Instead, the absence of methodological reflection or vague formulation of the inferential process can be seen as a phenomenological strategy where archaeological knowledge is taken to be firmly rooted in a wide range of empirical observations, but in a tacit fashion. In some ways this approach can be seen to follow the principles of phenomenology where knowledge can be conceptualised as being based on a general intuition rather than exact enumeration or coding of data (Lavento 1995; 1998; 2001: 16–7, 45, 77, 146–8). Although phenomenology was not discussed in early Scandinavian theoretical archaeology, it is worth noticing that the process of archaeological inference has been concep-

tualised along these lines from very early on. Interestingly, then, Meinander (1991: 34) has noted that while Montelius' method was based on the conceptualisation of the formation of archaeological knowledge as inductive, Müller's method can be characterised as hermeneutic or narrative. In this sense Meinander can be seen to follow the branch of Finnish archaeology that opposed both inductivism and deductivism in favour of the dialectic method.

Ari Siiriäinen and the latent effects of New Archaeology

Meinander's dialectic views were further developed and more explicitly expressed by his successor Ari Siiriäinen (1939–2004), professor of archaeology in Helsinki between 1983 and 2002. Siiriäinen shared Meinander's interest in natural scientific methods, especially geology, and had a similarly liberal conception of archaeology's method of explanation. However, Siiriäinen's views were further influenced by his interest in anthropology (Carpelan & Lavento 2005: 5). This led Siiriäinen to conceptualise the aims of archaeology in a global rather than national context. Siiriäinen (1988: 6) writes, that the path of nationalism is finally coming to an end, and any talk of archaeology as a national science should be ended. Instead archaeologists have to start seeing historical reasons for possible national characteristics in a global context and against the globally common cultural processes (Siiriäinen 1988: 6). In this sense, Siiriäinen wanted to distance himself from the nationalist project of finding out the true origins of the Finns.

Siiriäinen's anthropologically influenced ideas about archaeology's need for theoretical integration were most explicitly expressed in his talk at the third Nordic Theoretical Archaeology Group conference that was held in Bergen in 1990. Siiriäinen did not attend the conference but instead prepared a paper to be presented by another delegate with title *Theoretical aspects in the Finnish archaeology – are there any?*. In his paper, Siiriäinen (1993) discusses New Archaeology as a theoretical program and especially the way in which New Archaeology in the course of the 1970s had come to depend on cultural analogies and anthropological models in explaining cultural change.

Siiriäinen, however, argued that analogical reasoning has no explanatory power in the sense that the New Archaeology insisted:

[A]nthropological models cannot be used to prove that discontinuities in material culture are a consequence of ethnic processes – as they can be a consequence of a host of other reasons as well – but they nevertheless provide one possible interpretation. (Siiriäinen 1993: 34)

Another weakness with analogies according to Siiriäinen is that they do not reveal any long-term processes:

They inevitably derive from short-term historical situations with all their particularistic biases [...]. Even if we were able to eliminate or oversee the effect of the historical situations, the models nevertheless only give us alternatives for a historical structural interpretations of our archaeological material. The longer the processes are which we want to detect by means of the anthropological models, the more we have to take historical particularities into account and the less useful the models become. (Siiriäinen 1993: 34)

These shortcomings of analogical explanation lead Siiriäinen to propose that migration might still be a useful tool in describing local variations in the archaeological record:

We have never abandoned migration as one obvious and relevant alternative in explaining discontinuities in archaeological sequences as was the case – with some notable exceptions – in the rest of Scandinavia for so long [...], probably due to the emphasis on processual paradigms borrowed from Anglo-American (school of theoretical) archaeology. [...] Being a typical ‘product’ of Finnish archaeological education of the late 50’s and early 60’s, I have not committed myself to any of the existing theoretical schools, nor do I have any clear preference as regards such orientations as environmentalism and determinism and so forth, or Marxism, socialism, and the like, for that matter. (Siiriäinen 1993: 32)

While Siiriäinen is certainly critical of the Finnish tradition insofar as cataloguing and description of archaeological finds has been prioritised over synthesis or generalisation in post-World-War-II archaeology, he sees the emphasis on local matters as a research strategy worthy of saving. Siiriäinen then sees the so-called isolation of Finnish archaeology as a good thing because it means that migration theory was never abandoned in favour of processual explanations, as was the case in other parts of Scandinavia (cf. Kokkonen 1984a: 163). In fact, Siiriäinen points out that migration theory was chosen deliberately as an alternative to the ‘invading new paradigms’ by scholars like Meinander and Ella Kivikoski, for instance (Siiriäinen 1993: 34).

