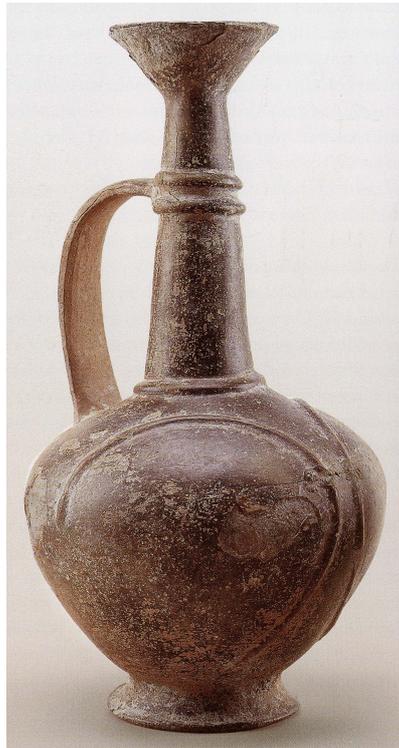


# **Altered States of Consciousness and Ritual in Late Bronze Age Cyprus**

**DAVID COLLARD**

**B.Eng, Grad.Dip (Arts), Pgrad.Dip (Arts), MA (Archaeology).**



**Thesis submitted to the University of Nottingham for the degree  
of Doctor of Philosophy**



## **Abstract**

This thesis combines an anthropological approach to the study of Altered States of Consciousness (ASCs) with a detailed analysis of previously published evidence for the consumption of psychoactives from Late Bronze Age Cypriote (Late Cypriote) contexts to investigate the possibility that such mental phenomena may have been utilised within religious rituals of this period. This evidence primarily consists of ceramic vessels associated with the consumption of opium and alcohol (often supported by organic residue analysis), but also includes iconography, ethnographic and historical sources and neuro-psychological studies of the effects of the relevant psychoactive substances. This range of evidence is analysed using a 'contextual analysis' designed to interpret the meanings (symbolic and socio-political) associated with the ASCs these substances can induce, particularly in relation to ritual practice.

Within Late Cypriote mortuary ritual, extreme drunkenness and opium-induced ASCs are interpreted to have been symbolically linked to ritualised interaction with the underworld, suggesting that these mental phenomena possessed significant symbolic meaning. In the context of mortuary feasting, however, alcohol induced ASCs also appears to have possessed significant socio-political meaning relating to their ability to promote the development of group identity and the negotiation of individual rights and status.

In non-mortuary contexts opium consumption was identified in a limited number of cases, exclusively linked with religious ritual, suggesting a continued association between the supernatural and opium induced ASCs, most likely within the context of divination ritual. In these cases opium consumption appears to have been restricted, suggesting that this activity had been incorporated into strategies involved with the ritualised legitimisation and maintenance of status and hierarchy. Alcohol induced ASCs, however, are primarily associated with feasting within non-mortuary ritual, suggesting that the socio-political meanings associated with such convivial activity were most prominent in these contexts.



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## List of Abbreviations

ASCs	Altered States of Consciousness
BCE	Before Current Era (synonymous with BC)
BLWM	Black Lustrous Wheel-made (ware)
BM	British Museum
BR	Base Ring (ware)
BS	Black Slip (ware)
CE	Current Era (synonymous with AD)
CG	Cypro-Geometric (period)
LBA	Late Bronze Age
EBA	Early Bronze Age
EC	Early Cypriote (period)
ECA	Early Cypriote Age
IA	Iron Age
LC	Late Cypriote (period)
LCA	Late Cypriote Age
LH	Late Helladic
MBA	Middle Bronze Age
MC	Middle Cypriote (period)
MCA	Middle Cypriote Age
Myc.IIIC:1	Mycenaean IIIC:1 (ware), known as LHIIIC:1 in the Aegean
PBR	Proto Base Ring (ware)
PWH	Plain White Hand-made (ware)
PW	Plain Wheel-made (ware)
PWP	Proto White Painted (ware)
PWW	Plain White Wheel-made (ware)
RP	Red Polished (ware)
RLWM	Red Lustrous Wheel-made (ware)
TEY	Tell el-Yahudiyeh (ware)
WLWM	White Lustrous Wheel-made (ware)

WS	White Slip (ware)
WSh	White Shaved (ware)
WP	White Painted (hand-made ware)
WPW	White Painted Wheel-made (ware)

## Chronology of Prehistoric Cyprus

Aceramic Neolithic		ca.10500-5500 BCE
Ceramic Neolithic		ca.5500-4000 BCE
Chalcolithic		ca.4000-2500 BCE
Philia		ca.2500-2350 BCE
Early Cypriote		ca.2400-2000 BCE
Middle Cypriote		ca.2000-1600 BCE
Late Cypriote		ca.1600-1050 BCE
Late Cypriote	IA	ca.1600-1500 BCE
	IB	ca.1500-1450 BCE
	IIA	ca.1450-1375 BCE
	IIB	ca.1375-1300 BCE
	IIC	ca.1300-1200 BCE
	IIIA	ca.1200-1100 BCE
	IIIB	ca.1100-1050 BCE

Dates prior to the Late Cypriote Period are derived from Steel.<sup>1</sup> Late Cypriote dates largely follow the chronology defined by the Swedish Cyprus Expedition.<sup>2</sup> While not without problems,<sup>3</sup> the Late Cypriote chronology has proved to be reasonably reliable, with the possible exceptions of the beginnings of the period (MCIII/LCI transition) and the distinction between the LC IIC and LC IIIA periods.<sup>4</sup>

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<sup>1</sup> Steel (2004:13).

<sup>2</sup> Åström (1972a: 682-705, 755-762). The dates presented here generally conform to those of the SCE with minor changes to absolute dates in keeping with more recent publications, eg. Steel (2004:13).

<sup>3</sup> Knapp (1990:148-149); Steel (2004:12-18)

<sup>4</sup> The ceramic indicators of a distinction between the LC IIC and LC IIIA remains a topic of debate. See Åström (2003:72-73); Kling (1984, 1987, 1989, 2000); Sherratt (1991).



## Introduction

Ritual and religion are increasingly being accorded a central role in the development of complex societies throughout the ancient world, particularly in understanding how social and political authority were established and legitimised.<sup>5</sup> This relationship appears to be particularly evident in the East Mediterranean<sup>6</sup> during the Bronze Age (ca.3000-1200 BCE), as suggested by the supernatural status commonly attributed to rulers and the repeated association of ritual buildings with the storage of agricultural surplus and craft industry.<sup>7</sup> While the role of ritual practice and religious ideology<sup>8</sup> in this process of socio-political development is often emphasised by archaeologists,<sup>9</sup> certain aspects of the ways in which archaeologically detectable ritual practices and religious symbolism might reinforce or challenge such ideologies have received little attention.<sup>10</sup> That is to say, some aspects of the archaeological record with the potential to represent material correlates of ideology or religion and thereby elucidate ancient cognitive processes<sup>11</sup> remain seriously understudied. In particular, the use of altered states of consciousness within Bronze Age East Mediterranean ritual has been largely ignored to date, despite the frequently observed ritual use of such phenomena throughout ethnographically and historically documented cultures.<sup>12</sup>

‘Altered states of consciousness’ (hereafter ASCs) are mental states recognised by an individual as a noticeable deviation, in terms of subjective experience or psychological functioning, from the cognitive norms of that individual during waking, alert

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<sup>5</sup> Aldenderfer (1993); Hayden (2003:347-379); Marcus & Flannery (2004); Schachner (2001); Trigger (2003: 79-91).

<sup>6</sup> Considered here to consist of the Aegean, Anatolia, Cyprus, the Levant, Mesopotamia and Egypt.

<sup>7</sup> Bard (1992); Crawford (2004:214-221); Driessen (2002); Gesell (1987); Hitchcock (2000); Hood (1987); Kemp (1992:71-76); Kyriakides (2001); Knapp (1986); Platon (1983); Rehak (1987; 1995); Sagona & Zimansky (2009:269-270); Webb (1999:2); Wiersma (2007). Cf. Gibson (2010) for discussion of the concept of theocracy in ancient Mesopotamia.

<sup>8</sup> Ideology can be defined as the capability of dominant groups to make their own sectional interests appear universal, Giddens (1979:6).

<sup>9</sup> Bard (1992); Bauer (1996); Braithwaite (1984); Demarest (1989); Knapp (1986:67-83; 1988; 1996b); Miller & Tilley (eds.); Parker-Pearson (1984a; 1984b); Shanks & Tilley (1982); Shennan (1992); Webb (1999:2; 2005).

<sup>10</sup> Cf. Dornan (2004:25-26).

<sup>11</sup> Renfrew’s ‘operation of the mind’, Renfrew (1994).

<sup>12</sup> Bourguignon (1973:9-11); See also Hayden (2003); Lewis (1971); van der Walde (1968:57).

consciousness.<sup>13</sup> In general terms, ASCs are produced by any agent or manoeuvre which interferes with the normal inflow of sensory stimuli, the normal outflow of motor impulses, the normal ‘emotional tone’ or the normal flow and organisation of cognitive processes.<sup>14</sup> Specific activities which can cause such irregularities include sensory deprivation (sleeplessness or fasting), meditation, intensive and prolonged dancing, repetitive movement (particularly when combined with rhythmic sound, light flicker or fatigue) and the consumption of psychoactive (mind-altering) substances.<sup>15</sup> The consumption of psychoactive substances is of particular interest to this study as not only are they the easiest and fastest method of inducing an ASC,<sup>16</sup> but they involve the use of substances which may be recognisable in the archaeological record.

Within the cultures in which they were induced, such mental states were commonly interpreted with reference to religious belief and experience, whereby the change from a ‘normal’ state of consciousness to an altered state was commonly associated with a corresponding shift from the ‘normal’, natural world towards an ‘other’ or ‘spiritual’ world.<sup>17</sup> Entering an ASC was seen as providing a means of entering or interacting with the supernatural world and its inhabitants.<sup>18</sup> Indeed, such religious interpretations of ASCs are particularly likely in contexts where modern neuropsychological explanations are unavailable. ASCs are discussed in more detail in Chapter 1.

On Cyprus during the Late Cypriote Age (hereafter LCA, ca.1600-1050 BCE), substantial evidence has been uncovered suggesting the consumption of certain psychoactive substances, principally alcohol<sup>19</sup> and opium.<sup>20</sup> In particular, the recent identification of such substances via organic residue analysis<sup>21</sup> suggests a promising avenue for archaeological research into the ASCs induced by their consumption.

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<sup>13</sup> Ludwig (1968:69).

<sup>14</sup> Ludwig (1968:70).

<sup>15</sup> Pearson (2002:74).

<sup>16</sup> Pearson (2002:74).

<sup>17</sup> Ludwig (1968:85).

<sup>18</sup> Hayden (2003:5); Lewis (1971); Ludwig (1968:85); Pearson (2002:74); Sherratt (1995:16).

<sup>19</sup> South (2008), Steel (1998; 2002; 2004b); Webb & Frankel (2008).

<sup>20</sup> Bisset et al. (1996a); Karageorghis (1976); Koschel (1996); Merrillees (1962; 1974; 1979; 1989), Smith (2009:97-102); Stacey (pers.comm.).

<sup>21</sup> Bisset et al. (1996a); Guasch-Jané et al. (2006); McGovern (1997); McGovern et al. (2008); Tzedakis & Martlew (2001).

