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The application of pottery attribute analysis: A case-study from the Neolithic complex of Kordin, Malta

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ABSTRACT

The Late Neolithic of the Maltese Islands is constituted by a complex megalithic landscape of aggregation sites above and below ground. A focus on these 'temples' has dominated the debate. In particular, a functional approach to technology has resulted in restricted ceramic typologies seen as largely secondary to 'megalithic society.' While correlated with available radiocarbon dates and stratigraphy, the existing typology is primarily concerned with vessel shapes. To date, there has been no attempt to investigate the tools and motor actions used to produce pottery. This paper explores this debate through the case-study of the Kordin cluster, focusing on an attribute-based approach to the ceramic repertoire. The Kordin group originally consisted of three temple complexes, of which only one survives. This paper examines all surviving material, curated at the National Museum of Archaeology (Valletta), paying particular attention to ceramics. The analysis of ceramics identifies the range of tools and motor actions used in production using a statistically justifiable method. The results show the range of technological actions used throughout the Late Neolithic, thus providing a more complete picture beyond megaliths.

1. Introduction

The Late Neolithic of the Maltese Islands is characterized by large megalithic complexes created between 3600 and 2500 BCE in a slow process of accretion. They are distributed across both islands, generally found in proximity to agricultural plains and sources of water (Grima, 2005). Layouts of these buildings vary considerably, although they all have a series of apses, enclosed spaces and larger spaces for bigger groups of people. Conventionally, they are designated as temples in archaeological literature. They served as aggregation sites and have traces of ritual and mundane activity. Some temples remained fairly small, while others (for example Tarxien) slowly grew into a very large complex (Fig. 1). The Neolithic and Bronze Age have yielded large quantities of ceramics, although production sites remain elusive. The majority of Neolithic ceramics are from these aggregation sites, which also contain other materials including stone tools, figurines and animal bones.

The approach to ceramics and other finds has been very much secondary to the perceived importance of buildings. This paper builds on previous work by the author (Vella Gregory, 2017) to refocus approaches to Maltese prehistory. First, it offers a long overdue approach to ceramics by employing attribute analyses. Second, non-ceramic finds are included in this study and considered as part of the biography of aggregation sites. Third, these results are used to discuss wider implications for the study of technology in Mediterranean prehistory by systematically applying single occurrence attribute analysis for motor actions and tool identification, on body and rim sherds. This paper focuses on the use of identified tools and corresponding motor actions to minimize bias in generating the highest level grouping of statistically justifiable attribute clusters. Furthermore, it demonstrates how to apply this approach to a dataset and this can be replicated elsewhere. It moves beyond broad static categories such as 'impressed' ware, a common descripted in Mediterranean archaeology, and focuses on tools and techniques.

The case-study presented is the multi-period aggregation site of Kordin. This study is based on archival research and consists of a thorough re-examination of all extant surviving material, including ceramics and other remains, museum index cards, unpublished notes and published data from various excavations and other studies. Currently curated at the National Museum of Archaeology in Valletta, these materials remain a central resource for prehistoric studies. To date, pottery has tended to be viewed as a supporting act to the wider archaeological picture, which places abundant focus on megalithic structures (Vella Gregory, 2017). This paper explores the potential of pottery for giving a wider understanding of the material culture and technology.

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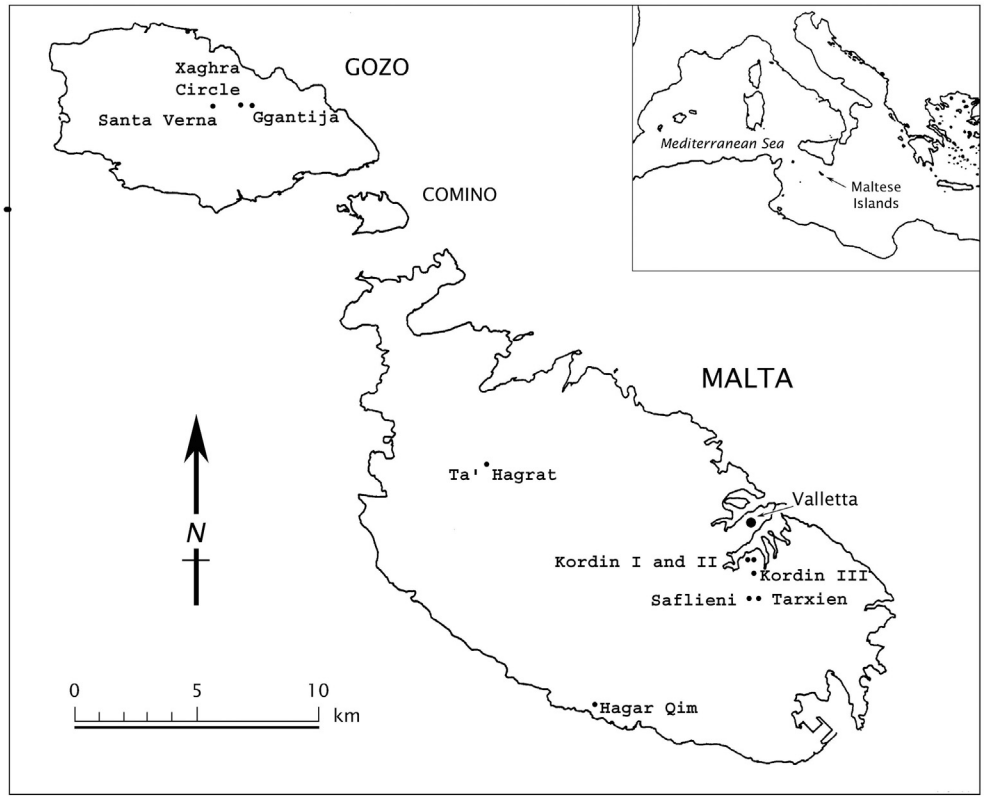