In retrospect, then, the theoretical backwardness of Finnish archaeology might present itself not as a problem but rather as a viable research strategy. More specifically, the reluctance in Finnish archaeology to adopt logical schemas or processual explanations as covering theories might have resulted in a research atmosphere in which diverse perspectives and possible explanations are combined liberally:

It seems evident to me that the Finnish archaeologists, having always been attached to the diachronic school [...], have avoided using generalizations, historical or anthropological, as a research strategy. Instead, they have persistently been restricted to description of prehistoric processes, ethnic ones amongst them, as particularistic phenomena emerging and interpreted directly from the archaeological material. If they have endeavoured to seek any causes for the observed phenomena, these have been found in particular historical situations. This kind of research inclination, originally of course common and uncriticized in international archaeology remained in Finnish research even after the impact of the ‘New Archaeology’. (Siiriäinen 1993: 34)

In all its maddening vagueness this liberal attitude enables oneself, hopefully, both to take into account particularistic elements strictly connected to unique historical situations and detect static systems and dynamic processes in one and the same coherent theory. Thus, as I see it, each historical situation with all

its idiosyncratic elements belongs to several processes all of which have their own systemic constraints (both ecological, economical, technological and cultural). (Siiriäinen 1993: 33)

In his analysis of the development of theorising in Finnish archaeology, then, Siiriäinen points toward inclusiveness as an important aspect of research that nevertheless tends to be overlooked in any highly systematic approach, such as nationalism, evolutionism, or the adoption of the hypothetico-deductive method for that matter.

In this respect, Siiriäinen's analysis highlights another aspect in Finnish archaeology. As pointed out by Siiriäinen (1990; see also Kokkonen 1984c), in the 1980s, the field of Finnish archaeology was relatively small and plagued by a phobia of overlapping research topics. Practically this was the reason why, in Finnish archaeology, certain theories regarding migration or chronology for instance had been passed on from generation to generation as facts rather than theories open for further revision. As a remedy to the situation, Siiriäinen (1990) argues that, in order to avoid the dogmatism that reliance on authoritative research leads to, archaeologists needed to drop the positivist conceptions that the view of the past was nothing more than a chain of linked truths based on intimate knowledge of particular materials and that, having studied the same material, two researchers would independently reach the same conclusion about the past.

The above concerns led Siiriäinen (1988; 1990; 1993) to state that more theorising is needed within Finnish archaeology. Siiriäinen (1990) felt that if Finnish archaeologists were more knowledgeable about the current theoretical discussions, they would see archaeology as an interpretative discipline, and that this would ultimately lead them to appreciate the value of alternative interpretations as inspiring rather than conflicting or wrong. Toward this end, Siiriäinen wanted to stress the relevance of speculation in science. In fact, Siiriäinen favoured the view of archaeology as a science that welcomes speculation as a form of dialogue from which acceptable hypotheses can be 'approximated' (Siiriäinen 1988: 7). In his view, speculation should be the alternative to the kind of archaeology that cloaks subjective impressions

as empirical conclusions (Siiriäinen 1988: 7; cf. Meinander 1973a: 10).

Interestingly, then, Siiriäinen's interest in processual theory, and his view of interpretation as a point of connection rather than separation between individual researchers, can be seen to reflect the development that took place in archaeology more broadly during the 1970s and the 1980s after the heyday of New Archaeology. Siiriäinen (1993: 35) predicted that, although theorising in Finnish archaeology until the early 1990s had been rather old-fashioned, in coming years Finnish archaeologist will take a more active role in the international theoretical debates. In many ways, Siiriäinen's wish for an increase in theorising came true, but it remains questionable whether the development followed the directions anticipated by Siiriäinen. Whereas Siiriäinen called for a more intimate integration between theory and practice, the bulk of archaeological theorising in the course of post-processualism in the 1980s and 1990s moved theory in the very opposite direction.

