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Negotiated Positivism: The disregarded epistemology of Arne Furumark

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ABSTRACT

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Archaeological theory during the twentieth century is often presented according to a tri-partite scheme. This article serves to put this model into question through the explication of the epistemology of the Swedish classical archaeologist Arne Furumark. He introduced a heuristic model for ceramic studies in 1941 that bears the hallmarks of logical positivism. This early appropriation of analytical philosophy in classical archaeology does not resonate with the above-mentioned model of archaeological theory. However, Furumark did not adopt the agenda of processual archaeology wholeheartedly as the greater part of his research was founded on a culture historical framework. Furumark's epistemology was negotiated between two archaeological paradigms, or two branches of positivism.

Keywords: epistemology, logical positivism, archaeology as history, Aegean Bronze Age, Mycenaean pottery, culture historical archaeology, positivism, processualism.

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Negotiated Positivism: The disregarded epistemology of Arne Furumark

Introduction

In this paper, I aim to explicate the epistemology of Arne Furumark, Chair in Classical Archaeology and Ancient History at Uppsala University between 1952 and 1970. Furumark's primary contribution to the advancement of archaeology is the seminal *Mycenaean Pottery* published in two volumes 1941. In the beginning of *Mycenaean Pottery* Furumark introduced a framework for the analysis of pottery. In this article, I argue that this framework in part corresponds with logical positivism that was widely appropriated in archaeology only with the advent of processual archaeology in the 1960s. This article elaborates on Furumark's epistemology and situates it in an epistemological context of the 20th century.

Furumark's scholarly production extends over several areas of specialization in Classical Archaeology and Ancient History, such as Italic prehistory, Aegean prehistory, Cypriot archaeology and ancient history (see Hägg (1968) and Nylander (1983) for biographies and bibliographies). Furumark was also keen to disseminate scholarship to the public; he participated for instance frequently in the broadcasts of the Swedish Radio and published several books about the classical world for the public (e.g. Furumark 1961; 1962). However, his studies on Mycenaean pottery are still considered as his primary scholarly contribution. Furthermore, the analytical framework that he introduced is in particular pertinent in the field of Aegean prehistory. I will therefore restrict my analysis in this paper to a handful of Furumark's publications concerning Aegean prehistory and Mycenaean pottery. In addition, I will supplement these publications with information

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preserved in Furumark's personal archive housed at the University Library of Uppsala University.

The aim of this article is to advance our knowledge of the history and epistemology of Archaeology and Classical Archaeology and Ancient History. Classical Archaeology and Ancient History is often portrayed as a branch of Archaeology which lags behind in theoretical matters (e.g. Guidi 1998; Morris 2000; Trigger 1996). This article will serve to revise this notion.

There is, nevertheless, an epistemological inconsistency between Furumark's presentation of a heuristic framework and the bulk of his research. Furumark was not a processual archaeologist, despite his appropriation of logical positivism. He regarded archaeology foremost as a historical science. That is, he viewed his research as history that was based on and supported by archaeological findings. The historical accounts that he produced for the Late Bronze Age were permeated by tenets of culture historical archaeology. In other words, Furumark did not embrace logical positivism at the expense of inductivist, older, or traditional positivism but rather added a logical positivistic dimension to a traditional framework. His research is characterized by an epistemological negotiation of two branches of positivism.

Variations of positivism

The notion of positivism is crucial in this paper. As an epistemological notion, positivism has been used in a wide variety of settings. Positivism — without a preceding qualifier — is often used for a kind of rudimentary scholarly practice that pays particular attention to sources and analytical procedures pertinent to the sources. This is sometimes viewed as a pejorative term. This positivism — which for a want of a better term will be denominated traditional — was incorporated in the humanities in the late nineteenth century (see Mommsen 1990; Siapkas 2017:33; below). Traditional positivism constituted the epistemological foundation also for culture historical archaeology and it continues to be a primary epistemological foundation in for instance classical archaeology. Traditional positivism is founded on the methodology of source-criticism, and where priority is given to procedures that secure the authenticity of the sources. Furthermore, traditional positivism is often incorporated into analytical models that are based on common sense reasoning. The emphasis on source-criticism was often regarded as a means to secure the objectivity of sciences, but in reality, it made science vulnerable to the influences of contemporary ideologies and tendencies. A set of issues which have received scholarly attention in this way concerns cultural, ethnic and national identities which have been projected on to the past (see Jones 1997; Siapkas 2014).

Logical positivism stands in sharp contrast to traditional positivism. The major epistemological difference is that logical positivism strives to explicate the deductive reasoning that constitutes the analysis (see below).

However, before I elaborate in detail about logical positivism let me turn to the scholarship of Furumark.