Fig. 1. Map showing the location of the Maltese Islands and sites mentioned in the text. (Outline map courtesy of Nicholas Vella.)

2. The Kordin complex

The Kordin complex consists of three temples in one site, dating to at least 3600 BCE and expanded over time (Table 1). While temple sites are known in the literature as single entities (for example Kordin, Tarxien, Ħaġar Qim etc.), each site typically consists of multiple buildings. The aggregation sites survive in various states of preservation. The quantity of pottery that survives is also variable. The Kordin complex originally consisted of three temples, although only the third temple (Kordin III) survives in the present (Fig. 2). Of this, only a portion of the pottery from Ta' Kordin III survives. Originally, the complex would have been smaller than the nearby Tarxien temples but larger than some of the smaller temples (for example Ta' Ħaġrat in Mġarr). The broader context is a society that has heavily invested in its past to secure its future. The roots of this are traced to the Middle Neolithic and in the Late Neolithic ideas of community, memory and ancestry are significantly elaborated, leaving an indelible physical imprint on the landscape (Vella Gregory, 2013, 2016, 2017).

The site has been chosen for this present study because it provides a workable data set that is reflective of comparable data sets from other sites. Second, this site has traditionally been somewhat overlooked in the larger narrative of the Neolithic. Combined with its history of destruction and loss of data, it was felt that a thorough re-examination of extant material would contribute to the site's longer-term preservation. Third, while decontextualized in the present, in the Neolithic it occupied a promontory, giving people an excellent view of the surrounding land and seascape. This tallies with the broader context of similar sites, although this point is completely lost in the site's present day setting of heavy urbanization. Fourth, it has a spatial link to Tarxien temples and the burial site of Saflieni (Fig. 2). A similar parallel is drawn in Gozo with the larger temples of Ġgantija, the smaller temples of Santa Verna and the Xagħra Circle burial site (see Grima et al., 2009). While smaller burial complexes exist (for example at Xemxija), these two stand out because of their size, the heavy investment in architecture and infrastructure and the continued use of the sites over 1100 years. In Gozo, the relationship between the sites was not merely spatial and was an integral part of ways of living (Bonanno et al., 1990; Vella Gregory, 2013). While the relationship between Tarxien and Saflieni has also been noted, Kordin has yet to be included in the picture in this regard.

Ensconced in a heavily urban setting in a high traffic area, the Kordin III complex is today accessed through a gate by the parvis of the Capuchin church. The present landscape owes its origins to 1848, when the British inaugurated the first dry dock in Vittoriosa Creek (Vella, 2004). While only material from Kordin III survives, it is essential to understand the site as a whole. Although the site was known in the 19th century, the first detailed study was published by Thomas Ashby (Ashby

Table 1
Neolithic phases and associated events.

Period	Phase	Dates, BCE	Main events
Early Neolithic	Għar Dalam	5000–4500	Initial settlement from Sicily, farming communities.
	Grey Skorba	4500–4400	Start of village life
	Red Skorba	4400–4100	Continuation of village life, communal shrines, clay figurines
Middle Neolithic	Żebbuġ	4100–3800	Considered start of Temple Period. No temples. Beginning of collective burials.
	Mġarr	3800–3600	Poorly known phase, explored further here
Late Neolithic	Ġgantija	3600–3000	Beginning of 'temple' building.
	Saflieni	3300–3000	Transitional phase, overlapping, mostly known via ceramics
	Tarxien	3000–2500	Apex and eventual decline of temples. Restriction of areas within temples.