CONCLUDING VISIONS

The mainstream historiography of archaeology has tended to portray the discipline as a succession of conflicting -isms and revolutionary paradigms, each with their own conceptualisation of the preferred method of archaeological inference. While such historical approach can provide points of departure for a more detailed understanding of the idiosyncrasies of the history of the discipline, it is more often prone to obscure or dismiss research that does not fall within any clear paradigmatic definitions (cf. Lucas 2017; Murray & Spriggs 2017). As result, the creation of the -isms of archaeology tends to hinge on the preconceived ideas about the nature and limits of science by those who write the history of archaeology rather than the research of those individual scholars who contributed to it, not to mention the many social factors that shaped the discipline (Moro Abadía 2010; Lahiri 2017). This does not mean that we should totally reject the categories that we have been using to write the history of archaeology, but we must be able to assess the relevance of particular concepts and distinctions for the scholars of the past (Moro Abadía 2010: 229).

Against this background, the history of the epistemology of Finnish archaeology forms a particularly interesting object of study. On one hand, the concepts of empiricism and positivism, that are frequently used to describe Finnish archaeology as old-fashioned or theory-free, misrepresent the nature and level of theorising in Finnish archaeology. Although, in the course of the history of Finnish archaeology, the use of those and other pertinent concepts, such as induction and deduction, has not been particularly explicit or consistent when epistemological questions have been discussed in writing, the concepts have nevertheless been important for the self-understanding of individual scholars.

On the other hand, and regarding Meinander's and Siiriäinen's expressed reactions to New Archaeology in particular, the adoption of a rather liberal attitude toward methodological and theoretical issues, as well as the use of vague conceptual formulations, can render the study of the history of theoretical reflection in Finnish archaeology challenging. However, as this article has argued, this vagueness in the use of theoretical concepts should not be seen as a lack of theoretical engagement, but instead as a deliberately chosen theoretical position in itself. Some scholars, including Meinander and Siiriäinen, have deliberately adopted an empiricist philosophy of archaeology as a way of avoiding the use of reductive or simplifying theorising.

When assessing the reasons behind the conceptual vagueness of the Finnish reactions to New Archaeology, two factors in particular should be kept in mind. On one hand, a history of romantic nationalism, although becoming less fashionable in the course of the 20th century, shaped Meinander's conceptualisation of the form of archaeological inference. Meinander saw that, when studying the origin of the Finns, emphasis should be put on archaeological materials rather than linguistic or ethnographic theories that aim to explain the individual finds. If assessed from the viewpoint of the general historiography of archaeology, Meinander's philosophy of archaeology appears as theory-free naive empiricism. However, as was highlighted in this article, Meinander's empiricism denotes a certain openness or optimism toward the relevance or evidential powers of archaeological materials. In

this sense, it does not reflect empiricism as an atheoretical position, but can be understood as a phenomenological or speculative form of empiricism (see below).

On the other hand, the reluctance toward adopting covering-law theories or generalisations also has to be seen as a way of avoiding the dogmatism introduced by authoritarianism in research. These worries were explicitly expressed by both Meinander and Siiriäinen who saw that, due to the small size of Finnish archaeology as well as the overall scarcity of archaeological materials, certain interpretations of the materials had been passed on as unquestioned truths for generations. Both, then, held that in order to avoid this kind of disciplinary dogmatism, systematic theorising – not theorising *per se* – should similarly be shunned. Siiriäinen in particular argued that dogmatism is result of theoretical ignorance, and that better theoretical awareness would lead archaeologists to see the principles of their discipline as open for further revision, and the diversity of interpretations as an opportunity rather than a point of elimination.

As argued in the article, the worries expressed by C.A. Nordman, A.M. Tallgren, C.F. Meinander, and Ari Siiriäinen highlight the dangers inherent to any form of methodological or theoretical simplification. The general objective of these researchers has never been to object systematicity or new theoretical views and research methods, but to avoid overarching generalisations and dogmatism that the adoption of one particular point of view or systematic approach can lead to. The explanation of particular archaeological phenomena by recourse to authority or with the help of a covering theory has never been an actual goal in Finnish archaeology. This is highlighted by the fact that, in light of the history of archaeology, any reductionist strategy has been relatively short-lived and often met with severe criticism (Kokkonen 1984a). In this sense, Finnish reaction to New Archaeology should not be seen as dismissal of theory due to disciplinary isolation, but instead as a well-informed and deliberate adoption of a theoretical position. More detailed elaboration of the intricacies of this particular theoretical position should be possible through the analysis of the actual archaeo-

logical research conducted by the respective scholars.

