to the Levant. The paper does have a tendency to place undue emphasis on trade in pottery, without considering the possibilities of 'invisible' commodities like wool, grain, even timber maybe, at a level lower than that suggested by the contents of the Uluburun ship, with its relatively enormous quantities of metals and other high-level goods. Other evidence for contacts is also mentioned, such as the Aegean-style frescoes from Tell el-Dab'a and several Syro-Palestinian sites, but it is surprising to see no reference in the context of trade to Ahhiyawa (probably the leading power within the Mycenaean world) and the clear indication, from the late 13th century treaty between the Hittite king Tudhaliya IV and the king of Amurru, that Ahhiyawan ships would be active in Amurru ports and might even be landing goods destined for Assyria.5

One last paper in this section, by Morris, discusses a letter found at Ugarit, the wealthiest city state on the Syrian coast, sent by the pharaoh Merneptah to the king of Ugarit, in which the pharaoh effectively rejects an invitation to send a statue of himself to be placed in the greatest temple of Ugarit. This sheds interesting light on the history of this period; the invitation may well reflect a wish to return to an old allegiance, at a time when Hittite power was weakening while that of Assyria was growing, all of which, as just noted, may have affected the Aegean.

The papers in the fourth section, as stated above, relate to topics of which the reviewer has no detailed knowledge, but all seem sensible discussions. Onderka discusses two temples in the Sudan, products of the long-lived Egyptian-influenced civilisation of Kush, based first at Napata, whose rulers were for a period, from the late 8th century well into the 7th, pharaohs of Egypt, then at Meroe, which was still flourishing at the time of the early Roman empire. One temple seems to belong to the mid-7th century, associated with Taharka who disputed control of Egypt with local rulers and the Assyrians, and the other to the 1st century CE, apparently built by the king Natakamani and queen Amanitore whose inscriptions in a revival of the Egyptian hieroglyphic script are discussed by Vrtal in the second paper of the section. There is then a discussion by Morriconi and Tucci of Assyrian and Egyptian influences on 7th century Philistine culture, as shown in the material from Tel Migne (Ekron), which was at its most flourishing in this period; this flourishing is argued to be due to its position within the Assyrian empire rather than later Egyptian domination. Kahn discusses an interesting question, 'Why did Necho II kill Josiah?', referring to the death of one of the last kings of Judah in the late 7th century. The traditional view is that Josiah attempted to dispute Necho's march to the Euphrates to confront the Babylonians and died in battle at Megiddo, as described in some detail in the Bible in 2 Chronicles 35: 20–24 (though without an explanation of Josiah's action); but the older and probably more reliable source in 2 Kings: 29–30 merely states that Necho 'killed' Josiah when they met at Megiddo. Kahn argues that this was in fact an execution of a disobedient vassal; the reviewer finds his demonstration of the difficulties in the traditional view convincing, and his hypothesis certainly deserves serious consideration.

Finally, there is a discussion by Bonadies of a class of amphorae in soft stone, of a shape with conical body and angular shoulder, which starts from three examples in the Louvre that probably come from Egypt. Other examples of this type have been found in archaeological contexts in Assyria (many), Samaria, various Egyptian sites, Carthage (1 example), and, in some quantity, Spain. They have generally been thought Egyptian, but are more closely related to the Bronze Age 'Canaanite jar' type, which persisted into the Iron Age; if produced in Egypt, they may represent a mixture of influences and have been the work of Levantine craft workers.

Overall, a collection that offers a view of Egyptian civilisation ranging wide in time and space.

Beckman, G.M., T.R. Bryce and E.H. Cline 2011. The Ahhiyawa Texts. Atlanta: Society of Biblical Literature.

Cline, E.H. and D. O'Connor (eds) 2006. *Thutmose III. A New Biography*. Ann Arbor: University of Michigan Press.

Dickinson, O. 2006. The Aegean from Bronze Age to Iron Age. Continuity and Change between the Twelfth and Eighth Centuries BC. London and New York: Routledge.

Moran, W.L. 1992. *The Amarna letters*. Baltimore and London: Johns Hopkins University Press.

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Leslie Preston Day, HeidiM.C. Dierckx, Kimberly Flint-Hamilton, Geraldine C. Gesell, Kevin T. Glowacki, Nancy L. Klein, David S. Reese and Lynn M. Snyder. *Kavousi IIC: The Late Minoan IIIC Settlement at Vronda.* 

<sup>&</sup>lt;sup>5</sup> Beckman *et al.* 2011: 63, 68.