FURUMARK'S HEURISTIC MODEL

Furumark introduced an analytical framework in the "Introduction" of *Mycenaean Pottery* vol. 1 (Furumark 1972a:1-10). The purpose of his model is to clarify his methodological approach to pottery. The framework makes the criteria for the mapping of pottery explicit. It consists of three levels. Initially Furumark explicates the factors that determine the taxonomy of pottery. He distinguishes between technical and morphological characteristics. These are in turn subdivided. Technical characteristics denominate both the raw material used to construct ceramic vessels and the manufacturing process.

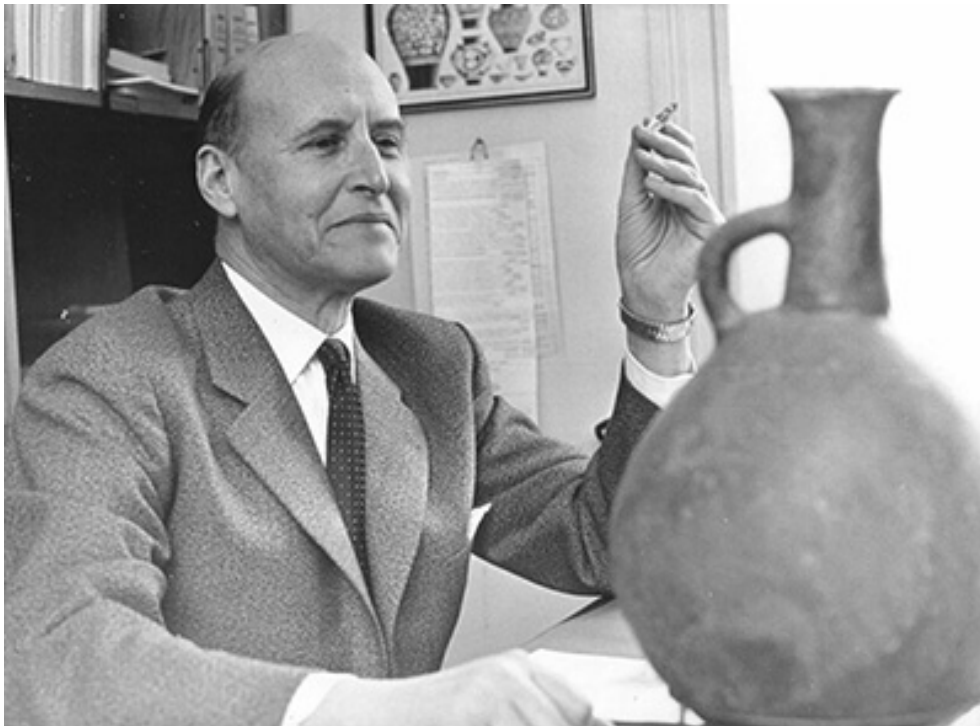


Fig. 1. Arne Furumark. Photo: Unknown.

The morphological characteristics refer to the shape and the decoration of the vessels. The notions of shape and decoration are in turn further subdivided by Furumark. Shape consists of form and specific shape, and decoration consists of pure design and specific implementation of the design on a particular specimen (Furumark 1972a:1). The analytical pairs are not regarded as symmetrical by Furumark. On the contrary, he makes a clear distinction and holds one part of each pair to be more pertinent than the other. Accordingly, he holds shape, with its further subdivisions, to be "the essential, primary feature" whereas decoration, with its subdivisions, is "a non-essential, secondary feature" for taxonomies of pottery (Furumark

1972a:1, for both quotes). Furumark singles out the morphological features, i.e. shape and decoration, as the significant features for his study and omits the technical components. The morphological features constitute the backbone of the analysis of the pottery. Each type of morphological feature will be ordered into classes or categories by Furumark, and will be presented in “a systematic arrangement” (Furumark 1972a:2).

In order to conceptualize the diachronic evolution of the pottery Furumark adopts the concepts typology and style. A typological series is constituted by the gradual chronological development of a morphological type (Furumark 1972a:4-6). The gradual and slow pace of change in material culture — morphological similarities — are explained as a result of human “inertia” and “conservatism” (Furumark 1972a:3-4). Nevertheless, Furumark is careful to question the assumption that morphological development is regular. He raises the possibility that people could continue to use older types of pottery also after the introduction of later types (Furumark 1972a:4-6). He associates the concept style with the concrete execution of decoration on the vessels. However, style is not an analytical end for Furumark: “the analysis of style should be employed chiefly as a method of discerning general characteristics” (Furumark 1972a:6). Furumark is careful to raise objections against the well-established assumptions that change occurs in small unnoticeable steps, and that it is uni-directional.

As far as I can judge, Furumark follows and implements the order outlined in the model. That is, the taxonomic order and relevance each notion is ascribed with in the presentation of the model is also mirrored in the actual catalogue. The primary categories in the model are also used for the primary sorting and the second-level criteria are used for further subdivisions in the catalogue (see e.g. Furumark 1972a:236-424).