Furthermore, this LCA evidence for alcohol and opium consumption primarily derives from sites interpreted as ritual in character, such as ‘sanctuaries’, ‘temples’ and tombs.<sup>22</sup> Their ritualised use within these particular contexts, therefore, seems worthy of serious consideration, particularly when considered alongside abundant ethnographic evidence for the induction of such mental states within ritual practice. Despite this observation, however, archaeological research paying significant attention to the phenomena of ASCs within the Bronze Age of both Cyprus and the wider East Mediterranean region has, to date, been extremely limited (see Section 1.6.1).

Two factors are likely to have contributed to this neglect. Firstly, it has been suggested that within modern western society, such mental states are commonly perceived as degenerate or false forms of experience, not worthy of scholarly attention.<sup>23</sup> Secondly, the traditional conservatism and over-reliance on historical sources, common in East Mediterranean archaeology,<sup>24</sup> also appears to have contributed to a reluctance to consider topics of a more anthropological concern and restricted the adoption of corresponding approaches to archaeological research. Commonly characterised as ‘culture-historical’,<sup>25</sup> such approaches often view symbolic aspects of behaviour, such as ritual practice and religious beliefs as unattainable and, therefore, inappropriate topics for archaeological research (see Section 2.2).<sup>26</sup>

This thesis seeks to address these issues by combining an anthropological approach to the study of ASCs with a detailed analysis of previously published Late Cypriote evidence for the consumption of psychoactives such as opium and alcohol to investigate the possibility that such mental phenomena may have been utilised in this context. This evidence, which consists primarily of ceramic vessels associated with the consumption of opium and alcohol (often supported by organic residue analysis, see Section 3.3.1), will be studied using ‘contextual analysis’, an approach common to

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<sup>22</sup> Cf. Webb (1999).

<sup>23</sup> This attitude is discussed by Goodman (1986:84); Krippner (2000:207); Lewis (1971/1989:33); McGowan (2006:51).

<sup>24</sup> Hitchcock (2000:15); Knapp (1993:22; 2005:4); Knapp et al. (1994:430); Sherratt (1998:292-293); Steel (2004a:215, Note 2); Webb (2006:117).

<sup>25</sup> Clarke (2005:9-10); Sherratt (1998:292-293); Steel (2004a:215, Note 2); Webb (2006:117).

<sup>26</sup> Hawkes’ ‘Ladder of Inference’ provides a good example of such a view, Hawkes (1954). See also Wasilewaska (1994) for a more recent example.

contemporary post-processual or interpretive archaeologies (see Section 2.1.1).<sup>27</sup> The aim of this analysis is to interpret the meanings (symbolic and socio-political) that may have been associated with the ASCs these substances can induce, particularly in relation to ritual practice.

Chapter 1 consists of a detailed review of the phenomena of ASCs, drawing heavily upon anthropological research on this topic. This includes discussion of the ways in which such states are commonly induced and experienced, consideration of a handful of ethnographic case studies demonstrating how they can be incorporated into culturally meaningful practices and a more general discussion of the role such phenomena play in human societies, particularly within religious ritual. The chapter concludes with a review of previous archaeological research dealing with ASCs and a discussion of issues relevant to their investigation using archaeological forms of evidence.

Chapter 2 presents a discussion of the theoretical approaches suitable for studying the ritual use of ASCs in the LCA. Particular emphasis is given to post-processual approaches, including contextual analysis, archaeological approaches to ritual and religion and a review of how ethnographic and historical sources are best utilised within archaeology. The chapter concludes with a discussion of the way these approaches will be applied within this thesis.

Chapter 3 consists of a review of the different forms of evidence relevant to the investigation of ASCs in Late Cypriote society, including LBA historical sources from nearby regions, iconographic representations and, in particular, ceramic vessels suggestive of the consumption of certain psychoactives. The neuro-psychological properties of the psychoactive substances suggested by this evidence are also considered. Brief discussion of an ultimately unsuccessful program of organic residue analysis, aimed at establishing further LCA evidence for the consumption of such substances, concludes the chapter.

Chapter 4 considers background material necessary for the analysis of Late Cypriote mortuary ritual. This commences with a discussion of the limitations imposed on a study of evidence and theoretical issues relating to the archaeological study of

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<sup>27</sup> Barrett (1994); Hitchcock (2000); Hodder (1987); Hodder & Hutson (2003), Knapp (1986, 1993, 1996b); Manning (1998); Robb (1998); Shanks & Tilley (1987b); Webb (1999; 2005).

mortuary ritual. This is followed by a detailed review of Early and Middle Cypriote mortuary ritual and a reconsideration of previous interpretations of this evidence, particularly with regard to the possible use of ASCs during these periods.

Chapter 5 consists of a detailed contextual analysis of the Late Cypriote evidence for ASCs (established in Chapter 3) from mortuary contexts. This primarily consists of a detailed evaluation of six well preserved and recorded tombs (case studies), followed by a review of the full corpus of published Late Cypriote tombs. The chapter concludes with a discussion of the possible use of ASCs during Late Cypriote mortuary ritual, as suggested by this evidence.

Chapter 6 parallels Chapter 5 with a detailed analysis of comparable evidence from Late Cypriote non-mortuary contexts. This includes detailed evaluations of three well published sites (case studies) demonstrating significant evidence for alcohol and opium consumption in non-mortuary ritual contexts, followed by a review of all excavated and published non-mortuary Late Cypriote sites. The chapter concludes with a discussion of the possible use of ASCs during Late Cypriote non-mortuary ritual.

Chapter 7 consists of a final review of the evidence for the Late Cypriote use of ASCs. This chapter presents a summary interpretation of the possible meanings (symbolic and socio-political) associated with these mental phenomena, particularly in relation to ritual practice and religious belief.

### ***The Late Cypriote Context***

In order to provide a sufficient contextual background for this study, a summary of the LCA will conclude this introduction.

Cyprus is dominated by mountains, with the Kyrenia range spread across the north of the island and the Troodos massif covering much of southern Cyprus (**Map 1**). Two major zones of agricultural potential are defined by these ranges, the central Mesaoria Plain, which lies between the two ranges, and the coastal belt between the Troodos range and the southern coast. The island was probably heavily wooded in ancient times.<sup>28</sup>

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<sup>28</sup> For a summary of the geography of Cyprus, see Steel (2004a: 1-11).

The earliest human presence on Cyprus is currently dated to ca. 10,000 BCE.<sup>29</sup> During the Neolithic and Chalcolithic periods (8<sup>th</sup> Millennium BCE to ca.2500 BCE.) Cypriote material culture exhibits relative homogeneity across the island and was characterised by a high degree of conservatism, exemplified in the use of round-houses up until the end of the Chalcolithic period.<sup>30</sup> The start of the Bronze Age is marked by significant changes from the preceding period, characterised by population increase, settlement relocation, advances in metalworking, ceramic and textile technology, the reintroduction of cattle and the introduction of rectilinear architecture, plough agriculture and new mortuary practices (see Chapter 4).<sup>31</sup> While these changes have been suggested to indicate an influx of population from Anatolia,<sup>32</sup> a continuing lack of coastal settlements and limited number of imported goods suggest that Cyprus remained quite isolated from the surrounding cultures of the East Mediterranean at this time and continued to be so well into the second millennium BCE.<sup>33</sup>

During the LCA the isolation of Cyprus appears to have ended. There was a substantial increase in population and expansion of settlement, apparently associated primarily with the increasing exploitation of abundant copper resources located in the Troodos foothills to meet a developing international market.<sup>34</sup> During the LCI-IIA new settlements incorporating monumental architecture began to develop in coastal regions in order to engage in increasing international trade.<sup>35</sup> A corresponding increase in the number of inland sites was coupled with the establishment of fortified settlements along the foothills of the Troodos and Kyrenia ranges where they met the Mesaoria Plain and along the south coast of the Karpass peninsula.<sup>36</sup> This period also coincided with the

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<sup>29</sup> McCartney (2010); Peltenburg et al. (2000). See also Ammerman et.al. (2006); but see Simmons & Mandel (2007).

<sup>30</sup> Swiny (1989). See also Dikaios (1960); Wright (1992).

<sup>31</sup> Frankel (2000); Keswani (1996:218-219; 2004:37); Knapp (1990; 2008:68-87); Manning (1993); Peltenburg (1996:17-27); Steel (2004a:119-148); Webb & Frankel (1999). For discussion of specific examples see Balthazar (1990); Bolger (1991); Crewe (1998); Keswani (2004:37-83); Swiny (1989).

<sup>32</sup> Frankel (2000); Webb & Frankel (1999:38-43); cf. Steel (2004aa:126-128); Knapp (2008:103-114); contra Manning (1993); Peltenburg (1993:18-20).

<sup>33</sup> Knapp (1990:149, Table 3); Steel (2004aa:143).

<sup>34</sup> Knapp, A. B. (1988; 1990:147; 1996a); Muhly (1989); Peltenburg (1996).

<sup>35</sup> Åström (1972); Catling (1962); Knapp (1988, 1996a); Merrillees (1971; 1992); Negbi (1986); Peltenburg (1996); Wright (1992). Prominent early coastal sites include Enkomi-*Ayios Iakovos*, Courtois et.al. (1986); Dikaios (1969-1971); Kition, Karageorghis (1985); Hala Sultan Tekke, Åström (1986; 1996); Åström et al. (1976), and Morphou-*Toumba tou Skourou*, Vermeule & Wolsky (1990).

<sup>36</sup> Åström (1972:763-764); Keswani (1996); Peltenburg (1996:30-335).

earliest references in Syrian and Babylonian texts to copper from Alashiya, which is equated by a number of scholars with ancient Cyprus and more specifically with Enkomi-*Ayios Iakovos*.<sup>37</sup> This has led to suggestions that Enkomi exercised control over the entire Cypriote copper trade in this period.<sup>38</sup> Peltenburg argues that during the early LCA Enkomi was the locus of a fledgling secondary state that exercised control over some or all of the island.<sup>39</sup> Unfortunately, the scarcity of settlement data from this period makes it difficult to adequately assess the political landscape of Cyprus from LCI-LCIIA.

Changes to mortuary patterns around the beginning of the LCA (discussed further in Section 5.0.1) suggest the partial fragmentation of kin-based communities and the development of new social groups. Increasing elaboration of funerary ritual and wealthy burials containing gold, jewellery and imported exotica of Levantine or Egyptian origin (particularly faience, glass, ivory and alabaster objects) suggest elite competition through conspicuous consumption and funerary ritual.<sup>40</sup> Similarly, warrior burials, the increasing presence of weapons and depictions of warfare on pottery highlight the development of social divisions based on military prowess.<sup>41</sup> At the same time, increasing external demand for Cypriote copper and the associated need to organise the administration of its trade further contributed to increases in social complexity on Cyprus, including the establishment of a settlement hierarchy aimed at accessing, controlling and supporting copper production.<sup>42</sup> According to Knapp,<sup>43</sup> developing authority over innovation sectors (copper production, agricultural produce and international trade) led to tightened control of productive resources, accumulated wealth and sharpened social and geographical divisions within Cypriote society. The specialised and standardised production of new Cypriote pottery styles such as Base-ring, White Slip and Plain White Wheel-made wares (Hereafter BR, WS and PWW respectively) is also introduced during this period.<sup>44</sup>

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<sup>37</sup> Courtois (1984); Knapp (1996a); Muhly (1989); Peltenburg (1996); Schaeffer (1952, 1971). Contra Merrillees (1992). For discussion of evidence both for and against the equation of Alashiya with Cyprus, see Knapp (1985:234-241) and Merrillees (1987; 1995) respectively.