Specialist Reports and Analyses. Kavousi. The results of the Excavations at Kavousi in Eastern Crete. 2017. Philadelphia: INSTAP Academic Press. ISBN 978-1-93153-484-0 hardback £55; 978-1-62303-405-4 e-publication £33.

This is the third volume in the series publishing the cleaning and excavation of the site of Vronda in the Kavousi area. The first volume, Kavousi IIA, was devoted to the excavation, stratigraphy, and architecture of the houses and their finds on the summit of the Vronda ridge (Buildings A-B, C-D, J-K, and Q), along with earlier (Building P) and later (Building R) structures around them. The second volume, Kavousi IIB, focuses on the buildings on the slopes of the Vronda ridge (Building Complexes E, I-O-N, and L-M, Building F, the pottery kiln, as well as other areas excavated on the periphery). The present volume brings the evidence from all houses together and provides a reconstruction of life and society at Vronda in the LM IIIC period. The excavation of Building G (the 'Shrine') is not included and will be published in a separate volume. Kavousi IIC is more than a synthesis; it is an excellent volume that not only provides in-depth specialist studies of the houses at Vronda but also provides a general discussion of the LM IIIC period on Crete. It is beautifully and abundantly illustrated with photographs, plans, drawings, charts, tables and reconstructions. I can recommend this volume not only to specialists in LM IIIC but also to students and the general public. The last years, our knowledge of the LM IIIC period has vastly improved; the Gulf of Mirabello in general (Vassiliki Kephali, Chalasmenos, Vrokastro) and the Kavousi area in particular (Vronda, Kastro, Azoria) have proved to be one of the most interesting regions for the study of the end of the Bronze Age and the beginning of the Iron Age and city-state formation.

Vronda is located in northeastern Crete, 1.25 km south of the modern village of Kavousi, on a flattopped area of the ridge named Xerambela, which is a northern spur of the Mt. Papoura in the Thriphti Mountain Range. Its proximity to Azoria and the Kastro is particularly interesting and provides a micro-region to study local and regional trajectories and developments. Despite its at first sight rather marginal location, the site of Vronda was occupied in the Final Neolithic, Early Minoan (EM) II, EM III, Middle Minoan (MM) II, MM IIIB-LM I and LM IIIC periods. Undoubtedly the nearby presence of a perennial spring, the existence of a small alluvial fan associated with the spring and its strategic location on major routes of communication have contributed to the diachronic appeal of the site. Its

most extensive occupation dates to LM IIIC (ca. 1170 BC-ca. 1050 BC) and the LM IIIC settlement provides a window on to daily life in the Kavousi area. The volume is organized in chapters that bring together specialists' reports on the analyses of architecture (Chapter 1), pottery (Chapter 2), figurines (Chapter 3), stone implements (Chapter 4), miscellaneous small finds (Chapter 5), faunal remains (Chapter 6), and paleobotanical remains (Chapter 7). The final chapter provides a settlement history of Vronda and a reconstruction of LM IIIC society.

The first chapter provides an excellent synthesis as well as an analysis of the architectural data. The earliest architectural remains are MM II in date and Building P is the best preserved Protopalatial structure. Several buildings stood on the Vronda summit in MM III-LM I but architectural remains dating to this period are scanty. The LM IIIC settlement consists of several building complexes covering an area of 0.50 ha. The architectural and ceramic evidence suggests that the different complexes developed out of a core of two to three rooms over a period of three to four generations of 30 years. The agglutinative architecture of the building complexes shows that they consist of different houses, and the same is suggested by the spatial replication of fixtures such as hearths and ovens as well as ceramic and lithic assemblages. Exceptions to this general pattern are the Buildings A-B and G which remain static throughout LM IIIC. Building materials and construction techniques are basic; mudbrick does not seem to have been a common building material in any period and rubble walls bound with a mud mortar are the rule. A claylike soil was used for the make-up of floors and flat roofs. Although the same building materials and construction techniques are used for all buildings, some distinguish themselves from others by stone type (Building A, D), the size of their internal rooms (Building A, D) but also their plan (Building G or the 'Shrine') and specific architectural features, such as platforms and the unique terracotta window frame. More common are benches, stone-built enclosures (bins and pot stands), hearths and ovens. Worth mentioning is the application of space syntax (access analysis and visibility graph analysis) to Buildings D, E West and I, which are the only ones of which the plans are completely preserved. Unfortunately the plan of Building A-B, is not preserved well enough, as space analysis might confirm or reject an interpretation as communal building or ruler's house (see chapter 8).