The backbone of the catalogue — and accordingly the actual analysis — consists of detailed presentations of Mycenaean pottery. In other words, Furumark places his analytical emphasis on the presentation and categorization of his empirical evidence. In many respects, Furumark’s catalogue is similar to other large catalogues in Classical Archaeology that emphasize the detailed presentation of a large number of archaeological finds (see Morris 1994:36). However, it does also contain parts of a more generalizing character. That is, Furumark is not only analysing the style, but also the shape and the design of a type in itself. It is fruitful therefore to make a distinction in Furumark’s study between parts dealing with concrete specimens and examples mediated in detail, and parts in which a reasoning with a more general character occurs. As generalizing parts, I consider for instance conclusions drawn by Furumark about the pottery of a particular style. For instance, when he discusses the syntax of the decoration of Mycenaean III C:I pottery (a morphological category) and the establishment of the chronology of each category (Furumark 1972a:554-67).

The meticulous explication of the analytical process, the introduction of several notions — which for many of us actually are excessive in their detail (see Sherratt 2011:259; Blegen 1951; Wace 1953, 1956), the oscillation

between the minute details and general conclusions are all hallmarks of the agenda of logical positivism.

Furumark identifies three sequential steps in his heuristic model. The first step is “to establish a stylistic and chronological classification” (Furumark 1972a:XVII). The second step in the analysis is to use external — to ceramics — evidence in order to correlate the ceramic categories with respect to relative and absolute chronologies. The third level is the historical synthesis: “I shall deal with the Mycenaean pottery from a historical point of view, giving a continuous account of its development, ... and with the bearing of my results on the general history.” (Furumark 1972a:XVII). The three analytical steps mirror the intended division of *Mycenaean Pottery* into three volumes: Volume 1 “Analysis and Classification”, Volume 2 “Chronology” (Furumark 1972b), and Volume 3 “History”. The first and second volumes were published in 1941 and reprinted in 1972. A third volume of *Mycenaean Pottery* was published posthumously in 1992 (Furumark 1992). However, this was a completely different volume than the one promised by Furumark; it was edited by Paul Åström, Robin Hägg and Gisela Wahlberg and entitled “Plates”.

Mycenaean Pottery was ground breaking. It was only with Furumark’s publication that a nomenclature for Mycenaean pottery was established.

”Furumark said in his Preface that he regarded his work as ‘preliminary and provisional’; it has, nevertheless, been the Mycenaean ‘bible’ for nearly fifty years. The excavations and research of these years, however, now mean that, although Furumark’s work must still be used as a basic text, his study needs considerable revision.” (Mountjoy 1986:7)

As Penelope Mountjoy indicates the analytical taxonomy that was introduced in *Mycenaean Pottery* was considered as the common point of reference for further research on Mycenaean pottery (see also Sherratt 2011:257). The impact of *Mycenaean Pottery* is also confirmed by Mountjoy’s aim to revise Furumark’s taxonomy in order to accommodate for the new finds found after its publication. Furthermore, Furumark’s taxonomic scheme was also employed in studies of other categories of ceramics, for instance by Gisela Walberg in several studies of Minoan pottery (e.g. Walberg 1987). In other words, *Mycenaean Pottery* belongs to the highly influential studies that establishes the nomenclature of a field, like for instance Winckelmann’s taxonomy of ancient sculpture.

LOGICAL POSITIVISM

Logical positivism is a philosophical school that had a significant impact on scholarship during the twentieth century. This branch of analytical philosophy was introduced by the so-called Vienna Circle in the late 1920s. The characteristic feature of the agenda of logical positivism is that meticulous empirical observations are used as the foundation for deductive reasoning that produces knowledge of a more general relevance. Ultimately, the aim was to produce universal laws that would explain conditions by identifying cause and effects.

The Vienna Circle consisted of a group of scientists who were affiliated with the University of Vienna. They had regular meetings on a weekly basis. They had a common agenda in some matters, but they did also have different opinions about other matters. In addition to the core of scholars who attended the meetings regularly, it also attracted a wide variety of scientists from all over Europe (see Stadler 2007 for members and context). Members of the Vienna Circle introduced and promoted the notion that it was a significant group. *Wissenschaftliche Weltauffassung: Der Wiener Kreis* from 1929 by Rudolf Carnap, Otto Neurath and Hans Hahn (see Stadler 2012) is regarded as the intellectual manifesto of the Vienna Circle. It contains an outline of their philosophical agenda and it is, not least a conscious self-definition in relation to older and other philosophical traditions.