<sup>38</sup> Knapp (1996a); Muhly (1989).

<sup>39</sup> Peltenburg (1996:27-37). Cf. Knapp (1988, 1997; 2008:147); Webb (2005). Contra Merrillees (1992).

<sup>40</sup> Keswani (1989:66-69; 2004:119-126,157-159); Manning (1998:45); Steel (1998:289; 2004a:174); Webb (1992a:90-91).

<sup>41</sup> Peltenburg (1996:30); Steel (2004a:154).

<sup>42</sup> Knapp (1988, 1990); Peltenburg (1996:29-37).

<sup>43</sup> Knapp (1990).

<sup>44</sup> Crewe (2004; 2007); Kling (1987); Steel (2004a; 2010:108-109).

Through the course of the LCA increasing standardisation of production and a corresponding reduction in the surface treatment of these wares suggests mass production in regional workshops.<sup>45</sup>

While Cypriote trade relations were primarily focused towards the East during the early part of the LCA<sup>46</sup> trade with the Aegean flourished during the 14<sup>th</sup> and 13<sup>th</sup> Centuries BCE. Cyprus became pivotal in the dissemination of Aegean pottery throughout the East Mediterranean, with the consumption of such pottery seen at Cypriote coastal centres in forms such as the stirrup jar and pictorial crater.<sup>47</sup> This expansion of Cyprus' international trading networks led to further development of the island's copper producing industry, to its apparent peak in the 13<sup>th</sup> and 12<sup>th</sup> Centuries, with corresponding developments in urbanisation. There was a further increase in population and expansion of settlement, particularly along the coast, culminating with the rise of a number of urban centres along the south coast in the 13<sup>th</sup> Century BCE.<sup>48</sup> Construction episodes at a number of sites reflect a programme of town planning and site-wide restructuring which suggest increasing socio-political organisation.<sup>49</sup>

While Enkomi was still an important centre, there is little evidence to support the idea that it exercised control over the entire island from the 14<sup>th</sup> to 12<sup>th</sup> Centuries BCE.<sup>50</sup> Indeed, the political organisation of Cyprus during the later LCA has been characterised as having comprised of a number of smaller regional polities, rather than a single unified state.<sup>51</sup> Within this hegemony, Keswani suggests two different types of urban polity in this period.<sup>52</sup> The first includes coastal urban centres in the east, such as Enkomi, Kition and Hala Sultan Tekke, which were involved in long-distance trade and controlled by competing, semi-autonomous elite groups. The second type of urban polity includes towns in the south and southwest, such as *Maroni-Vournes*, *Kalavassos-Ayios Dhimitrios*

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<sup>45</sup> Steel (2010:112).

<sup>46</sup> Catling (1962); Keswani (1996). While there is evidence of contact with the Aegean at this time, these contacts appear to have been limited.

<sup>47</sup> Steel (1998).

<sup>48</sup> Catling (1962); Keswani (1996); Knapp (1996a); Negbi (1986).

<sup>49</sup> Crewe (2004:159).

<sup>50</sup> Keswani (1996:234).

<sup>51</sup> Keswani (1996). Peltenburg, however, suggests that a single state administered from Enkomi presided over some or all of the island up until ca.1300 BCE, around which time it devolved into smaller regional polity, Peltenburg (1996:27-28).

<sup>52</sup> Keswani (1996).

and *Alassa-Palio taverna*, which are engaged in more centralised control of agricultural produce. The elites in these towns appear to have enjoyed more centralised power than their counterparts from eastern coastal towns and their position seems to have been established and maintained by exercising ritual authority over the control of extensive stores of agricultural produce stored within monumental ashlar buildings.<sup>53</sup> Limited use of written records and an apparent lack of sphragistic seal use<sup>54</sup> also suggest the absence of a single administrative centre. Based on evidence from seals, Webb does, however, propose that a single administrative system was in use across the island.<sup>55</sup>

A number of changes to previous ritual practices have also been noted in the LCA. This period first saw the appearance of outdoor or court-centred sanctuaries, such as those at *Myrtou-Pigadhes*, *Athienou* and *Ayios Iakovos-Dhima*, replacing extramural cemeteries as the focus of ritual activity.<sup>56</sup> During the LCIIIC and LCIII periods, monumental cult buildings constructed in urban centres such as *Enkomi*, *Kition* and *Kouklia-Palaepaphos*, paralleled by the appearance of ashlar-built monumental administrative buildings.<sup>57</sup>

At a number of sites, the close proximity of metallurgical installations and cult structures, combined with the discovery within them of objects which refer to copper production, such as the ‘Ingot God’ (**Fig.6.17**), bronze figurines and miniature ingots, has led to the suggestion of ideological control over copper production in the LCA.<sup>58</sup> Knapp suggests that Late Cypriote elites may have exploited ritual ceremony and an exclusive range of culturally significant iconography related to copper production in order to secure, legitimize and maintain control of the copper industry.<sup>59</sup> Similarly, it has been suggested that the Aegean influences seen in seal impressions found on contemporary pithoi fragments may have utilised foreign iconography to mark the contents of the pithoi

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<sup>53</sup> Keswani (1996:232-236).

<sup>54</sup> Webb (1992b, 2002:126-128) suggests that the absence of sealings and impressions made by locally engraved stone seals in LBA Cyprus may reflect the use of cylinder seals as exotic insignia worn by managerial elites to sanction their authority and increase their prestige.

<sup>55</sup> Webb (2002: 138-142; 2005:179-180). Within this single system, however, Webb does identify hierarchical differences which may reflect the socio-political hierarchy suggested by Keswani.

<sup>56</sup> Steel (2004a:175-176). See also Dothan & Ben-Tor (1983); du Plat Taylor (1957); Gjerstad *et al.* (1934:356-361).

<sup>57</sup> Steel (2004a:176); Webb (1999:4; 284-294).

<sup>58</sup> Knapp (1986; 1988; 1993; 1996b).

<sup>59</sup> Knapp (1986; 1988; 1993; 1996b).

as the property of elites, who used such iconography to legitimise control over the production and storage of agricultural produce.<sup>60</sup> Cultic interest in the production of other commodities, such as textiles and olive oil, is similarly suggested in the spatial association of workshops and cult buildings.<sup>61</sup> Knapp further suggests that these associations provide evidence for the integration of subsistence and craft production with the stabilisation of socio-political power.<sup>62</sup> The Late Cypriote elites who controlled commodity production, distribution and trade may have manipulated the LCA belief system to legitimise their status and power.<sup>63</sup> The resultant ideology appears to have been developed and reinforced through the construction and control of ceremonial architecture, ritual paraphernalia, exotic and symbolic artefacts and the development of socially coercive sanctions (i.e. distinct divisions of authority).<sup>64</sup>

### **End of the Bronze Age**

Around 1200 BCE a horizon of possibly contemporary catastrophes left both coastal and inland sites in ruins.<sup>65</sup> The following century was characterized by massive disruption to the island's settlement pattern and a transformation of the island's material culture by the 11<sup>th</sup> Century BCE. These events are often attributed to the arrival of Aegean (predominantly Mycenaean) migrants,<sup>66</sup> possibly groups of the 'Sea Peoples' referenced in Egyptian New Kingdom documents in relation to attacks upon Egypt ca.1200 BCE.<sup>67</sup> Based upon chronological correlations, these 'Sea Peoples' are often associated with most violent destructions apparent in the archaeological record across the East Mediterranean around 1200 BCE.<sup>68</sup>

While the number of settlements declined, for the most part, LCIIIA residents rebuilt the towns of the previous period and continued to use the same burial locations.<sup>69</sup>

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<sup>60</sup> Knapp (1993:17; 1996a:65); Webb & Frankel (1994).

<sup>61</sup> Hadjisavvas (1992); Smith (2002:299-304). Smith suggests that one of the industrial installations associated with the LCA Temples at Kition-*Kathari* was for the production of textiles, including fulling and dyeing of wool.

<sup>62</sup> Knapp (1986; 1988; 1993; 1996b).

<sup>63</sup> Knapp (1988; 1993; 1996b).

<sup>64</sup> Knapp (1986; 1988; 1993; 1996b); Webb (1999:2).

<sup>65</sup> Åström (1998b); Iacovou (1989); Kling (1987); Muhly (1984); Sherratt, E.S. (1998).

<sup>66</sup> Hadjisavvas (2003); Karageorghis (1987; 1998a; 2000a; 2002); Muhly (1984).

<sup>67</sup> O'Connor (2000); Wood (1985:217-220).

<sup>68</sup> Gitin et.al. (1998); Muhly (1984); Oren (2000).

<sup>69</sup> Iacovou (1989).

There are, however, ca.1200 BCE destruction levels at Enkomi, Kition and Maa-*Palaeokastro*, while *Kalavastos-Ayios Dhimitrios*, *Maroni-Vournes*, *Morphou-Toumba Tou Skourou* and *Pyla-Kokkinokremos* were abandoned.<sup>70</sup> Of the sites which survive these destructions, most were abandoned by the end of the 12<sup>th</sup> Century BCE, with only Kition and Paphos, of the large urban centres, remaining occupied to a major extent into the 11<sup>th</sup> Century.<sup>71</sup>

Changes to the ceramic repertoire of LBA Cyprus were central to early arguments for the arrival of Aegean migrants to Cyprus around 1200 BCE. There is a dramatic increase in locally produced Mycenaean style pottery, Mycenaean IIIC:1 or White Painted Wheel-made III ware (hereafter Myc.IIIC:1 or WPWIII),<sup>72</sup> while the indigenous ceramics such as BR, WS and PWW wares begin to form a smaller percentage of the repertoire.<sup>73</sup> This equation of a ceramic style with an ethnic type, however, ignores recent research on ethnicity which suggests that such simple correlations are unfeasible.<sup>74</sup> Furthermore, the local production of Mycenaean-style pottery appears to date back to the LCIIIC period, prior to the settlement destructions and there is little basis for a distinction between LCIIIC and LCIIIA ceramics.<sup>75</sup> Sherratt suggests that the increasing popularity of Myc.IIIC:1 ware can be attributed instead to its suitability for mass production, paralleling the intensified production of other craft items throughout Cypriote urban centres.<sup>76</sup> The large-scale production of this ware on Cyprus may also have been related to the destruction of the Mycenaean citadels, the previous centres of production for Mycenaean style pottery.<sup>77</sup> In the face of a continuing market for Mycenaean style pottery throughout the East Mediterranean, Cypriote potters may have taken up its production.

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<sup>70</sup> Cadogan (1984;1996); Courtois et.al. (1986); Dikaios (1969-1971); Karageorghis & Demas (1984;1985; 1988); South (1984a;1996;1997); Vermeule & Wolsky (1990).

<sup>71</sup> Catling (1994); Iacovou (1989; 1994:150); Steel (2004a:210-211). At Enkomi, while the site is largely abandoned, certain ritual buildings appear to be reused into the LCIIIB, Dikaios (1969-71).

<sup>72</sup> WPWIII has also been referred to as Mycenaean IIIC:1b, Rude or Pastoral Style, Decorated LCIII and Late Mycenaean IIIB, as discussed by Kling (1991:181).

<sup>73</sup> Iacovou (1989); Kling (1984; 1987; 1989; 1991); Sherratt, E.S. (1991).

<sup>74</sup> Graves-Brown (1996); Hall (1995); Jones (1996; 1997); Shanks (2001); Sherratt E.S. (1992; 1998).