The pottery chapter (Chapter 2) focusses mainly on the LM IIIC pottery, which has previously been published in its architectural context. This volume follows on

from the previous publications and gives a general discussion of the pottery from the entire site in terms of wares as well as a statistical analysis that includes the uncatalogued sherds as well as the recognizable vessels. It is regrettable that petrographic analysis of the pottery is not included, but this will also be treated in another volume. Within the different ware groups (fine, medium coarse, coarse, cooking and storage wares), the pottery is discussed by shape. The reader is advised to keep Kavousi IIA and IIB at hand since not all catalogued vessels and sherds are illustrated (again) in Kavousi IIC. The volume furthermore includes a discussion of early Subminoan pottery styles in the settlement as well as Venetian and Modern pottery. The Late Geometric (LG)-Early Orientalizing pottery will be published in the volume on burial, since it was found in the tombs.

On the basis of the ware types (dining, food preparation, cooking, storage, etc.) on the floor or embedded in the roofing material, it is argued that a typical ceramic household assemblage in LM IIIC Vronda had about ten drinking vessels, a krater and one or two jugs; for food preparation one to two lekanai, a cooking dish and several usually tripod cooking pots as well as lids and trays seem to be common; storage included at least one pithos and two to three vessels for small-scale storage (pithoid jars, pitharakia and amphorae). There are two exceptions to this general pattern: Building A-B with its large amount of storage (five pithoi) and elite drinking vessels and Building G or the 'Shrine' with its primarily ritual equipment, which, like the architectural analysis, points towards a different destination of these buildings.

The discussion of the Vronda figurines (Chapter 3) is accompanied by an in-depth comparison with figurines from other settlements on Crete (Karphi, Chalasmenos, Chania, Tylissos and Vrokastro). The terracotta figurines represent bovines and horses and are handmade from standard clays used in the pottery on the site. Both in LM IIIC settlements and sanctuaries (Patsos Cave, Hagia Triada) bovine figurines seem to be more common. On the basis of contextual comparisons with figurines from Karphi, those from the Vronda houses are interpreted as votives associated with small domestic shrines.

In total, the excavation produced 270 ground stone implements (Chapter 4) distributed over several buildings. The typology used here is Blitzer's that is based on wear marks and size and allows possible functional interpretations. Like at nearby Chalasmenos, very few obsidian chipped pieces are found, suggesting that small sites in the Mirabello Bay did not have a connection with Melos, which is in contrast to LM IIIC Chania, where over 200 obsidian pieces were found. Imported stones are very rare

indeed and aside from nine obsidian pieces, the site yielded one emery tool. In general stone tools were found in rooms with special features such as hearths, ovens, enclosures and benches, suggesting that they were for daily use.

The limited number of small finds in the LM IIIC settlement (Chapter 5) suggests that the inhabitants took with them portable objects that could not easily be replaced. Small finds from previous periods include terracotta beads or spindle whorls, loom weights, a nodulus, terracotta stoppers, a kernos, stone vase fragments, stone beads and bowls and a couple of lead fragments. At nine, the total number of loom weights is unusually low and also the absence of the typical LM IIIC bobbin loom weights popular elsewhere on Crete is surprising given that weaving was a major household activity. The most intriguing object from the site is a unique terracotta window frame with six fenestrations from Room B7, which is unfortunately not illustrated in this volume. It was originally painted with running spirals with triangle filler and cross-hatched motifs. Iconographic parallels suggest that six-paned windows are associated with large special rooms and it is argued here that it had symbolic connotations.

The chapter on the faunal remains (Chapter 6) discusses the methodology involved in the recovery and analysis of the faunal remains and the information that can be gained concerning patterns of animal husbandry and meat consumption. No fish bones were found but there is some consumption of shells. The animal bones themselves have already been published in Kavousi IIA and IIB. Sheep and goat are by far the most common but the faunal evidence did not allow identifying herd management goals (meat, milk, wool/hair production) and it is concluded that a mixed and generalist herding strategy was employed at the site. As is the case for the ovi-caprids, pigs and cattle were consumed in all areas of the sites and in all periods of site use. There is one exception to this pattern of scattered, disarticulated animal bone, from an MMIB-II deposit in Building B which testifies to the consumption of major meaty joints in at least two events. Such a scattered pattern suggests a community of independent households responsible for their own provisioning in LM IIIC. The most common way of processing meat in LM IIIC Vronda was to reduce sheep, goat, pig and cattle limbs into smaller units that could be cooked on a small brazier or boiled in a cooking pot. The rarity of burn marks on the bones suggests that meat was not cooked over the fire over a longer period of time.