Alfred Jules Ayer's account of the agenda of logical positivism is regarded as authoritative, in part because he spent time with the Vienna Circle in 1936 and was one of the most ardent champions of logical positivism in Great Britain (Ayer 1959b). He presents an overview of the development and various branches of logical positivism as well as a comprehensive summary of the concerns of the Vienna Circle (Ayer 1959a:3-10). The foundational tenets of logical positivism are the rejection of metaphysics, the emphasis on the scientific method, and the notion that authentic or genuine scientific issues are only those that can be solved by scientific logical analysis or deductive inference (Ayer 1959a:8). This involved a particular emphasis on the analytical language and the ways that language, and various types of sentences, were employed in the analytical process. Language, syntax, was scrutinized according to the rules of analytical logics. Furthermore, the Vienna Circle regarded science as a unified endeavour. Therefore, the analytical logics of natural sciences — in effect, mathematics — were regarded as templates also for the social sciences and the humanities (Ayer 1959a).

A methodological resemblance between logical positivism and earlier traditional types of positivism is the emphasis on the direct empirical observations — often also called positive facts. However, these two branches of positivism diverge in regards to what the observations should amount to. In traditional positivism, observations constitute the foundation of categorization. Furthermore, scholars adhering to traditional positivism often refrain from drawing general deductions. That is, traditional positivism does not always encompass analytical steps of generalization. From a logical positivist point of view, this disqualifies traditional positivism as a metaphysical non-scientific practice. This was made clear by Rudolf Carnap, a founding member of the Vienna Circle, in the groundbreaking article “The Elimination of Metaphysics Through Logical Analysis of Language” (1959). Carnap used the term metaphysics for all types of discourses that did not meet the standards of scientific logical reasoning. He mentions explicitly traditional positivism as an example of metaphysics (Carnap 1959:77).

In other words, for the philosophers of the Vienna Circle logical reasoning is a prerequisite for science. This was also articulated by Carl

Hempel in the seminal article “The Function of General Laws in History” (1942). Hempel argues that it is necessary to use general laws in order to write history. In order to explain the particularities in our observations we need to draw on previous experience of human practices, or in the vocabulary of logical positivism to draw on general laws. In other words, a primary issue for Hempel is to explicate how scientific analysis proceeds from detailed observation to general conclusions. Hempel argued, like Carnap, that logical deduction is the foundational part of science.

Another defining issue for the logical positivists was the view of science as a unified field. Humanities, social sciences and natural sciences are similar and they should all be evaluated according to the same criteria. In practice, this meant that logics, and mathematics, were cast as theoretical and methodological templates. In the humanities, scientists should appropriate the methodology and scientific agenda of natural sciences. Accordingly, particularistic constraints endemic to archaeological and historical evidence were regarded as obstacles to be overcome. It was of utmost importance that also the humanities produced conclusions with general relevance and that research in the humanities was conducted in accordance with logical deductive reasoning.

CONTESTED POSITIVISM

Scholarship in the humanities was established as professional endeavour during the late nineteenth century. In several academic disciplines, the process of professionalization was associated with the establishment of specific methodological discourses that emphasized the meticulous management of the sources. For instance, in academic professional history, the source critical method that had been introduced by Leopold von Ranke was cast as a method associated with academic historians (see Ranke 1824a; 1824b; Novick 1988; Iggers and Powell 1990). Similarly, the development of a couple of foundational methods such as typology and stratigraphy facilitated the development of archaeology during the late nineteenth century (e.g. Montelius 1899). Methodological skills were perceived as the feature that distinguished professional history and archaeology from the practices of the amateurs.

Traditional positivism is accordingly scholarship that emphasizes, or even restricts, science to practices that pertain directly to the sources. These practices were explicated, but other parts of the analytical process were left un-theorized. Inductivist approaches — notoriously captured by the phrase “let the objects speak themselves” — are premiered in traditional positivism (see Mommsen 1990:137). This stands in contrast to logical positivism, which emphasizes deductive reasoning (see Ayer 1959a:8).

The notions of positivism and logical positivism are also contested. The members of the Vienna Circle had different opinions on various matters, and in some cases, it is disputed whether a scholar belongs to the group or not. For instance, Karl Popper is often regarded as one of the primary scholars of the Vienna Circle, not the least due to his introduction of the principle of falsifiability (Popper 1934), but his relation to the Vienna Circle was tense. Neither he, nor other members of the Vienna Circle regarded him

as a logical positivist (see Ayer 1959a:6). Furthermore, positivism was in use before the emergence of the Vienna Circle, and it denoted a theoretical perspective that differs from logical positivism. Despite the profound impact of the Vienna Circle its deployment of the term positivism did not eradicate or replace other usages; traditional positivism and logical positivism have continuously been used in tandem. This has generated a terminological confusion and it has occasionally been perceived as a problem. Later adherents of logical positivism have therefore proposed the replacement of positivism with empiricism. They argued that the notion of positivism is tainted by a “widespread misunderstanding” and the shift in terms would therefore remedy the situation (Parrini and Salmon 2003:1).

