

Connecting crafting communities: reconstructing interactions between communities in and out of Cyprus in the early third millenium BC Hadjigavriel, M.

#### Citation

Hadjigavriel, M. (2025, May 22). Connecting crafting communities: reconstructing interactions between communities in and out of Cyprus in the early third millenium BC. Retrieved from https://hdl.handle.net/1887/4246917

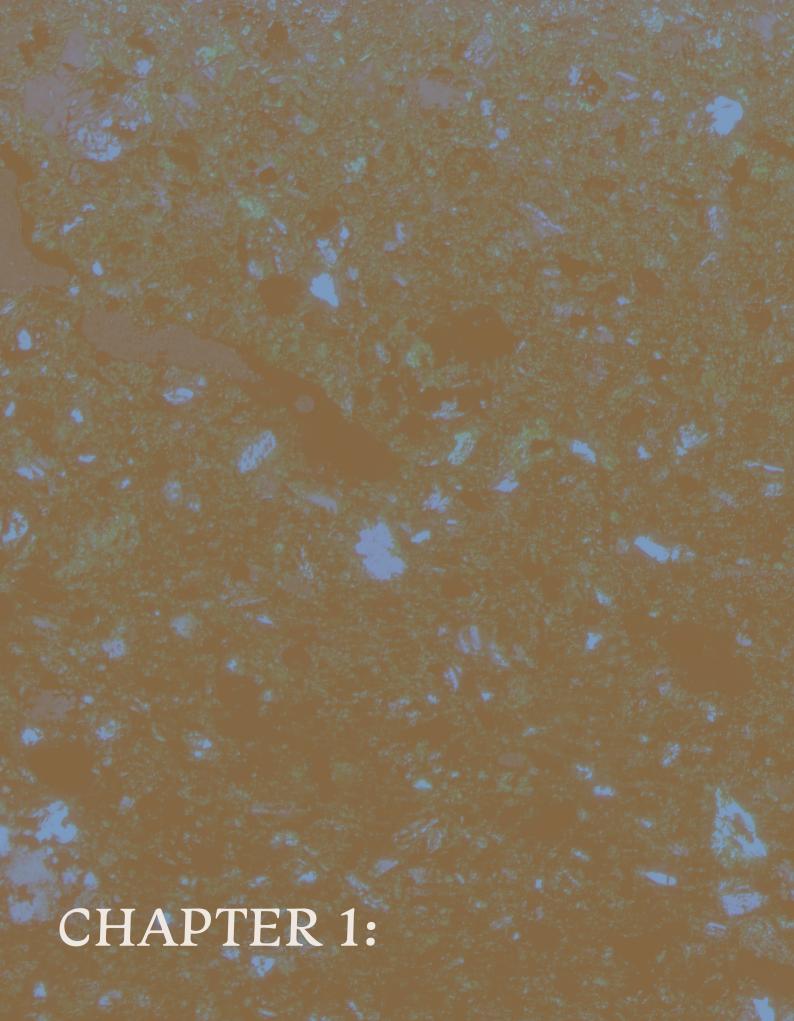
Version: Publisher's Version

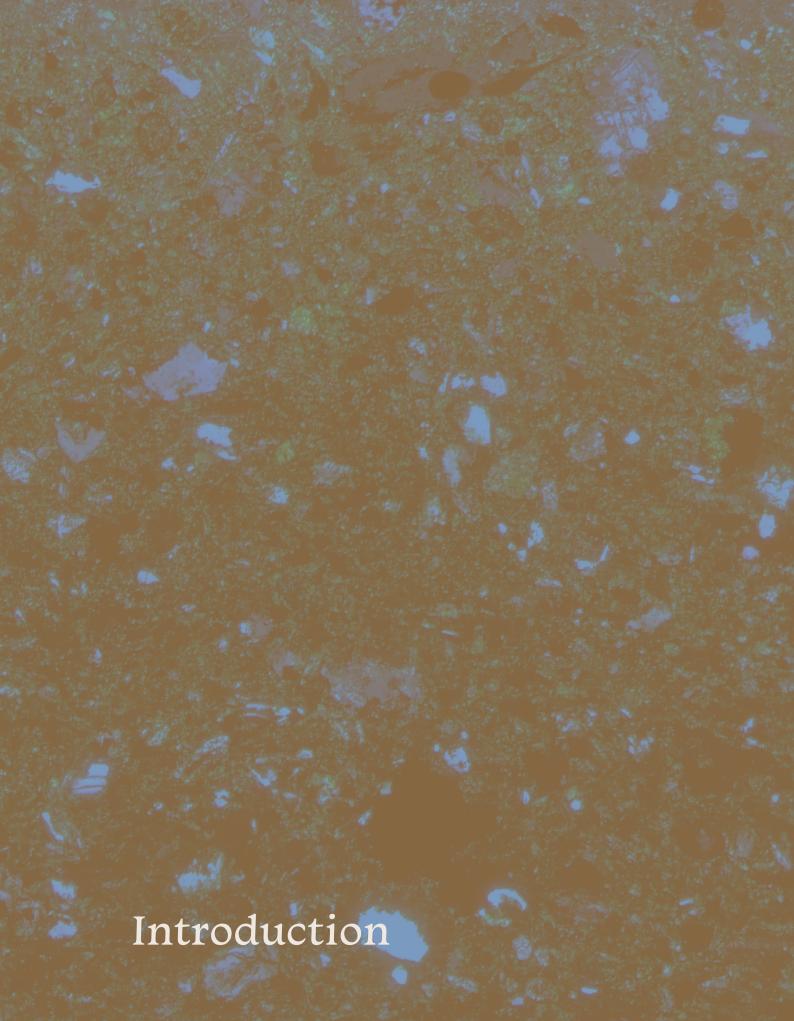
License: License agreement concerning inclusion of doctoral thesis in the Institutional

Repository of the University of Leiden

Downloaded from: <a href="https://hdl.handle.net/1887/4246917">https://hdl.handle.net/1887/4246917</a>

**Note:** To cite this publication please use the final published version (if applicable).





### CHAPTER 1 — Introduction

"The study of Cyprus' prehistoric and early historic past has been dominated by a tendency to see the island's social, economic, cultural and even artistic development as the results of migrations, invasions, colonization, diffusion, or other external factors, whether Near Eastern or Aegean (or both) in origin" (Knapp, 2008, p. 1). This statement still holds true, especially for the third millennium BC. This research aims to investigate how ceramic types and technologies changed in Cyprus during the Late Chalcolithic (ca. 2900-2400 BC) and what this can tell us about intra- and extra-insular interactions at the time. The focus is primarily on the interactions between communities within Cyprus, and secondarily with communities in Cilicia, Anatolia, and specifically the site of Tarsus-Gözlükule.

The issues outlined above are investigated through the analysis of two main groups of artefacts:

- 1. The main Cypriot pottery types in the Late Chalcolithic, with an emphasis on the characteristics that seem to have been influenced technologically by interactions with Anatolia.
- 2. All the known Cypriot pottery and other objects found in Anatolia and vice versa during the early third millennium BC.