The plant remains come in the first place from the Geometric graves and are interpreted as grave offerings. Although the finds from Vronda are somewhat meagre, they still fill a gap (Chapter 7) as palaeoethnobotanical studies of Postpalatial and Early Iron Age sites and knowledge of cultivation and subsistence practices is generally limited. The species that are attested are the usual suspects: olive, grape, pistachio, lentil, bitter vetch and grass pea. The near absence of grain plants, however, is unexpected as is the prominence of poisonous fool's parley. Grape pips seem to represent a largely wild population and their paucity as well as the absence of wine-making equipment make it unlikely that wine was produced in the LM IIIC settlement.

The concluding chapter on the settlement history of Vronda provides, for both specialist and nonspecialist readers, an extremely useful summary of the chronology of the LM IIIC period and the controversial transition from the LM IIIC to the Early Iron Age (Subminoan, Proto-geometric). It also discusses the diachronic settlement history of the site, bringing together the findings of all specialists' studies. Of the earlier periods, the Protopalatial remains are the most extensive and Vronda may have been a regional centre in a network of rural farmsteads, hamlets and villages, possibly a stop on the road system to the east. MM IB-II Building P on top of the ridge played a special role, as suggested by the concentration of large numbers of fine cups and bridge-spouted jars, the nodulus and the kernos stone which was perhaps associated with a court. The evidence available for the MM IIIB-LM I settlement fits with the general pattern of reduced population in the Kavousi area that continued in LM II-IIIB.

Vronda was reoccupied within LM IIIC and the reasons for the shift in settlement patterns from the coast (Mochlos, Gournia) to the mountains is still a matter of controversy. Although it is very likely that security must have been a significant factor, other economic factors may have played a role. The collapse of the palatial centres and their economic infrastructure may have caused people to take to the mountainous regions which, besides security, also offered potential for subsistence. Climatic change, especially the onset of a drought in the 13th and 12th century in the Eastern Mediterranean, may also have played a role. The hypothesis of the invasion of Dorians is discounted, since many of the elements that were traditionally seen as signs of a new ethnic group seem to have developed already during LM II-LM IIIB. The settlement of Vronda is abandoned at the end of LM IIIC and Subminoan and Protogeometric pottery was found only in the tholos tombs. A new cemetery came into existence in the Geometric to Early Orientalising period but there is no evidence for occupation of the settlement until the 17th century AD.

The discussion of daily life in LM IIIC Vronda is evocative, especially in combination with the 3D

reconstructions of the building complexes in their landscape. Food preparation and consumption were the main activities attested in the houses but, with the exception of Building A-B, the houses contain fewer storage jars than needed for self-sufficiency. The excavator wonders whether Building A-B made up for insufficiency in the individual household units, but this hypothesis does not take into account the possible use of perishable containers, such as bags and wooden containers, for storage of foodstuffs.

The settlement is organized in agglutinative complexes that consist of different houses with between one to five rooms, each with its own hearth. The population is estimated at 100-150 people. The basic unit of Vronda society is considered to be the household and the clusters of buildings are said to represent multi-household units of kin-related groups. On the basis of their location, their architecture and the practices they testify to, Buildings A-B and G on the summit are interpreted as communal buildings. The former is interpreted as a ruler's house although the intriguing suggestion that it might be a communal dining building, comparable to the later andreion, can in my opinion not be ruled out. The latter is a communal shrine with statues of goddesses with upraised arms. Besides communal ritual, there is evidence for ritual practices in the houses and in Building A-B (figurines, ceramic vessels, triton shell, fenestrated stands and kalathoi).

In short, I would recommend this excellent volume to student and specialists because it makes a very important contribution to our knowledge of the end of the Bronze Age and the transition to the Iron Age.

Blitzer, H. 1995. Minoan Stone Implements and Industries, in J. Shaw and M. Shaw (eds) Kommos I: The Kommos Region and Houses of the Minoan Town. Part 2: The Minoan Hillsop and Hillside Houses: 403-535. Princeton: Princeton University Press.

Day, L.P., N.L. Klein and L.A. Turner 2009. *Kavousi IIA: The Late Minoan IIIC Settlement at Vronda. The Buildings on the Summit* (Prehistory Monographs 26). Philadelphia: INSTAP Academic Press.