Similarly, the archaeologist Robert Preucel tried to establish a distinction between positivism and empiricism (Preucel 1991:18-19). He argued that logical empiricism should be associated with the first generation of the Vienna Circle and logical positivism with the second generation, and in particular with Carl Hempel and Karl Popper. Preucel bases his distinction on the fact that the first generation of the Vienna Circle did not explicate models for the analytical process; he associates logical positivism with deductive generalisations.

These two calls serve to remind us that notions are mutable and contested. However, neither of the calls arguing for a distinction between positivism and empiricism has had any significant impact in the scholarly community. Logical positivism continues to be the preferred denomination for the philosophical program of the Vienna Circle.

LOGICAL POSITIVISM AND ARCHAEOLOGY

Logical positivism had a wider impact in archaeology with the advent of processual archaeology. According to well-established historiographies of archaeology, processual archaeology was introduced as a new paradigm with the seminal article “Archaeology as Anthropology” by Lewis Binford (1962). Binford’s agenda mirrored partly the agenda of logical positivism. Like the philosophers in the Vienna Circle, he emphasized a methodological meticulousness, deduction, rules of logic, and the construction of universally valid explanations. Binford echoes for instance Carnap’s argument that analytical philosophy first and foremost is a method (Carnap 1959:77). Nevertheless, Binford was in particular influenced by Hempel’s notion of covering laws, or the deductive-nomological model (Binford 1972:18, 90, 115; Hempel 1942, 1965; see Preucel 1991:19-21; see above).

Binford’s appropriation of Hempel was followed by other archaeologists. Occasional references to Hempel, Carnap and Popper are widespread among processual archaeologists. However, the amount of references to the publications of the Vienna Circle are surprisingly few. In the end, it seems that internal specialization and acknowledgements of other archaeologists were more important than references to analytical philosophers in for instance the works of David L. Clarke (1968) and Colin Renfrew (1972:15-26). Processual archaeologists tend to indicate their engagement with logical positivism in a very limited way. Furthermore,

method constituted an integrated part of the analytical models each processual archaeologist introduced or used in their studies. However, they seldom engaged with the philosophical underpinnings of their heuristic models.

The agenda of logical positivism was only appropriated in part by processual archaeologists. A governing discourse shared by logical positivists and processual archaeologists is the aim to establish value-free notions and terminology (see Carnap 1959; Roberts and Vander Linden 2011). Another feature of logical positivism that was adopted in processual archaeology was the heuristic separation of the analytical process in several sequential steps. That is, the actual process of inference was made explicit and categorized. An initial formulation of questions was separated from the actual observations, which in turn was separated from the deductive process of drawing conclusions. The last analytical step was crucial for logical positivists (see above), and it received much attention also by the processual archaeologists.

This entailed the utilisation of the covering laws that were introduced by Hempel (see above). The notion of the covering laws has two meanings in logical positivism: first, they are used to explain the evidence, and, second, the formulation of new covering laws is one of the aims of science. The adoption of covering laws in archaeology was marred with problems. On one hand, covering laws are rather vague and often based on common sense. For this reason, observations of past behaviour articulated as scientific laws tend to be rather pointless. On the other hand, the universal laws which archaeologists formulated as the result of logical reasoning based on direct empirical observations were nothing else than common sense clothed in scientific vocabulary. This was criticized by archaeologist. In the words of Kent Flannery, the generalizations that were presented, as laws were only trivial “Mickey Mouse laws” (see Flannery 1973:51; 1982). As a remedy, of sorts, to this problem archaeologists focused their efforts on the middle-range level. That is, a new level was chiselled out between the detailed observations and the universal generalizations. The middle-range level consists of covering laws that are culturally conditioned and should be distinguished from the universal claims of covering laws.

In other words, the epistemology of processual archaeology was founded on logical positivism. However, the appropriation of the philosophy of the Vienna Circle was adapted in accordance with the agenda of processual archaeology.

Archaeological histories

Furumark was inspired by contemporary analytical philosophy when he constructed his analytical model. However, he did not copy the agenda of logical positivism in a straightforward sense. The influence of logical positivism on Furumark’s scholarship was limited to the explication of the analytical process of inference, from minute details to general conclusions. Furumark placed logical positivism within a traditional positivist

framework; this mirrors the subordinate position archaeology has to history in Furumark's scholarly agenda. The bulk of his production was in contrast founded on culture historical archaeology and traditional positivism.