## 1.1. Background and State of the Art

It has been argued that both insularity and connectivity are demonstrated throughout Cypriot prehistory. Due to its central location in the Eastern Mediterranean, Cyprus has frequently been part of networks of mobility, interaction, and exchange (Knapp, 2013, p. 35). This dual characteristic of being both isolated and interconnected is reflected in the material culture and technological changes observed on the island, particularly during the Late Chalcolithic period (ca. 2900-2400 BC). Traditionally, the Cypriot Chalcolithic has been viewed as a period of relative isolation. For the third millennium BC, researchers often place emphasis on the transition from the Late Chalcolithic to the Bronze Age, which is marked by the Philia Phase (ca. 2400-2350/2250 BC), a period characterized by several changes, such as novel pottery types and agricultural practices (Webb & Frankel, 2007). The Philia culture has often been reconstructed as representing migrants from the mainland, and debates centre on how these newcomers interacted with the local population. For example, in the 1960s, Dikaios (1962) argued for the peaceful migration of 'superior' Anatolian populations replacing the 'inferior' Cypriot culture. In the 1980s and 1990s, Held ascribed the 'delayed' emergence of Bronze Age on the island to 'cultural retardation' due to insularity, while Knapp and Manning attributed it to internal sociocultural evolution and competition (Held, 1989; Manning, 1993; Knapp, 1994).

According to Peltenburg, Chalcolithic culture was already changing when migrant populations arrived, and after some time of co-existence, the Philia culture eventually supplanted the Chalcolithic one. Following this line of thought, Bolger presented indications of complex regionalism, interactions and emerging complexity already in the Late Chalcolithic. Recently, Bolger and Peltenburg interpreted the emergence of the Early Bronze Age as the result of interactions between regional cultures and Anatolian migrants (Peltenburg, 2007; Bolger, 2013). Knapp suggested that the interactions between the Philia and the Chalcolithic cultures reflect hybridization processes, where foreigners and locals mingled, lived together, and influenced each other (Knapp, 2013). Conversely, Frankel and Webb have considered the Philia an entirely foreign phenomenon, a new culture that was brought to the island by Anatolian migrants, while suggesting that the Philia Phase extends backwards chronologically, overlapping with the Late Chalcolithic (Webb & Frankel, 2007). The nature and scale of cultural interactions between Cyprus and Anatolia thus remains contested and poorly understood.

### 1.2. Research Questions

This study contributes to this debate of how Cyprus was connected to other regions by employing an innovative approach to ceramic assemblages of the Chalcolithic. Pottery has been central when studying interactions between the island and the surrounding mainlands, as technological developments in pottery production during the Late Chalcolithic, such as red monochrome burnished surfaces and relief decoration, have been interpreted as extra-insular influences (Peltenburg, 2007; Bolger, 2007; 2013). Similarly, novel vessel shapes such as jugs with cut-away spouts, and surface treatments such as white-filled incised motifs, have been interpreted as reproductions of Anatolian ceramics during the Philia Phase (e.g. Webb & Frankel, 2007). Anatolia is prominent when discussing extra-insular interactions during the third millennium BC, due to the presence of Cypriot pottery in Cilicia, similarities in pottery production and other elements of the material record, while indicators for contacts with the Levant are scarce. So far, Cypriot Chalcolithic and Philia Phase pottery outside Cyprus has only been found in Cilicia, in Tarsus-Gözlükule and in the Antalya region, in Hacımusular Höyük (Goldman, 1956; Mellink, 1991; Özgen et al. 2021). This, in combination with its geographical proximity to the northern coast of Cyprus, makes Cilicia the ideal region for the assessment of extrainsular interactions in the third millennium BC.

This study explores the nature of connections between Late Chalcolithic communities within Cyprus and external interactions with Cilicia, through the lens of the exchange of ceramics and pottery technologies. The common denominator of previous studies on the reconstruction of interactions in the third millennium BC is that ceramic objects and technologies were perceived as self-evident proxies of trade or migration. Therefore, the emphasis was on the movement of ceramics and technologies, rather than on their production. This study, instead, combines technological and assemblage analysis, to investigate pottery production on different parts of the island, and how these might have been influenced by Anatolian pottery traditions. Through a critical examination of the evidence from Cilicia and Cyprus, it challenges the assumption that contacts were one directional.

The main research question is:

What can pottery assemblages of Cyprus tell us about the interactions between communities within the island and with communities in Anatolia in the early third millennium BC?