<sup>75</sup> Kling (1984; 1987; 1989); Sherratt, E.S. (1991).

<sup>76</sup> Sherratt, E.S. (1991).

<sup>77</sup> Hitchcock (2005).

In response, proponents of the migration hypothesis have attributed further ‘innovations’ to the arrival of Aegean colonists, including coroplastic art, new forms of weapons, armour and personal accessories, ‘bathtubs’, religious symbols, tomb architecture, military architecture and large halls with central hearths.<sup>78</sup> As with Mycenaean-style pottery, however, there are methodological and chronological problems with the association of many of these ‘innovations’ with a hypothetical migration ca.1200 BCE.<sup>79</sup> Indeed, it has been pointed out that despite the settlement destructions, many other aspects of Cypriote material culture exhibited continuity across the LCIIIC/LCIIIA transition.<sup>80</sup> The apparently peaceful nature of many of the ca.1200 BCE settlement abandonments further suggests possible economic disruption rather than an invasion.<sup>81</sup>

In light of these points, much of the Late Cypriote material previously described as ‘Aegean’ has recently been argued to represent a ‘hybridising’ amalgamation of Cypriot, Aegean and Levantine technologies and iconographies indicative of a new elite identity emerging on Cyprus in response to increasing involvement in East Mediterranean trade networks.<sup>82</sup> As argued by Marian Feldman, the hybridized iconographic representations commonly seen on foreign ‘exotica’ reflect the development of internationally recognised symbols of ‘royalty’, used across the East Mediterranean at this time.<sup>83</sup> While some population movement between the Aegean and Cyprus is likely during the 12<sup>th</sup> Century BCE given the intense trade relations between Cyprus and the Levant, Egypt and the Aegean at this time, a dynamic cultural interaction characterised by the assimilation and adaptation of ‘foreign’ material currently seems more likely than a mass migration from the Aegean. The helleno-centric interpretation of seemingly

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<sup>78</sup> Hadjisavvas (2003); Karageorghis (1998a; 1998b; 2000a; 2002).

<sup>79</sup> Collard (2008); Hitchcock (1999; 2004; 2005); Iacovou (1989:52-53); Knapp (2008:259-264); Sherratt, E.S. (1992; 1998); South & Todd (1985); Voskos & Knapp (2008).

<sup>80</sup> Knapp (2008: 280); Sherratt, E.S. (1992:326-327); Steel (2004a:204); Voskos & Knapp (2008).

<sup>81</sup> Iacovou (2007:465-466); Knapp (1988:153; 1996a:69). Knapp suggests that the disruption of external markets, in particular, the demand for copper, would have disrupted the production economy of Cyprus which had developed in the LBA, in turn affecting the entire settlement hierarchy of the island.

<sup>82</sup> Eriksson (2008:306-307); Hitchcock (1999); Knapp (2008:264-280); Voskos & Knapp (2008); Smith (2003b).

<sup>83</sup> Feldman (2002:2). The iconography of this so-called ‘international style’ incorporates composite creatures such as sphinxes and griffins and fantastical vegetation such as voluted palmettes, running spiral s and guilloche patterns and is commonly found on easily portable luxury goods of a prestige nature such as ivory containers and jewellery. See also Smith (2003b).

foreign ‘innovations’ in 12<sup>th</sup> Century BCE Cypriote contexts may actually be the result of the influence of Cypriote nationalism and politics upon certain researchers.<sup>84</sup>

In any case, it appears that remaining urban centres flourished during the LCIIIA period, despite the disruptions to Cypriote society at this time.<sup>85</sup> Rich burials with local and imported luxury items attest to Cyprus’ continuing role as a centre of craft specialization and international trade. The LCIIIA/IIIB transition, however, demonstrates a more significant discontinuity in the archaeological record, with major changes to the cultural repertoire of the island including the abandonment of most LCIIIA urban centres prior to the establishment of the city kingdoms of the Cypriote Iron Age.<sup>86</sup>

With this contextual background in mind, the possible meanings associated with ASCs induced via the Late Cypriote consumption of alcohol and opium will now be assessed. Given the magnitude of Late Cypriote social transformation, however, an attempt will be made throughout this thesis to recognise that such changes may relate to corresponding changes in the symbolic and socio-political meanings associated with these mental phenomena.

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<sup>84</sup> Leriou (2007:21-22); Voskos & Knapp (2008: 660-662); cf. Steel (2005).

<sup>85</sup> Negbi (1986); Sherratt, E.S. (1991; 1992); Steel (2004a:188).

<sup>86</sup> Catling (1994); Iacovou (1989; 1994); Sherratt, E.S. (1991; 1992); Steel (2004a:210-211).



# Chapter 1. Altered States of Consciousness

## 1.1 Defining Altered States of Consciousness

As mentioned in the Introduction, ‘altered states of consciousness’ (ASCs) are mental states recognised by those experiencing them as a significant deviation, in terms of subjective experience or psychological functioning, from this monotonously regular, ‘ordinary’ consciousness.<sup>87</sup> Such deviations might include a greater preoccupation with internal sensations or mental processes than is usual and the impairment of reality testing to various degrees.<sup>88</sup> Examples of ASCs include mental states induced by the consumption of psychoactive substances, meditative states, trance<sup>89</sup> or possession states, phenomena such as hypnosis and even daydreaming. ASCs, it seems, can also be found in almost every culture.<sup>90</sup> Research by Bourguignon established that 437 out of 488 ethnographically recorded cultures under consideration practiced institutionalised, culturally patterned forms of an ASC.<sup>91</sup>

Previous studies focusing on ASCs are numerous and varied, reflecting the multi-disciplinary relevance of the topic.<sup>92</sup> The range of approaches used to study these phenomena include those that adopt a psycho-physiological focus,<sup>93</sup> cognitive or psychological approaches,<sup>94</sup> experiential or phenomenological perspectives,<sup>95</sup> ethnographic analyses<sup>96</sup> and studies which focus on the Shamanic use of ASCs.<sup>97</sup> While all of these approaches are relevant to an archaeological consideration of ASCs,

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<sup>87</sup> Barušs (2003:8); Bourguignon (1973a:6); Evans (1989:11); Ludwig (1968:69); Tart (1972:1203).

<sup>88</sup> Ludwig (1968:70).

<sup>89</sup> Barušs defines trance as a state of consciousness in which the appearance of awareness is present, but which is actually a sleep-like state characterised by involuntary behaviour and decreased environmental responsiveness, Barušs (2003:110).

<sup>90</sup> Bourguignon (1977:7; 1979:264); Morris (2006:311); van der Walde (1968:57); Winkelman (1997:393). Cf. Lewis (1971:38) who suggests that ‘mystical experiences’ (religiously interpreted ASCs) are a universal phenomenon and Hayden (2003:7), who argues that ASCs are the fundamental religious experience for the vast majority of ‘traditional’ religions.

<sup>91</sup> Bourguignon (1973a:9-11).

<sup>92</sup> Barušs (2003:viii, 8).

<sup>93</sup> Lee (1968); Ludwig (1968); Winkelman (1990; 1997; 2000).

<sup>94</sup> Barušs (2003); Pearson (2002); van der Walde, P. H. (1968).

<sup>95</sup> Evans (1989)

<sup>96</sup> Bourguignon (1968; 1973a); Kiev (1968); Lee (1968); Modarressi (1968).

<sup>97</sup> Eliade (1964); Halifax (1982); Ripinsky-Naxon (1993); Siikala & Hoppál (1992); Winkelman (1990; 1997; 2000).

experiential perspectives are particularly useful for documenting the variety of experience in ASCs and interpreting the meaning they may have had for individuals undergoing them.<sup>98</sup>

This chapter focuses on a discussion of ASCs, initially considering the ways in which such states can be induced and their common cognitive or experiential characteristics, as described by those who experience them. Ethnographically documented examples of ASCs will be presented to demonstrate how they can be incorporated as culturally meaningful practices, followed by a more general discussion of these phenomena, particularly in relation to their use within religious ritual. The chapter will conclude with a review of archaeological research which considers ASCs and a discussion of issues relevant to their investigation within this thesis.

## ***1.2 Inducing Altered States of Consciousness***

ASCs can be produced through a variety of methods and can appear in almost any context.<sup>99</sup> In general terms, it has been proposed that ASCs are produced by any agent or manoeuvre which interferes with the normal inflow of sensory or proprioceptive (body awareness) stimuli, the normal outflow of motor impulses, the normal 'emotional tone' or the normal flow and organisation of cognitive processes.<sup>100</sup> As there seems to be an optimal range of sensory stimulation necessary for the maintenance of normal waking consciousness, levels above or below this appear to be particularly conducive to producing ASCs.<sup>101</sup> These mental states can be deliberately induced or arise accidentally and unpredictably and can arise in solitary situations or in social contexts involving a number of individuals.<sup>102</sup> They can also be categorised as states that are subject to little cultural patterning and those that are given an institutional context with culturally defined form and meaning.<sup>103</sup> In relation to this thesis, the later are the most likely to be recognisable archaeologically.

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<sup>98</sup> Barušs (2003:6).

<sup>99</sup> Evans (1989:119-154); Ludwig (1968:70).

<sup>100</sup> Ludwig (1968:70).

<sup>101</sup> Lee (1968:49); Ludwig (1968:70).

<sup>102</sup> Bourguignon (1973a:8); Evans (1989:119-154); Ludwig (1968:70).

<sup>103</sup> Bourguignon (1973a:8; 1979:236).

Ludwig discusses the specific conditions under which ASCs occur, dividing them into five categories:<sup>104</sup>

**1) Reduction of exteroceptive (sensory) stimulation and/or motor activity.**

This includes the reduction of sensory input, the change in patterning of sensory data or the constant exposure to repetitive monotonous stimulation. Examples in this category include Highway hypnosis, solitary confinement ASCs, nocturnal hallucination and hypnotic trance.

**2) Increase of exteroceptive (sensory) stimulation and/or motor activity and/or emotion.**

Here, ASCs result primarily from sensory overload or bombardment, which may or may not be accompanied by strenuous physical activity or exertion. Examples include brainwashing, mass hysteria, religious conversion and healing trance, spirit possession states, shamanistic divination and prophetic trance, ecstatic trance (dervishes), fire-walkers trance and ASCs resulting from inner emotional turbulence or conflict. The phenomenon of sonic driving also fits into this category, whereby ASCs can be induced by repetitive rhythmic sound, often in combination with intensive and prolonged dancing and enhanced by any corresponding fatigue, hyperventilation or increase in body temperature.<sup>105</sup>

**3) Increased alertness or mental involvement.**

This category includes ASCs which result primarily from focused or selective hyper-alertness over a sustained period of time. Examples include trance resulting from prolonged vigilance, fervent praying and total mental involvement whilst listening to a charismatic speaker.

**4) Decreased alertness or relaxation of critical faculties.**

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<sup>104</sup> Ludwig (1968:71-74). Cf. Winkelman (1997:398-402).

<sup>105</sup> Neher (1962:156-159); Nencini (2002:926); Pearson (2002:74); Szabó (2006:58).

This category is characterised by passive states of mind where goal-directed thinking is minimal. Examples include mystical states achieved through meditation, daydreaming, drowsiness and music trance.

#### **5) The presence of somatopsychological factors.**

This refers to mental states resulting from alterations in body chemistry. Examples include ASCs resulting from dehydration, hormonal disturbances, hyperventilation or sleep deprivation, hypoglycaemia from fasting, toxic deliria and ASCs induced via the ingestions of psychoactive substances.