ARCHAEOLOGY IS HISTORY

Furumark's scholarly publications cover a wide variety of topics in classical archaeology and ancient history. Although his major contribution to the advancement of classical archaeology was his studies of Mycenaean pottery, he nevertheless regarded archaeology as an instrument subordinate to history. That is, for Furumark archaeology was a historical science that contributed to explain the past. The aim of archaeology "must be a reconstruction of historical relations what is commonly and conveniently called the origin and development of the material but what is really the reflexion of processes in the human mind." (Furumark 1972a:2)

As mentioned above, Furumark never published the third volume of *Mycenaean Pottery* in which he indicated that he would produce a historical synthesis. However, he did produce historical accounts in other publications. It is important to keep in mind that Furumark did not change his views on epistemological matters in any substantial way during his career. That is, there are no signs of an epistemological break between, for instance, the early and the late writings of Furumark. In contrast, Furumark did not only maintain the same epistemological perspective throughout his career but he continued also to express a sense of pride for his early works late in life.² It is therefore reasonable to view the historical synthesis Furumark produced in other publications than *Mycenaean Pottery* as similar to the one he intended to publish, at least on an epistemological level.

A CULTURE HISTORICAL FRAMEWORK

In general, Furumark pursued themes that are characteristic of traditional culture historical archaeology in his research. The epistemological anchoring in traditional positivism is evident in his scholarly production in several sub-fields of classical studies. Furthermore, his wide range of publications for a non-academic public were also permeated by a traditional ancient historical perspective. In books such as *Redan de gamla grekerna* (1961) and *Hellener och Barbarer* (1962) he presents accounts of ancient Greece which serve to further enforce the exemplary features of the ancient Greek culture.

Nevertheless, two of Furumark's publications are particularly relevant for this article since they contain historical accounts based on empirical observations of archaeological materials: *The settlement at Ialysos and Aegean history, c. 1550-1400 B.C.* (Furumark 1950), and *Swedish excavations at Sinda, Cyprus: Excavations conducted by Arne Furumark*

² For instance, he was proud to send a signed copy of *Några metod- och principfrågor inom arkeologien* (Furumark 1966) to a colleague in 1981. See correspondence in Box 2 634 A:2 in Furumark's archive.

1947-1948 (Furumark *et al.* 2003) — which was published posthumously by Charles Adelman, Paul Åström and others. Both account for archaeological excavations with material from the Late Bronze Age.

In *The settlement at Ialysos and Aegean history, c. 1550-1400 B.C.* Furumark re-examines the finds excavated by the Italian excavations at Ialysos on Rhodes. He begins with a meticulous analysis of the ceramic finds (Furumark 1950:152-77). This is then used for an account of the history of the settlement (Furumark 1950:177-83). The archaeological finds are used to categorize the settlement as part of the Minoan civilization. In other words, Furumark's reasoning is underpinned by the equation between the distribution of material culture with the distribution of the people associated with it. This is an epistemological cornerstone in culture historical archaeology (see Childe 1929:v-vi; Siapkas 2014). The change of the material culture that occurred in association with a destruction layer is explained by an invasion by Mycenaeans (Furumark 1950:177-83). That is, foundational changes in the archaeological record are explained with the arrival of a new people. This was the preferred choice of explanation in culture historical archaeology.

The *Swedish excavations at Sinda* is similar on an epistemological level (Furumark *et al.* 2003). Paul Åström who authored the historical account emphasized that he follows a framework established by Furumark and the Cypriote archaeologist Porphyrios Dikaios in 1956 and 1957. According to their model, which combined written and archaeological sources, the changes in the archaeological record was due to

“two waves of immigrations, the first by Greek settlers, probably via southern Anatolia, the second by the Sea Peoples (of Syro-Palestinian origin) corresponding with the raid during the time of Ramses III. While Sinda was subsequently abandoned, Proto White Painted ware appeared at Enkomi corresponding with Furumark's Mycenaean III C1c and showing an admixture of Cretan and Rhodian elements, suggesting a second Greek (Achaean) immigration via the islands.” (Furumark *et al.* 2003:71)

In other words, the history of the Late Bronze Age on Cyprus is explained with the migrations of peoples. Furumark did in turn rely on the conclusions of Einar Gjerstad in *The colonization of Cyprus in Greek Legend* (Gjerstad 1944). Gjerstad had analysed Greek legends — i.e., myths — in order to illuminate the historical reality of the Bronze Age.

In Furumark's historical accounts, the primary epistemological tenet is the association of the distribution of the archaeological material with the distribution of a people. For instance, once a type of pottery is recognized as typical for the culture of a people then the process is inverted and when the same type of pottery is found in new archaeological sites it is used to infer the presence of that people (see Siapkas 2014, 69; Childe 1929, v-vi). In other words, the generalizations that Furumark draws from the scrutiny of the archaeological finds adhere to fundamental tenets of culture historical archaeology and traditional positivism.