Day, L.P. and K.T. Glowacki 2012. *Kavousi IIB: The Late Minoan IIIC Settlement at Vronda. The Buildings on the Periphery* (Prehistory Monographs 39). Philadelphia: INSTAP Academic Press.

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## Archaic to Classical

Lieve Donnellan, Valentino Nizzo, Gert-Jan Burgers (eds) *Contexts of Early Colonization* (Papers of the Royal Netherlands Institute in Rome 64) pp. 387, b/w illustrations. 2016. Roma: Palombi Editori. ISBN 978-88-6060-729-4 paperback €49.00.

Lieve Donnellan, Valentino Nizzo, Gert-Jan Burgers (eds) *Conceptualising Early Colonisation.* pp. 246, b/w and colour illustrations. 2016. Bruxelles: Belgisch Historisch Insituut te Rome. ISBN: 978-90-74461-82-5 paperback €75.00.

One of the most significant phenomena of early Greek history was the growth in the number of settlements around the Mediterranean that have been identified as Greek poleis. The subject of early Greek colonisation, which includes the processes of migration, the foundation of settlements, and the relationships between migrants and indigenous populations, has undergone fundamental reappraisal in the past 35 years. During this period there has been considerable reflection on the terminology that was used in the ancient world and the language that we use to describe the events and outcomes of these migrations, as well as the way that we conceptualise material culture from these settlements. The term 'colonisation' has been questioned as being too evocative of nineteenthcentury imperialism. Although not everyone has accepted these reinterpretations or rejections of the word colonisation, there is agreement that we need to evaluate and refine our models of colonisation and carefully (re)examine our historical and archaeological data. New models of migration, colonisation and settlement have transformed our understanding of the growth of these poleis and how we may understand the movements of people during the 8th and 7th centuries BC. Early colonisation is no longer simply explained as a stateorganised event, instead there is wider debate about the occurrence of different types of migrations and settlement that varied in terms of their causes, how they established new communities and the longterm impact in each locale.

The conference Contextualising early Greek colonisation: Archaeology, Sources, Chronology and Interpretative Models between Italy and the Mediterranean held at the Royal Netherlands Institute in Rome, Academia Belgica, and British School at Rome (between June 21-23 2012) and the resultant volumes, focus on the early phase of colonisation, in the 8th to 7th centuries BC. The two volumes, which are discussed here, provide an interesting range of papers that examine how the archaeology of (primarily) Italy has been examined to understand the processes of migration and the impact of Greek settlement. A third volume, which contains shorter papers based on the poster sessions at the conference, is published as a special issue of the journal Forum Romanum Belgicum of the Belgian Historical Institute in Rome.

The publications are dedicated to David Ridgway, and volume 1 starts with a *memoriam* of his life and work. David Ridgway, one of the most important figures in classical archaeology and in particular on migration and colonisation, had died just before the conference was held. Guzzo's brief but poignant outline of the importance of Ridgway's work provides a very suitable introduction to volume 1, which explores many of the themes of Ridgway's research and publications. These two publications are excellent companion volumes to the *Festschrift* in honour of Ridgway and Francesca R. Serra Ridgway.<sup>2</sup>

The first volume Contexts of Early Colonization presents twenty-six chapters that are organised in four thematic sections. These chapters cover the chronology of the Mediterranean Iron Age, the Mediterranean at the start of the first millennium BC in Italy, the Levant and Western Andalusia, indigenous communities in Italy in the Early Iron Age, and the impact of the arrival of Greek communities. There is, inevitably, overlap across the different sections in volume 1 and with the smaller second volume, Conceptualising Early Colonisation, which contains discussions of models and frameworks for examining colonisation, migration, and identity. Whilst the existence of repetition or overlap between chapters is not necessarily a problem, and indeed it could be a strength of the volumes, I was often left frustrated because relevant complementary chapters, which covered similar material, were separated from one another, either within volume 1 or between the two volumes. Editing the proceedings from a conference is never easy, but the structure of these two volumes has been driven by the order of the sessions and the presentations at the conference. There are significant possibilities for the comparison of sites, material and approaches but the structure of the two volumes does not really enable this to happen. The artificial distinctions of sessions at the conference

De Angelis 1998; Osborne 1998; Hurst and Owens 2005

<sup>&</sup>lt;sup>2</sup> Herring et al. 2006