This final category is of particular importance to this thesis as it involves the use of specific materials which may be detectable in the archaeological record, psychoactive substances. Incidentally, the consumption of psychoactives is also considered to be the easiest and fastest method of inducing certain ASCs.<sup>106</sup>

Winkelman, from a 'psychopsychological' viewpoint, argues that the common feature of these categories is the manipulation of processes and functions of the limbic system, or 'paleomammalian' brain.<sup>107</sup> As the limbic system regulates such mental aspects as identity, emotion, attachment, sense of self and personal conviction, any changes to these can be considered to alter one or more aspect of consciousness.<sup>108</sup> The central role played by the limbic system can subsequently be seen to explain many of the experiential characteristics recorded in relation to ASCs.

### ***1.3 Experiential Characteristics of Altered States of Consciousness***

Given the subjective nature of consciousness, it should come as no surprise that there is notable variation between attempts to describe and subsequently categorise the aspects of consciousness affected by ASCs.<sup>109</sup> The difficulties involved in describing these aspects are further compounded by the way cultural and personal factors can

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<sup>106</sup> Pearson (2002:74).

<sup>107</sup> Winkelman (1997:397-398; 2000:xii).

<sup>108</sup> Winkelman (2000:xii).

<sup>109</sup> Barušs (2003:8).

influence these experiences. Not only may the subjective context of ASCs differ, depending on the cultural or social circumstance, but the behavioural manifestations associated with them may also vary.<sup>110</sup> Although such cultural factors do not determine the basic nature of these experiences, they do structure the behavioural manifestations of the experience and the way it can be modified and interpreted into a form acceptable within an individual's socio-cultural context.<sup>111</sup> For example, the sensation of flying is experienced during both the injection of DMT (dimethyltryptamine) in an experimental setting and the ritual ingestion of *ayahuasca*,<sup>112</sup> but as the cultural context of these experiences is markedly different, so is the meaning attributed to each.<sup>113</sup>

When such individual and cultural variation is taken into account, a number of basic aspects of consciousness are affected during ASCs, with varying degrees of overlap.<sup>114</sup> While the following should not be considered an exhaustive list, Ludwig suggests that the characteristics of most ASCs, at least during clinical tests are:<sup>115</sup>

### **1) Alterations in thinking.**

Within this category Ludwig includes subjective disturbances in concentration, attention, memory and judgement. Primary thought processes often predominate and reality testing can be impaired. The distinction between cause and effect becomes blurred, reflective awareness is diminished, an individual may become less aware of being awake and can experience an inward shift in the direction of attention.

### **2) Disturbed time sense.**

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<sup>110</sup> Bourguignon (1973a:12; 1977:7; 1979:233, 242); Ludwig (1968:76); van der Walde (1968:58). See also Rättsch (2005:13-14) for discussion of the importance of dosage, set and setting on the experiences induced by psychoactive substances.

<sup>111</sup> Bourguignon (1973a:14); van der Walde (1968:58)

<sup>112</sup> *Ayahuasca* is the name given to a psychoactive infusion of the Amazonian jungle vine genus *Banisteriopsis* used during rituals in a number of regions of South America. For a more detailed summary, see Rättsch (2005:86-88); Rudgley (1998:24-30).

<sup>113</sup> Nencini (2002:928).

<sup>114</sup> Barušs (2003:8); Evans (1989:34-48); Ludwig (1968:77-83).

<sup>115</sup> Ludwig (1968: 77-83). As an example of an alternative list of these characteristics, Barušs lists the aspects of consciousness affected to be attention, perception, imagery, inner speech, memory, decision making, problem solving, emotions, arousal, self-control, suggestibility, body image, personal identity, experience of time and meaning, Barušs (2003:8).

The subject may feel timelessness, time coming to a standstill or a slowing or quickening of time.

**3) Loss of control.**

The subject often experiences a loss of self-control. During the induction phase a subject may actively try to resist the ASC, fearing this loss of control, while in other cases they may relish giving in to experience, perceiving greater control or power through the loss of control. The latter is often the case in mystical, revelatory, spirit possession states, where the subject relinquishes conscious control in the hope of experiencing divine truths, clairvoyance, cosmic consciousness, communion with the spirits or supernatural powers.

**4) Change in emotional expression.**

This includes sudden and unexpected delay of emotion, more intense displays than normal and emotional extremes.

**5) Body-image change.**

This includes a wide array of changes to the way in which subjects perceive their body, whereby various parts of the body may feel shrunken, enlarged, distorted, heavy, weightless, disconnected, 'strange' or 'funny'. Experiences of dizziness, blurred vision, weakness, numbness, tingling and analgesia may also occur. Also common are experiences of a profound sense of depersonalisation, a schism between body and mind or feelings of the dissolution of boundaries between the self and others, the world or the universe.<sup>116</sup> In religious settings, these may be interpreted as transcendental or mystical experiences of 'oneness', expansions of consciousness or oblivion.

**6) Perceptual distortions.**

These include hallucinations, increased visual imagery and subjective hyper-acuteness of perceptions. This can also include synesthesia, where one form of

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<sup>116</sup> Evans (1989:42-43); Ludwig (1968:78).

sensory experience is translated to another form (for example, smelling a colour). The content of the perceptual distortions is particularly subject to the influence of cultural, individual and neuro-physiological factors.

**7) Change in meaning or significance.**

This includes a tendency for subjects to attach an increased meaning or significance to their experiences, ideas or perceptions, contributing to feelings of profound insight, illumination or truth. This represents one of the most important features of the mystical or religious consciousness and is likely to explain the use of ASCs to achieve ‘revelation’ in the context of religious ritual.

**8) A sense of the ineffable.**

Because of the uniqueness of subjective experience often associated with certain ASCs, subjects often find it difficult to explain them to someone who has not undergone similar experience.

**9) Feelings of rejuvenation.**

On emerging from an ASC many claim to experience renewed hope, rejuvenation or rebirth.<sup>117</sup>

**10) Hypersuggestibility.**

This describes an increased susceptibility to accept or automatically respond uncritically to specific commands or requests or to non-specific cues.<sup>118</sup> This characteristic is probably related to the reduction in critical faculties and capacity for reality testing (see no.1, above) and in an effort to compensate subjects may rely more heavily on suggestions of perceived authority figures. The dissolution of boundaries of the self common in ASCs (see no.5, above) may also contribute to believing that an authority figure’s wishes are one’s own, while suggestions

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<sup>117</sup> Although Ludwig lists this as a possible characteristic of an ASC, it may be more appropriate to consider it as a possible outcome of undergoing such a state (see below), rather than a characteristic of the experience itself.

<sup>118</sup> Evans (1989:41-42); Ludwig (1968:82).

may also be accepted as concrete reality or viewed with increased significance (see no.7, above).

## **1.4 Historical and Ethnographic Examples of Altered States of Consciousness**

A number of historically and ethnographically recorded examples of the culturally patterned use of ASCs are presented here. These are designed to demonstrate the ways in which such phenomena can be incorporated into various cultural practices and how their experiential characteristics may be interpreted in culturally meaningful ways and related to wider systems of belief.

### **1.4.1 Shamanism**

Of the many documented instances of the culturally patterned use of ASCs, examples of practices described as ‘shamanic’ dominate. Although first recorded amongst the nomadic tribes of Siberia and Central Asia (the term ‘shaman’ is a Tungus-Mongul word meaning ‘he who knows’),<sup>119</sup> similar practices have since been identified within a range of cultures throughout other parts of Asia (Nepal, Indonesia), the Americas, the Pacific, Scandinavia and Africa.<sup>120</sup> At the most general level, shamanism is an academic notion used to describe a pattern of ritual behaviour and belief in which a charismatic individual (the shaman) deliberately enters an ASC in order to interact with various spirits for the benefit of their community.<sup>121</sup> Although commonly associated with hunter-gatherer societies,<sup>122</sup> the occurrence of institutionalised shamanism within hierarchical communities<sup>123</sup> suggests its existence in more complex social contexts.

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<sup>119</sup> See Hayden (2003:46); Ripinsky-Naxon (1993:69). Cf. Kehoe (2000); Winkelman (1997:394) for discussion of the difficulties involved in both using the term ‘shaman’ and clearly defining shamanism.

<sup>120</sup> Eliade (1964); Halifax (1982); Harvey (2003); Morris (2006:17); Ripinsky-Naxon (1993).

<sup>121</sup> Eliade (1964:4-6); Hayden (2003:46); Morris (2006:16-19); Pearson (2002:74); Price (2001:3,6); Ripinsky-Naxon (1993:9,67, 96); Siikala & Hoppál (1992:1).

<sup>122</sup> Pearson (2002:66, 71); Ripinsky-Naxon (1993:22-23); Winkelman (1990; 1997:403). Cf. Winkelman (1990:309; 2000:58) who argues that the use of the term shaman should be restricted to hunter-gatherer societies.

<sup>123</sup> Lewis (1971:127-148); Siikala & Hoppál (1992:4).

A number of scholars have suggested that shamanic practices date back at least to the Palaeolithic (see Section 1.6),<sup>124</sup> although they may even be as old as anatomically modern humans.<sup>125</sup> Indeed, Winkelman argues that shamanism was universally practiced throughout the world prior to the development from hunter-gatherer lifestyles<sup>126</sup>, while other scholars suggest that many later religious myths and traditions, particularly those involving ASCs, probably derive from shamanism.<sup>127</sup>

### **The Role of the Shaman**

As one would expect for such a widespread phenomenon, shamanic practices display significant variation across the cultures in which they have been observed.<sup>128</sup> A number of basic elements of shamanism, however, may be trans-cultural.<sup>129</sup> First and foremost, the shaman performs the crucial role of mediator between his or her community and the spirit world (including nature), ensuring equilibrium between the two.<sup>130</sup> This includes such activities as interacting with the ‘Master of Animals’ to entreat sufficient food for the community, divining the cause of an illness or auguring the future and acting as a guide or ‘psychopomp’ for the souls of the dead to ensure their passage to the spirit realm.<sup>131</sup> In order to undertake these responsibilities, the shaman embarks on soul-journeys by entering an ASC which allows him or her to travel within the other-world (see below) and interact with spiritual assistants and avatars for the benefit of the community.<sup>132</sup> Alternatively, the shaman may call the spirits to interact with the community during a séance, acting as the medium for this interaction.<sup>133</sup> As a community’s healer, mystic and intellectual, the shaman also deals with matters concerning the community as a social unit, maintains their sacred myths and traditions, acts as a genealogist and keeps the calendar.<sup>134</sup> The role of a shaman within a community

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<sup>124</sup> Halifax (1982:5-6); Lewis-Williams (1999); Morris (2006:16) Siikala & Hoppál (1992:2).

<sup>125</sup> Winkelman (2000:xiii). Winkelman (2000:xiii) even suggests that shamanism played a central role in evolution of human consciousness.

<sup>126</sup> Winkelman (1990:319-301; 1997:393).

<sup>127</sup> Couliano (1991:8); Hayden (2003:86).

<sup>128</sup> Ripinsky-Naxon (1993); Siikala & Hoppál (1992:22).

<sup>129</sup> Ripinsky-Naxon (1993:9); Siikala & Hoppál (1992:2); Winkelman (1997:395-396).

<sup>130</sup> Pearson (2002:75); Siikala & Hoppál (1992:1, 126-127).

<sup>131</sup> Eliade (1964:205-258).