In addition to providing alternative views to established ideas about the history of archaeology, the evaluation of prior theorising can be an ‘essential facet of critical self-reflection about the nature of archaeology as a discipline’ (Murray & Spriggs 2017: 153). In this sense, the implications of the vagueness in elaborating on the preferred method of archaeological inference in the course of the history of Finnish theoretical archaeology can also be evaluated in light of contemporary discussions in archaeological theory. In the course of the 20th century, part of mainstream archaeological theory has come to increasingly oppose the idea that archaeology should rely on any clearly formulated theoretical frameworks such as logical positivism, structuralism, or social constructivism. On the contrary, if archaeology is to be able to take into account the many ways in which the past has been and can be interpreted or understood, the discipline has to actively seek ways to escape its preconceived and established intellectual or methodological frames of reference (Pétursdóttir 2012; Witmore 2014; Marila 2017; Pétursdóttir & Olsen 2018).

These considerations have sparked a distinctive tendency in the epistemology of archaeology toward a return to empiricism (see Marila 2017 for discussion and references). In this context, empiricism denotes a philosophy of archaeology far from the sense in which it is often presented through the historiography of archaeology as an atheoretical position. On the contrary, as a speculative attitude, the newly found empiricism is well-versed in speculative philosophy (Edgeworth 2016). Furthermore, unlike the empiricism of traditional archaeology, the recent return to empiricism is not characterised by epistemological concerns, but instead by ontological and ethical considerations about the ways in which anthropocentric theories can come to dominate archaeological materials (Olsen et al. 2012; Pétursdóttir & Olsen 2018).

Archaeological theorising in the 21st century therefore highlights that reliance on established strategies of methodological simplification or theoretical reduction should be avoided in order to allow the researcher to take the ontological multiplicity of the matters of concern involved

into account. The renewed empiricism therefore comes with the argument that theories are not monolithic systems that need to find their application in pertinent contexts, but instead that theories come as inherently unfinished and open-ended (Pétursdóttir & Olsen 2018). Theories therefore have their own history by which they have both changed or evolved but by which they will also come to find new applications.

This is not an anachronistic suggestion that the good old archaeological empiricism is applicable as such in today’s context. Instead, the arguments presented in this article should be taken to entail that, in addition to providing a more nuanced understanding of the history of archaeology, the study of the history of the epistemology of archaeology can provide ways to more critically assess the present state as well as the future of our discipline, and that the history of archaeology can serve as a way of reacting to its emerging epistemological challenges with a sense of historical awareness.

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NOTES

¹ Och framtidsvisionen ser ut på följande sätt. Det kommer en nyfunnen stenyxa till museet i Perä-seinäjoki. Omedelbart noterar museiföreståndaren, i vardagslag en skollärare, vissa data om fyndet. Så väljer han ett nummer på sin telefon – det för honom till den europeiska fornfyndscentralen i Frankfurt am Main. Fortfarande på sin nummer-skiva matar han in data om det nya fyndet. Samtidigt som centralen registrerar dessa svarar den med att ge ut ett registernummer som hädanefter är denna stenyxas nummer. På begäran ger centralen också uppgifter om alla stenyxor som liknar den nyhittade – svaret ges på teleprinter i skollärens kanslirum – utskrivet i klarskrift på det språk som önskas, alltså t.ex. på finska. (Meinander 1968: 66)

² Marxilainen deduktiivinen ajatustapa on piirre joka lähentää sikäläistä arkeologiaa amerikkalaiseen, vaikka yhteiskuntaa koskevat teesit olisivatkin sisällöltään toisenlaisia. Länsi-Euroopan tutkimus on niihin verrattaessa agnostinen. (Meinander 1973a: 16)

Eurooppalainen tutkimus on rationaalisempi – länsimainen arkeologi suhtautuu torjuvasti kaikkeen, mikä haiskahtaa filosofialle: venäläiset puolestaan rakastavat sitä. (Meinander 1973a: 14)

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