A MISSING *HISTORY*

The promised third volume *Mycenaean Pottery: A History* is an enigma, which merits a comment. There are some clues in the archive that indicate that Furumark had written at least large parts of a manuscript.³ In a copy of a letter to F. H. Stubbings at Cambridge, Furumark explains that “the greater part of a MS was written in 1941, but I was compelled to postpone its publication for several reasons”. The letter is undated, but from other information it contains we can date it to after 1944 and before 1950. The existence of a manuscript for *History* is also indicated by a letter to Furumark from the publisher Almqvist & Wiksell, dated to 6th March 1942. In it, they wonder if Furumark still plans to publish *History* in accordance with the bid that they had sent to him 29th October 1941.

Furthermore, a kind of to-do-list dated to 20th April 1944 that is preserved in the archive mentions that he must finish his planned publication *Aegean Studies* soon. This should consist of new studies and re-workings of parts of *History*. In other words, at some point between 1941 and 1944 Furumark abandoned the plan to publish *History*. This is also confirmed by a list of his publications from 12th September 1951 in which there is no mention of *History*. There are no traces of the actual manuscript to *History* preserved in the archive. This is noteworthy since Furumark seems to have preserved most of his papers, often in several copies.

Situating Furumark

Furumark did not employ a fixed theoretical framework. As already mentioned he shaped a theoretical perspective that was eclectic and included the adaptation of tenets from different paradigms. Furumark did not abandon traditional positivism and culture historical archaeology; instead, he endorsed fundamental theoretical assumptions from this paradigm. Furumark’s model builds on the typological method that was gradually developed by several Scandinavian archaeologists during the nineteenth century, for instance Oscar Montelius (1899). That is, they track minor changes on a category of artifacts in order to date them, and trace the evolution of the category. However, there are also differences between these two taxonomic approaches. For instance, Montelius explicated the typological method by citing examples (see Montelius 1899), while Furumark instead explicated his method in abstract terms (Furumark 1972a:1-10). The difference in style between Montelius and Furumark is intriguing since it suggests also an epistemological distance between the two scholars.

Another source of inspiration for Furumark was the scholarship of Friedrich Matz (Matz 1928; Furumark 1972a:112-13; 1966:34-35; Schäfer

³ All documents mentioned in his part of the article are preserved in Box 1 634 A:1 in Furumark’s archive.

1993:121). Matz belonged to a group of German classical archaeologists denominated *Strukturforschung* (Schweitzer 1938; for an assessment of *Strukturforschung* see Wimmer 1997; Altekamp 2017:307-09). They emerged during the 1920s and were influenced by academic art history. In particular, they found guidance in the methodology formulated around the turn of the century at the University of Vienna.⁴ Furumark articulates both praise and criticism against *Strukturforschung*. On one hand, Furumark mentions that his stylistic analysis owes much to Matz' model (Furumark 1972a:112-13; Furumark 1966:34-35) and that there are clear similarities with Schweitzer's studies (e.g. Schweitzer 1938; Furumark 1966:39). On the other hand, Furumark criticized for instance that Matz associated stylistic traditions with races. *Strukturforschung* was influenced by Nazi ideology and the deep structures they identified were associated increasingly with immutable traits of races (see Altekamp 2017:307-09). Furumark draws a line between the essentialism of culture historical archaeology and essentialism with used to legitimise the Nazi ideology (Furumark 1966:38).

Furumark constructed his taxonomy through detailed analysis of pottery. The typological or stylistic method Furumark employs had been in use in archaeology and classical archaeology earlier. However, it is noteworthy that *Mycenaean Pottery* was criticized by other classical archaeologists for "excessive pigeonholing" of Mycenaean pottery which "is unwise and unpractical" (Wace 1956:127). In addition, he was also criticised for ignoring archaeological, in particular stratigraphic, evidence in his study (Blegen 1951:23; Wace 1953:89). There is a tension in classical archaeology between archaeological and art historical discourses. Wace and Blegen represents a more archaeological approach than Furumark in this context. Furumark's "excessive" categorization led to revisions of his taxonomy once stratigraphic data became available (see Wace 1956; Sherrat 2011)

Furumark's epistemology is permeated by traditional positivism. Yet another tenet that Furumark articulated was a caution against drawing too far-fetched conclusions. On several occasions, Furumark articulates a criticism against other scholars since they make too far-fetched theories and interpretations of the evidence. For instance, although Furumark finds Montelius' typological method rewarding, he nevertheless dismisses Montelius' diffusionist model for the evolution of European prehistory. According to Furumark, Montelius did not pay sufficient attention to the chronological discrepancies of the finds while investing too much meaning in morphological similarities (Furumark 1966:29-30). Another illustration of this tenet is Furumark's ambiguous relation to Matz' scholarship (see above).