<sup>132</sup> Eliade (1964:5); Morris (2006:19); Pearson (2002:71); Ripinsky-Naxon (1993:67); Siikala & Hoppál (1992:1, 26).

<sup>133</sup> Siikala & Hoppál (1992:1).

<sup>134</sup> Pearson (2002:75); Ripinsky-Naxon (1993:64); Siikala & Hoppál (1992:1, 127).

is also commonly compared with that of a psychoanalyst.<sup>135</sup> Where a psychoanalyst interprets a personal trauma, however, a shaman provides the patient with a social myth that integrates and gives meaning to their disordered state or misfortune.<sup>136</sup>

The social role and beliefs associated with the shaman may often contribute to considerable social, economic and political power, possibly even outright authority.<sup>137</sup> As such, shamanism has a significant role, alongside other types of beliefs, in the formation of various social institutions, including the rise of specialised hierarchies within a stratified social organisation.<sup>138</sup> Indeed, according to Morris, almost all early states and empires were based on shamanic power, or ritualised suzerainty: “Shamanism itself implies a spiritual hierarchy, a devaluation of the empirical world, and evinces not equality and reciprocity, but charismatic (shamanic) power.”<sup>139</sup>

### **The Shamanic ‘Worldview’**

To develop an understanding of the symbolic meaning associated with shamanic ASCs, the beliefs or worldview associated with them must be considered. As with the nature of shamanism itself, although there is significant variation in the shamanic worldviews, some fundamental themes have been observed.<sup>140</sup>

In its most common form, the shamanic cosmos is vertically tiered, divided into three levels; the Middleworld, Upperworld and Underworld.<sup>141</sup> The Middleworld is the plane of everyday life, inhabited by both humans and non-mortal entities with considerable power, such as the ‘Master of Animals’.<sup>142</sup> Spirits are frequently believed to inhabit distinctive features of the middle world: mountains, caves, rivers, springs, rocks, trees and other special places.<sup>143</sup> The Upperworld is generally believed to be occupied by the most powerful beings; anthropomorphic deities (creator beings), astronomic personages such as Sun, Moon and creatures who are the ancestors of all animal

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<sup>135</sup> Lévi-Strauss (1963:198-204); Lewis (1971:178-205); McClenon (1997:347); Siikala & Hoppál (1992:123).

<sup>136</sup> Lévi-Strauss (1963:198).

<sup>137</sup> Lewis (1971:133, 140); Morris (2006:33,42); Pearson (2002:65); Ripinsky-Naxon (1993:62, 71); Siikala & Hoppál (1992:2); Winkelman (1997:395).

<sup>138</sup> Hayden (2003:122-151); Ripinsky-Naxon (1993:22).

<sup>139</sup> Morris (2006:75).

<sup>140</sup> Eliade (1964:259-279); Pearson (2002:69); Ripinsky-Naxon (1993:71).

<sup>141</sup> Eliade (1964:259-266); Hayden (2003:77-79); Pearson (2002:69); Ripinsky-Naxon (1993:105-120); Siikala & Hoppál (1992:7).

<sup>142</sup> Hayden (2003:77-79); Pearson (2002:69); Ripinsky-Naxon (1993:119-120).

<sup>143</sup> Pearson (2002:69).

species.<sup>144</sup> Although the Underworld is also considered to be inhabited by supernatural creatures such as spirits, ghosts and monsters, these tend to be seen as more malevolent towards humans than the supernatural beings from the other two realms.<sup>145</sup> Amongst hunter-gatherer societies, such beings tend to be identified as nature spirits, while in more complex, hierarchical societies, important spirits may be considered to be those of ancestors, particularly ancestor shamans.<sup>146</sup>

This shamanic cosmos is also considered to have a centre and an edge.<sup>147</sup> The centre is the axis of the world and the point at which all three levels of its levels join.<sup>148</sup> It is commonly conceived as a sacred pole, cosmic pillar, cosmic tree or world mountain, used by shamans to reach the supernatural realm.<sup>149</sup>

Regardless of whether or not a particular shamanic culture subscribes to the three-tiered cosmos described above, there exists a basic division between the natural, everyday world and the supernatural world, in which all supernatural beings exist.<sup>150</sup> Entry to this alternate reality is seen to be gained by the shaman entering an ASC, thereby initiating a journey or 'soul flight' within the other-world(s).<sup>151</sup> As illness or misfortune is usually seen as the result of malevolent spirits or a response by other spirits to a perceived slight, such as violation of the cosmic balance, harmony or social order, the shaman uses interaction with such spirits to investigate the cause of any illness or misfortune and determine the measures necessary to resolve the problem.<sup>152</sup>

### **Shamanic Initiation**

Becoming a shaman usually involves undergoing ordeals and rites of initiation.<sup>153</sup> A prospective shaman is commonly believed to have been chosen by the spirits and discovers his calling through an inner personal crisis, often characterised by some

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<sup>144</sup> Pearson (2002:69); Ripinsky-Naxon (1993:119).

<sup>145</sup> Pearson (2002:69).

<sup>146</sup> Siikala & Hoppál (1992:8).

<sup>147</sup> Pearson (2002:69); Ripinsky-Naxon (1993:112-115).

<sup>148</sup> Pearson (2002:69-70); Ripinsky-Naxon (1993:113).

<sup>149</sup> Eliade (1964:259-279); Hayden (2003:77); Pearson (2002:70); Ripinsky-Naxon (1993:112-115); Siikala & Hoppál (1992:7).

<sup>150</sup> Morris (2006:18); Ripinsky-Naxon (1993:67,113).

<sup>151</sup> Pearson (2002:71,75); Ripinsky-Naxon (1993:67). Shamanic ASCs are also commonly referred to as shamanic trance, Pearson (2002:73).

<sup>152</sup> Morris (2006:30); Ripinsky-Naxon (1993:65); Siikala & Hoppál (1992:26).

<sup>153</sup> Eliade (1964:110-144); Lewis (1971:66-70); Morris (2006:26); Pearson (2002:72); Winkelmann (199:7396). For specific examples, see Djarvoskin (2003); Harner (2003).

physical or mental anomaly.<sup>154</sup> This is commonly resolved through a physical ordeal symbolising death and subsequent rebirth.<sup>155</sup> This ordeal often consists of isolation in a forest or cave, accompanied by deprivations resulting in considerable psychological and physical stress.<sup>156</sup> The subject may have to endure beatings, burning, laceration, exposure to cold or snow and even being hung upside down for days. Recognising the mortality of the body is believed to be essential for the soul's transcendence to a more spiritual level of consciousness. A successful emergence from such ordeals demonstrates that the person is reborn and has gained shamanistic enlightenment.<sup>157</sup>

Subsequent phases of initiation may include the administration of hallucinogenic preparations by a master shaman to induce an ASC in order to send the initiate on their first soul-journey.<sup>158</sup> During this voyage, the shaman will hopefully meet his or her 'power animals', supernatural spirit helpers or totems which become lifelong assistants, or may even transform into an animal 'spirit helper'.<sup>159</sup> A mentor shaman will then begin instruction on healing, shamanistic lore and techniques and the oral traditions and myths of their people.<sup>160</sup> As a shaman becomes more experienced, they will become more familiar with ASCs, more in control of the situations they encounter while under them and increase the intensity of such experiences.<sup>161</sup>

Many of the trappings of a shaman (**Fig.1.1**) symbolically reflect their role as someone who travels in other worlds. Where drumming is used to help achieve an ASC, the shaman's drum is an important symbol upon which he or she is considered to fly or ride.<sup>162</sup> Animal decorations worn by shamans, such as feathered headdresses or antlers, may represent the spirit animals with which the shaman identifies, while symbols of death and rebirth may represent the shaman's initiation experience.<sup>163</sup>

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<sup>154</sup> Lewis (1971:66-70); Morris (2006:26); Pearson (2002:72); Ripinsky-Naxon (1993:71); Siikala & Hoppál (1992:5). In more hierarchical contexts, the role could also be handed down within a family, Siikala & Hoppál (1992:6).

<sup>155</sup> Lewis (1971:66-70); Pearson (2002:72); Ripinsky-Naxon (1993:82); Siikala & Hoppál (1992:6,126).

<sup>156</sup> Pearson (2002:72); Ripinsky-Naxon (1993:82); Siikala & Hoppál (1992:6).

<sup>157</sup> Pearson (2002:73); Ripinsky-Naxon (1993:82).

<sup>158</sup> Ripinsky-Naxon (1993:85).

<sup>159</sup> Morris (2006:26); Pearson (2002:73); Ripinsky-Naxon (1993:86).

<sup>160</sup> Pearson (2002:73); Ripinsky-Naxon (1993:87).

<sup>161</sup> Pearson (2002:73).

<sup>162</sup> Eliade (1964:145-180); Siikala & Hoppál (1992:9).

<sup>163</sup> Hayden (2003:59-60); Siikala & Hoppál (1992:10).

## Shamanic Altered States of Consciousness

Shamanic ASCs are predominantly induced through the ritualised consumption of psychoactive substances,<sup>164</sup> although other methods may also be used. These include fasting, self-immolation, physical and mental deprivation, torture, lack of sleep and other exhaustions, ceaseless dancing and rhythmic activities such as drumming and chanting.<sup>165</sup> The psychoactive substances used to induce shamanic ASCs may include psilocybin and the fly-agaric (hallucinogenic mushrooms), peyote, datura, opium, ergot, cannabis, coca and yage (ayahuasca).<sup>166</sup>

In addition to the induction of ASCs, the ritual surrounding the shamanic soul-journey commonly involves, “metaphors addressed to the spirit world through drumming, chants, dance, myths, drama, or more appropriately, psychodrama.”<sup>167</sup> This shamanistic drama usually occurs at night around a fire inside a tent.<sup>168</sup> When entering a deep ASC, the shaman may have a superficial appearance of death.<sup>169</sup> An experienced shaman, however, can maintain control over their personality and cognitive perception of purpose to become actively involved in encounters with supernatural beings of the other-world.<sup>170</sup> In many cases, the entranced shaman will describe aloud the adventures and perils of his soul journey, or possibly act out the role of one or more spirits.<sup>171</sup>

What is experienced, whether it be a soul flight or out-of-body experience, possession, a mystical state of pure being or a visionary experience, the degree of consciousness or amnesia and whether the experience is interpreted in secular or religious terms, seems to be extremely variable.<sup>172</sup> In addition to the influence that various belief systems have on the interpretation of shamanic altered states, such psycho-physical differences can also influence the specific explanation of a shaman’s experience.<sup>173</sup> In this regard, dramatic experiences are commonly interpreted as possession by a spirit or demon (commonly described as ‘possession trance’, see section 1.5.1), while less

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<sup>164</sup> Morris (2006:20); Pearson (2002:74); Ripinsky-Naxon (1993:9).

<sup>165</sup> Morris (2006:20); Ripinsky-Naxon (1993:142); Siikala & Hoppál (1992:11, 33-34).

<sup>166</sup> Ripinsky-Naxon (1993:85). For the shamanic use of opium, see Bernatzik (1970:244).

<sup>167</sup> Ripinsky-Naxon (1993:52).

<sup>168</sup> Ripinsky-Naxon (1993:52); Siikala & Hoppál (1992:10).

<sup>169</sup> Pearson (2002:74).

<sup>170</sup> Pearson (2002:74); Ripinsky-Naxon (1993:86).

<sup>171</sup> Ripinsky-Naxon (1993:37); Siikala & Hoppál (1992:35-37).

<sup>172</sup> Morris (2006:20).