More specifically:

- How did pottery technology and organization of production in Cyprus develop during the Late Chalcolithic?
- To what extent were ceramics circulated and exchanged among population groups from different regions in Cyprus?
- To what extent were ceramics circulated and exchanged between Cyprus and Anatolia in the early third millennium BC?
- To what extend did pottery technologies and characteristics transfer from Cyprus to Anatolia and vice versa?

# 1.3. Theoretical Framework: Pottery as an Indicator for Interactions between Communities

This thesis presents a theoretical and methodological framework for the study of pottery and the reconstruction of interactions. First, how connectivity in Mediterranean and island archaeology has been studied is considered, along with the history of research for pottery production and technologies in Prehistoric Cyprus, and how interactions within and outside the island during the third millennium BC have been reconstructed. The significance of pottery in the archaeological record and the various approaches to its study, particularly the *chaîne opératoire* approach, are then presented, as they are central to this study. Building on several ethnoarchaeological and archaeological studies which focus on the role of pottery as a proxy for community interactions, a theoretical and methodological approach is constructed.

### 1.4. Dataset

The comparative analysis of pottery technology focusses on key-sites from Cyprus, dating between ca. 2900 and 2500 BC. These assemblages are analysed through macroscopic, mineralogical and compositional methods which include the use of ceramic thin section petrography, and chemical analysis with a handheld XRF (hhXRF). The focus is on Late Chalcolithic pottery from four sites in Cyprus: Chlorakas-Palloures, Kissonerga-Mosphilia, Ambelikou-Agios Georghios, and Politiko-Kokkinorotsos. These sites were selected based primarily on their geographic locations in order to facilitate a comprehensive investigation of interactions between communities on the island. Sampling of sites spread across the island was imperative to capture a broad spectrum of pottery styles and technological practices, reflecting the varied influences and exchanges occurring during this period. The relevant pottery types from each site are studied in detail to observe and record their morphological characteristics, focusing on several key aspects: clay procurement and preparation, vessel forming techniques, surface treatments, colours and decoration, and firing techniques. In addition, ceramic thin section petrography is employed to provide detailed mineralogical and technological characterizations of the chosen samples. This method allows for the identification of micro-morphological characteristics which may indicate the provenance or specific manufacture technologies used in the production of these ceramics. These methods are complemented by the chemical characterisation of the selected samples with a hhXRF, to cross-check and assess the results of the ceramic thin section petrography. Subsequently, a pottery dataset from Tarsus-Gözlükule is studied macroscopically, and it is paired with information on well-published studies on ceramic assemblages of the Philia Phase (ca. 2400-2350/2250 BC), in order to reconstruct interactions with Cilicia during the third millennium.

## 1.5. Methodology

This study integrates two levels of analysis:

- a. a systematic overview of pottery technologies and intra-insular interactions and;
- b. an investigation of extra-insular interactions, with a focus on what kind of pottery and other artefacts were found where (exports, imports, and ceramics showing technological influences).

a. Pottery Technology and Intra-Insular Interactions: Reconstructing the Exchange of Craft Technologies

Although the earliest known imported vessel in Cyprus have been retrieved in an Early to Middle Bronze Age context (ca. 2000-1650 BC), various scholars have proposed that the red and black burnished wares of the Late Chalcolithic might indicate much earlier relations with the coeval Red Black Burnished Wares of Anatolia (Bolger, 2007; 2013; Bolger *et al.*, 2014; Peltenburg, 2007; 2018). Additionally, the Philia Red Polished Ware, the principal ware of the Philia Phase, shows clear influences from Anatolian Early Bronze Age wares in its shapes/morphology and technological characteristics. To better understand these relations, this research will focus on pottery production technologies.