The heuristic cautiousness, which Furumark articulates, is at odds with the agenda of logical positivism, which emphasizes that science, should

⁴ For instance Alois Riegl and Heinrich Wölfflin. This is a second group of scholars from Vienna mentioned in this article, and it should not be confused with the above-mentioned Vienna Circle.

encompass a deductive heuristic step. Furthermore, Furumark's objections are articulated as a criticism against too general conclusions. This tenet in Furumark's work is one of several indications that he adhered to traditional positivism. This kind of restricted positivism — that is, the relevance of each piece of evidence is viewed to be very restricted, and we should therefore refrain from drawing conclusions and introducing models unless we have very solid evidence — became widespread during the late nineteenth and early twentieth century. In some ways, this is a rigorous form of source criticism. Every analytical inference adds a new layer of uncertainty according to this view. This tenet had adherents in several academic fields. For instance, the French historians Charles-Victor Langlois and Charles Seignobos (1898), the Italian historian Ettore Pais (1906) and the Swedish historian Lauritz Weibull argued in similar ways against inferences with a too high degree of generalisation. Weibull articulated this in a declaration of principles for the new academic journal *Scandia* founded in 1928.⁵ Pais did share a similar view and he took the consequence of this. In several of his publications he refrained from writing history — a proper narrative — and focused instead on source critical problems which he addressed in appendixes (e.g. Pais 1906; see Ceserani 2011:223-29).

If we situate Furumark within this tenet of positivism then it is tempting to view Furumark's failure to produce *Mycenaean Pottery: A History* as intentional rather than accidental. That is, like Langlois and Seignobos, Weibull, and Pais, Furumark would find a history along the lines of logical positivism to be an epistemological oxymoron.

Furumark was nevertheless also inspired by analytical philosophy and logical positivism. The heuristic model that he introduced is founded on several tenets of logical positivism. As mentioned, archaeologists who find logical positivism rewarding tend to make very few and cursory references to their non-archaeological influences — this is evident in the works of Furumark. He never mentioned any of the members of the Vienna Circle explicitly. However, he makes one cursory mention of the Swedish philosopher Axel Hägerström (Furumark 1966:46-47).⁶ Hägerström was active at Uppsala University and cultivated a variety of logical positivism. We should keep in mind that logical positivism was a widespread international network that spanned across large parts of Europe, including Uppsala (see Strang 2010). The influence of Hägerström on Furumark's epistemology is however hard to pinpoint in detail. Furumark mentions that Hägerström had introduced the notion of objective categories. This was of

⁵ His statement in Swedish: "En forskning, som inte bygger på historiska fakta, framvuxna ur ett kritiskt siktat material, utan rör sig på det lösa förmodandets och den romantiska hypotesens gungfly, skapar inga vetenskapligt hållfasta resultat. Denna tidskrifts strävan är en rekonstruktion vilande endast på säkra utgångspunkter." For the quote and an introduction to Weibull's epistemology and the heated debates about it, see Svenstrup (2009).

⁶ Furumark's familiarity with Hägerström's philosophy is also confirmed by Carl Nylander. Nylander mentions this both in an obituary (Nylander 1983:35) and in personal communication (Nylander, personal communication 2017-04-02).

course valuable to Furumark considering that he strived to identify objective taxonomic principles through his heuristic model.⁷

Conclusion

The work of Furumark merits attention since it is an illuminating example of twentieth century epistemology. Furumark's epistemology does not comply with the archaeological paradigms that we commonly use to conceptualize twentieth century archaeology (e.g. Trigger 1996). The main part of Furumark's scholarship is founded on traditional positivism and culture historical archaeology. Several historical syntheses as well as catalogues and categorizations of the Mycenaean pottery adhere to tenets of culture historical archaeology. However, Furumark did also embrace tenets of logical positivism in his work. The latter became the philosophical foundation for processual archaeology. In this sense, Furumark was ahead of his time since he engaged with contemporary philosophy, which classical archaeologists seldom do. Furumark's epistemology illustrates, in other words, that the heuristic models we use to conceptualize theoretical perspectives occasionally fail to capture the nuances of the work of a single scholar. Furumark did, like many of us, appropriate bits and pieces from various sources that he negotiated in order to produce his scholarship. In other words, there are tensions and contradictions in the epistemology of Furumark.

A conceptualization of scholarship as fragmented and contradictory is in line with a nascent understanding of scholarship that emphasizes these aspects, rather than the categorization of scholarship into ordered monolithic paradigms (see Hillerdal and Siapkas 2015; Siapkas 2017). Furumark's epistemology can thus serve to confirm this conceptualization of scholarship as a negotiated mixture of appropriated ideas, notions and methods.

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⁷ Hägerström was a controversial public figure in Sweden, but this did not affect his standing as a philosopher in academia.

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