<sup>173</sup> Siikala & Hoppál (1992:11-12, 27).

dramatic experiences are commonly associated with the idea of the soul journey.<sup>174</sup> This variation in both the experience of the shamanic ASC and the interpretations developed for it may explain the considerable diversity observed in shamanic tradition, even within a single culture.<sup>175</sup>

In light of the experiential characteristics of ASCs as discussed above, the association of such mental states with the shamanic other-world seems clear. The visual and sensory imagery of shamanic trance states is taken as proof that the supernatural world has been entered,<sup>176</sup> with an individual's mythical worldview serving as guidelines for the manifestation of comprehensible images.<sup>177</sup> The subsequent soul journey constitutes a form of self-objectification and role taking<sup>178</sup> that provides the shaman with a sense of power and meaning directly related to human existence and its place within the cosmos.<sup>179</sup>

#### **1.4.2 !Kung Trance Performances<sup>180</sup>**

The !Kung San live in the Kalahari desert of Botswana in nomadic camps of 10-60 individuals and maintain a hunter-gatherer lifestyle. The dominant mode of religious expression amongst the !Kung is the culturally prescribed induction of ASCs which are used to cure the sick, influence the supernatural and to provide mystical protection. During an ethnographic study by Lee, approximately 50% of the adult males from the camp investigated were recorded as trance performers. During the trance performance, referred to as a dance, ASCs were induced via auto-suggestion, rhythmic dancing, intense concentration and hyperventilation, with the use of psychoactive substances completely absent.

The !Kung San were observed to dance at any time of year, with no discernable changes in frequency, although small camps tended to dance around once a month, while larger ones did so around once a week. Incentives for staging a dance include the

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<sup>174</sup> Siikala & Hoppál (1992:11-12, 35-40).

<sup>175</sup> Siikala & Hoppál (1992:22-23).

<sup>176</sup> Pearson (2002:75).

<sup>177</sup> Ripinsky-Naxon (1993:194).

<sup>178</sup> Winkelman (2000:xiii).

<sup>179</sup> Ripinsky-Naxon (1993:194).

<sup>180</sup> This description is entirely derived from Lee (1968).

presence of meat in the camp (as hunting was not necessary the following day), the arrival of visitors to the camp and the presence of sickness.

A dance is a major, all-night affair involving most adults of the camp. It is conducted in a circle, with a fire representing medicine, located in the centre. The women of the camp sit shoulder to shoulder between the male dancers and the fire, usually singing, but also dancing occasionally. The men dance and stamp around in a circle outside that of the women, moving both clockwise and anti-clockwise (**Fig.1.2**). Spectators, children and resting dancers sit around the outside of the dance circle. The dance is a social and recreational occasion, where trance performance is contrasted with social chatter, laughter and flirtation. Only the male participants enter trance although the women play an important role in providing the music. A dance usually begins about two hours after dark when the women light the central fire and begin singing.

Lee describes five phases involved in the trance induced during the dance:<sup>181</sup>

**1) Working up.**

The men dance with a tight, hunched posture, arms close to their sides, making short heavy steps with complex rhythmic figures. These dances last five to ten minutes each and this phase lasts for approximately the first two hours of dancing.

**2) Entering trance.**

A number of dancers apparently begin to concentrate intently, staring ahead or down at their feet. Footfalls and breathing become heavy and the dancers begin to sweat profusely. This phase lasts for approximately 30-60 minutes. A trancer can enter trance slowly, where he may stagger or lose balance and is subsequently led around by non-trancers until he shouts and falls comatose into 'half death', **Fig.1.3**. Alternatively trance may be entered suddenly, often characterised by a violent leap or somersault and an instant collapse into 'half death'.

**3) Half death.**

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<sup>181</sup> Lee (1968:39-41).

The trancer is stretched out on the ground outside the dance circle where dancing continues. Other men rub him with their hands or heads to keep his body warm. The trancer's body is rigid and he may tremble, moan and utter short shrieks. Many of the more experienced trancers, however, do not enter this phase.

#### **4) Active curing.**

The trance performer rises and moves amongst the participants and spectators, with his eyes half closed and staggering, to cure by laying on hands (**Fig.1.4**). This involves rubbing a subject with trembling hands, while continuing to moan, in rising intensity. A trancer treats every person present at the ceremony, although any sick person will receive more attention. During this phase, which lasts about an hour, a trancer may return to dancing to reinforce a fading trance. Violent exertions, such as fire-walking and fire-handling, sometimes occur during trance, but are not typical of more experienced trancers and are largely confined to young novices who are usually physically restrained by the older men.

#### **5) Return to normal state.**

After curing, the trancer usually falls asleep.

The dance continues all night, with trance activity observed to peak at around 12-2am and again at sunrise. A dance usually ends around 10-11am, although some continue through the following night, with changing personnel. The recruitment and training of trance performers is also an important part of the dance ritual whereby three or four older men commonly assist a young trancer while they are deep in trance.

Again, it is necessary to consider the beliefs behind the !Kung healing trance in order to begin to understand the symbolic meaning associated with the ASCs used within these ceremonies. Lee argues that !Kung medicine is considered to lie in the pit of the stomach of the medicine owner, although men can transfer medicine from one body to the other by laying on hands and rubbing sweat. Medicine normally lies dormant and needs to be heated by dancing. It is the boiling of medicine and its subsequent rising to

reach the brain that induces the healing trance. Sweat is viewed as a visible vapour of heated medicine on the surface of the body.

Trancers are believed to offer mystical protection to others involved in the ritual through laying on hands. They are also thought to be able to see ghosts of ancestors, to see across long distances and to possess x-ray vision. Spirits of the dead are sometimes believed to be responsible for causing sickness and may be seen by the trancers near the edge of the dance circle. X-ray vision usually consists of the ability to determine the sex of infants *in utero*. There is also a related belief that the most powerful of trance curers have the ability to transform into lions and stalk the desert for human prey.

In terms of the conditions that can induce ASCs, !Kung trance seems to constitute an increase in exteroceptive stimulation or motor activity. !Kung trance clearly utilises hyperactivity, increased excitement and vigorous, often violent expenditure of energy to induce trance.

When questioned about their trance experience, !Kung trancers describe perceptual distortions, changes in body image, dizziness, spatial disorientation, hallucinations and muscular spasms. They report sensations of boiling in the stomach, elevation above the ground, becoming larger than people around them (or others becoming smaller) and their bodies feeling vibrant with energy.

Lee suggests that while !Kung trance is in some ways similar to shamanistic trance, the beliefs which provide meaning to each can be viewed quite differently in that !Kung healing power comes from within the social body, and not through an interaction with spirits in the other-world. He also suggests that !Kung trance reflects more egalitarian ideals and strong community ties, demonstrated by the participation of the entire community within the dance and the high percentage of men who become trancers. The belief that healing power comes from the men of the community and the source of illness from outside of the group provides further evidence for a strong sense of community solidarity. Lee also argues that in the context of !Kung social ethics, which place a high value on harmony and avoiding violence, trance performance may also provide a socially approved outlet for behaviour which would normally be objectionable, such as shrieking, hyperactivity, trembling and even violence.

### 1.4.3 Voodoo Spirit-Possession in Haiti

Voodoo is a Haitian folk religion derived from a fusion of African animism and Catholicism.<sup>182</sup> The concept of spirit-possession is a central feature of Voodoo, and refers to the belief that *lao* (spirits or deities) interact with humanity by mounting or entering a person, replacing their soul.<sup>183</sup> While possessed, a person's thought and behaviour are attributed to the *lao* and some people perform extraordinary feats while possessed, such as climbing down trees headfirst (when possessed by a snake *lao*), holding hot irons, chewing broken glass and walking on hot coals (**Fig.1.5**).<sup>184</sup> Within Voodoo, most serious illness, and particularly psychiatric illness, is believed to be caused by possession following a wrongdoing or the breaking of a taboo and it is considered important for a patient to strive for or accept possession to begin the healing process.<sup>185</sup>

Voodoo possession rituals frequently involve much dancing, singing and drinking of alcohol in an atmosphere charged with extreme amounts of sound, light and drug stimuli (**Fig.1.6**).<sup>186</sup> Participants suffering from illness may also pray and fast beforehand to increase the likelihood of being healed.<sup>187</sup> As is the case for !Kung trance, the conditions which seem to contribute to the induction of Voodoo possession trance fall under the category of an increase in exteroceptive stimulation or motor activity.<sup>188</sup> The intense drum rhythm commonly present at Voodoo ceremonies may have a sonic-driving effect, while rhythmic dancing, alcohol and exhaustion may also contribute to the induction of ASCs.<sup>189</sup>

In addition to the performance of extraordinary feats, Voodoo possession is characterised by fainting, speaking in tongues, exhaustion, a reduction in the sense of self-identity and self-awareness and a subsequent sense of merging with the group.<sup>190</sup> Furthermore, most trancers do not remember much about the possession period, reinforcing the belief that one of their souls (it is believed that there are two) has been

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<sup>182</sup> Kiev (1968:143).

<sup>183</sup> Bourguignon, E. (1977:19; 1979:237); Kiev (1968:143).

<sup>184</sup> Bourguignon (1979:237); Kiev (1968:143).

<sup>185</sup> Kiev (1968:143;146).

<sup>186</sup> Bourguignon, E. (1977:19); Kiev (1968:144).

<sup>187</sup> Kiev (1968:144).

<sup>188</sup> Kiev (1968:145).

<sup>189</sup> Bourguignon (1979:240); Kiev (1968:144).

<sup>190</sup> Kiev (1968:143, 145).

displaced during this time.<sup>191</sup> In contrast, Voodoo religious leaders, or *Hungans*, often enter a mild possession state for the purpose of divining or curing through incantations or prayer.<sup>192</sup> With the exception of a change in voice, posture and facial expression, they preserve awareness of social context and their role. Their possession experiences are marked by a greater degree of self-control and consciousness than their patients, although it is possible that a hungan's possession state may actually constitute a dramatic role play rather than an ASC.

Kiev notes that many of the patients who come to a healer are suffering under the effects of a psychiatric illness and are significantly distressed.<sup>193</sup> Not only are psychiatric disorders generally humiliating, confidence-destroying and anxiety-producing in themselves, in contexts where such illness is attributable to a wrongdoing or breaking of a taboo, the sick individual may feel that others will view him as a taboo violator and reject him. This can lead to further anxiety, guilt, fear or shame. This may make a patient more amenable to suggestion and more likely to acknowledge community leaders and accept a passive role.

Kiev suggests that the social value of Voodoo possession rituals lies in the fact that the behaviour patterns they allow for provide a therapeutic channel broad enough to be suitable for most participants.<sup>194</sup> For the depressed and guilt ridden, the sin-cathartic basis of Voodoo ideology and ceremonies reduce guilt; for the hysteric, a possession ceremony provides a socially acceptable model for acting out; and for the obsessional and depressed, the event offers a reduction of inhibitions and an increase in emotionality. The connection of treatment with dominant social values further increases its therapeutic potential as does the possession trance experience of a sense of merging with the group.<sup>195</sup>

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<sup>191</sup> Bourguignon (1979:240); Kiev (1968:143).

<sup>192</sup> Kiev (1968:144).

<sup>193</sup> Kiev (1968:146).

<sup>194</sup> Kiev (1968:147).

<sup>195</sup> Kiev (1968:145).