The above-mentioned wares from Cypriot and Anatolian sites are studied macroscopically and petrographically in order to identify possible similarities in raw materials, forming techniques, surface treatments, morphologies and styles in order to facilitate the reconstruction of interactions between ancient potters. Gosselain (2018), drawing upon various ethnographic studies, argued for three types of relations between potters, and that these can be traced in different aspects of the pottery production processes. First, clay extraction, processing, and firing are usually conducted on a communal basis. Similarities in clay preparation and firing may point towards cooperation networks and indicate casual interactions that take place in shared settings. Second, the shaping and roughing out of the vessel are processes that require specialized skills that are gradually acquired by learning from another potter. These motor habits are not usually visible on the final product, and result from long-term and direct face-to-face interactions between potters. Third, preforming, decoration, prefiring, and post-firing are processes that are visible on the pot surfaces and the techniques can be reproduced by ephemeral/mediated interactions.

Building on various studies which are presented in Chapter 4, including the one by Gosselain, this study combines published data, macroscopic analysis, mineralogical and compositional analyses of ceramics (ceramic thin section petrography) and chemical/elemental analysis of ceramics (hhXRF) to investigate several aspects of pottery production technologies, envisioning the following three types of interaction:

- 1. The pottery from Cyprus was subjected to a macroscopic analysis, leading to the selection of 81 samples for laboratory examinations. These samples represent the main Late Chalcolithic wares from each site, and the most common vessel types. This examination involves studying the mineralogy, composition, and technology of the samples using ceramic thin section petrography, while the chemical and elemental composition is analyzed with hhXRF. The resulting data are then subjected to Principal Component Analysis (PCA), a statistical analysis employed by archaeologists to reconstruct compositional groups within a dataset. By investigating clay procurement and preparation through these methods, and identifying clay sources, it becomes possible to determine whether the pottery was produced in the same region and whether there was an exchange of ceramics between different regions.
- 2. The study also explores vessel forming techniques, vessel shapes, and firing at the macro level through a morphological analysis conducted via macroscopic analysis, accompanied with data from thin section ceramic petrography, and published data. This examination can provide insights into long-term interactions and shared pottery technologies within and between communities, helping to understand whether potters were mobile between communities.
- 3. Lastly, the investigation of vessel shapes, surface treatments, and decoration through macroscopic analysis, ceramic thin section petrography, and published data reveals visible pottery characteristics that can be imitated. This suggests mediated interactions, indicating that people and objects circulated from one site to another.

b. Investigating Extra-Insular Interactions: Tracing the Exchange of Objects & Technologies

Currently known Anatolian objects imported into Cyprus during the time period in question are discussed, such as a copper axe found at Chlorakas-*Palloures* (During *et al.*, 2018; 2021). Overall, very few third millennium BC Cypriot sherds have been found outside the island, in Cilicia, and exports are quite rare. Such objects come from a handful of well stratified settlement contexts or burials. For this thesis, the data are compiled in a database, and include: the type of object, technological properties, morphological properties, archaeological context and possible provenance. Additionally, the pottery reference collection from the Tarsus-*Gözlükule* was studied macroscopically, to assess the main characteristics of the local pottery, but also to evaluate the assumed Cypriot imports. This is augmented with information from prior publications, to better reconstruct the interactions between Cyprus and Anatolia in the third millennium BC.

### 1.6. Structure

This study starts with an overview of the archaeology of Cyprus and Cilicia in the third millennium BC, which is presented in Chapter 2. The pottery from both regions is discussed in Chapter 3 with an emphasis on the pottery from the sites which are the most relevant for this research, to provide an in-depth understanding of pottery production and consumption practices in Cyprus and Cilicia during the third millennium BC. Subsequently, theories and methods on connectivity, insularity, cultural interactions, technological mobility, and pottery technologies as indicative for interactions are presented in Chapter 4, along with the theoretical and methodological framework developed for this thesis. The macroscopic analysis of pottery from Cyprus is presented in Chapter 5. The archaeometric analyses of the Cypriot dataset and the results are presented in Chapter 6. The dataset from Tarsus-Gözlükule is presented in Chapter 7, alongside the published data, and is compared to the Cypriot dataset, to investigate extra-insular interactions. Lastly, Chapter 8 presents the discussion and conclusions of this study.