## **1.5 The Social and Cultural Roles of Altered States of Consciousness**

The examples of the culturally patterned use of ASCs presented above demonstrate the prominent roles and meanings which such behaviour often has within the societies in which they are employed. Given the prevalence of such phenomena,<sup>196</sup> this suggests that the utilisation of ASCs is a significant aspect of human social behaviour. Although the variability of ASCs experiences largely relates to psychobiological factors, the specific explanation of such states occurs at a cultural level.<sup>197</sup> As such, to understand the role a particular ASC has within a given society requires consideration of the social context in which it occurs.<sup>198</sup> As the cultural meaning supplied for them and the institutional framework within which they operate varies, so do the social roles ascribed to them.<sup>199</sup>

In relation to the role or meaning that ASCs may have within a society, Ludwig defines a number of ‘adaptive expressions’ of such states; those that function adequately and constructively.<sup>200</sup> These include:<sup>201</sup>

### **1) Healing.**

ASCs commonly play a major role in various healing practices and are particularly prevalent as a form of psychological therapy,<sup>202</sup> as suggested by the examples presented above. Healing practices which make use of ASCs often take advantage of the increased suggestibility, added meaning, emotional catharsis and feeling of rejuvenation commonly produced by such mental states.<sup>203</sup>

### **2) Avenues to new knowledge or experience.**

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<sup>196</sup> Bourguignon (1973a:9-11; 1977:7; 1979:264); Morris (2006:311); van der Walde (1968:57); Winkelman (1997:393).

<sup>197</sup> Bourguignon (1973a:13-14); van der Walde (1968:58)

<sup>198</sup> Bourguignon (1973a:13).

<sup>199</sup> Bourguignon, E. (1973a:3, 12; 1977:7; 1979:233, 242); Ludwig (1968:76); van der Walde (1968:58).

<sup>200</sup> As opposed to ‘maladaptive expressions’, which are unlikely to be adopted as culturally patterned practices, Ludwig (1968:86).

<sup>201</sup> Ludwig (1968:87-90).

<sup>202</sup> Bourguignon, E. (1979:267); Lewis (1971:178-205); Ludwig (1968:87); Winkelman (1990:322-323; 1997:405-410).

<sup>203</sup> Ludwig (1968:87); Prince (1968:vi).

Particularly in religious contexts, ASCs open up new realms of religious experience, reaffirm moral values, resolve emotional conflicts and often enable better ways of coping with the human predicament and the nature of the world. Indeed, it seems that such states are predominantly viewed in a religious context, with superhuman knowledge commonly considered unattainable during waking consciousness.<sup>204</sup> As this religious role of ASCs is of particular relevance to this thesis, it is discussed in further detail below (Section 1.5.1). It has also been suggested that ASCs have contributed significantly to creative insight and problem solving.<sup>205</sup>

### 3) Social function.

ASCs used in group settings may have a role in developing and structuring social relationships.<sup>206</sup> Dramatic displays of ASCs in a religious context, such as soul-journeys or spirit-possession, may serve to convince participants of the continued personal interest of spiritual beings, reaffirm local beliefs and sense of spiritual control and endow the utterances of a trancer with increased importance.<sup>207</sup> The common experience of the dissolution of the boundary between self and others can also contribute to greater social cohesion and a stronger sense of group identity.<sup>208</sup> From an individual perspective, possession rituals can provide a means of attaining a high status by filling a cult role, temporary freedom of responsibility for actions and pronouncements or the opportunity to act out aggressive and sexual conflicts or desires in a socially sanctioned manner.<sup>209</sup> In particular, it has been suggested that possession rituals are particularly popular among disempowered or marginal people as the sense of spiritual security and confidence that such an active cult role may have can replace the despair and hopelessness of their situation without actually providing any impetus for social change.<sup>210</sup> On the

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<sup>204</sup> Bourguignon (1973a:3 ,9); Ludwig (1968:88).

<sup>205</sup> Evans (1989:40, 47); Ludwig (1968:88); Ripinsky-Naxon (1993:198); Winkelman (2000:xiii).

<sup>206</sup> Ludwig (1968:88). In Chapter 2, this social function is instead defined as 'socio-political meaning', for the purposes of this thesis.

<sup>207</sup> Ludwig (1968:89).

<sup>208</sup> Ludwig (1968:90).

<sup>209</sup> Ludwig (1968:89); cf. Lewis (1971:66-92).

<sup>210</sup> Bourguignon (1973a:31); Lewis (1971:100-126); Ludwig (1968:89); Morris (2006:311).

other hand, as a sanctioned and prestigious form of decision making, they can also provide an avenue for expressions of social dissatisfaction and innovation.<sup>211</sup>

### 1.5.1 Altered States of Consciousness and Religious Ritual

As previously suggested, a number of the experiential characteristics of ASCs make such mental phenomena particularly likely to attain religious significance and prominent roles in religious ritual.<sup>212</sup> This includes: feelings of intense emotions; changes in body image and particularly the dissolution of boundaries between self and others which may be interpreted as an experience of cosmic ‘oneness’; perceptual distortions and hallucinations; and the tendency for subjects to attach an increased meaning or significance to their experiences. Particularly in the context of institutionalised religion, as ASCs increase suggestibility they heighten the common faith of those who experience them jointly.<sup>213</sup> It is not surprising then that the religious rituals of a wide range of ethnographically and historically documented cultures commonly incorporate ASCs as a central component.<sup>214</sup>

One way of attempting to understand the meaning attributed to such culturally patterned uses of ASCs is to consider the way such mental states are interpreted in terms of a particular culture’s religious beliefs or worldview. It has often been observed that the beliefs of many cultures worldwide involve a dualistic metaphysic, whereby a distinction is made between an empirical ‘everyday’ world and the ‘spirit realm’, where deities, spirits and other spiritual beings reside.<sup>215</sup> According to Morris, contact with or possession by such spiritual beings is a constituent part of most religious systems.<sup>216</sup> In this context, entering an ASC is commonly believed to provide a means of entering or interacting with the supernatural world and its inhabitants.<sup>217</sup> This may particularly have

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<sup>211</sup> Bourguignon (1973a:33).

<sup>212</sup> Bourguignon, E. (1973a:3,9-11).

<sup>213</sup> Bourguignon (1973b:338).

<sup>214</sup> Bourguignon, E. (1973a:3; 1977:9); Hayden (2003:66); Lewis (1971:38); Rappaport (1999:219); van der Walde (1968:57); cf. Nencini (2002:925) in relation to psychoactive substances.

<sup>215</sup> Morris (2006:313). The shamanic belief in an ‘everyday’ world and an other-world provides a perfect example of this, Morris (2006:18); Ripinsky-Naxon (1993:67,113).

<sup>216</sup> Morris (2006:311)

<sup>217</sup> Bourguignon, E. (1973a:3); Lewis (1971:46); Ludwig (1968:85); Merlin (2003: 295, 296); Pearson (2002:74); Sherratt (1995:16). Hayden argues that virtually all ‘traditional’ cultures believe that interacting with the supernatural world requires entering an ASC, Hayden (2003:66).

been the case in pre-modern contexts,<sup>218</sup> where neuro-psychological explanations for ASCs were unavailable. As religious beliefs provide the superstructure into which all other aspects of life can be placed,<sup>219</sup> the change from a normal state of consciousness to an altered one could reasonably be expected to become associated with a corresponding shift from the normal, natural world into an ‘other’ or ‘spiritual’ world (**Fig.1.7**).<sup>220</sup>

In terms of the different ways ASCs may be interpreted with respect to religious belief, categories such as visionary trance, soul absence, soul flight, spirit-mediumship and spirit possession (which normally involves a trance state) have been variously described.<sup>221</sup> In particular, Bourguignon distinguishes between explanations which involve ‘spirit possession’ and those which do not, which she refers to as ‘trance’.<sup>222</sup>

The term spirit possession generally refers to the voluntary (usually viewed positively) or involuntary (usually viewed negatively) incarnation or possession of an individual by a specifically defined spiritual being.<sup>223</sup> Possessing spirits could include mythical culture-heroes, ancestral spirits or ghosts, legendary kings or historical personalities, nature spirits and various types of deities.<sup>224</sup> Where there is belief in a high god, however, possession by this god is rare.<sup>225</sup> During possession by spirits, the ‘trancer’ usually behaves in a manner seen to correspond to that of the possessing spirit and which is interpreted by other members of society as evidence that a spirit is controlling the person’s actions, probably by inhabiting their body.<sup>226</sup> As such, this behaviour is commonly heavily influenced by the relevant spiritual beliefs of a community and is culturally structured.<sup>227</sup> The extent of this behaviour can vary from being highly dramatic to purely verbal, although the trancer will often follow a prescribed set of behaviour during highly formalised rituals.<sup>228</sup> Bourguignon also suggests that possession trance is less likely to be induced via psychoactive substances or involve hallucination when

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<sup>218</sup> Bourguignon, E. (1973a:3).

<sup>219</sup> Insoll (2004:12)

<sup>220</sup> Bourguignon, E. (1973a:3).

<sup>221</sup> Bourguignon (1968:8; 1979:236-239); Lewis (1971:37-65); Morris (2006:311).

<sup>222</sup> Bourguignon (1968:7; 1973a:12; 1977:9; 1979:245); cf. Lewis (1971); Winkelman (1997:410-419).

<sup>223</sup> Bourguignon (1968:15); Lewis (1971:37-65); Morris (2006:22).

<sup>224</sup> Lewis (1971); Morris (2006:23).

<sup>225</sup> Bourguignon (1968:11); Morris (2006:23).

<sup>226</sup> Bourguignon (1968:11); Lewis (1971); Morris (2006:22).

<sup>227</sup> Bourguignon (1973b:336-337; 1979:242); Lewis (1971).

<sup>228</sup> Bourguignon (1968:11-12).

compared to ASCs associated with other explanatory systems and that those possessed commonly experience amnesia.<sup>229</sup> Where psychoactive substances are used, they appear to be relatively mild, such as betel nut, alcohol or tobacco.<sup>230</sup> This may be because possession trance often requires a greater awareness of the physical environment and of body co-ordination to enable acting out the role of spirits and to respond to cues to act as a medium.<sup>231</sup>

Non-possession or ‘trance’ explanations seem to manifest more variation than possession explanations and can include themes such as the shamanic soul journey, communication with spirits, meditation and alterations in their awareness from being bewitched.<sup>232</sup> Such trances could include the repetition of messages from the spirits to an audience, the narration of a soul journey or even be a private experience such as a vision quest.<sup>233</sup> In contrast to possession trance, which involves becoming someone else, trance characteristically involves interaction with other beings through hallucinatory experiences.<sup>234</sup> In these cases, the memory of the experience and its description to others become important.<sup>235</sup> In such cases, the medium is seen as serving as an intermediary between the community and such beings,<sup>236</sup> and may, therefore be viewed as an important individual within society. At the same time, however, culturally patterned trance experiences will be influenced by cultural expectations as they are preceded by learning what to expect and how to interpret the trance experience.<sup>237</sup> The concept of soul-absence figures prominently in trance explanations of ASCs and can be viewed both positively and negatively.<sup>238</sup> The soul may be believed to have been stolen or devoured by evil forces or spirits, or more positively, to have left the body on a journey in order to interact with the spirit world.<sup>239</sup>

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<sup>229</sup> Bourguignon (1968:14; 1973a:12; 1979:252).

<sup>230</sup> Bourguignon (1973b:330-331).

<sup>231</sup> Bourguignon (1977:13)

<sup>232</sup> Bourguignon (1968:7; 1979:247).

<sup>233</sup> Bourguignon (1973a:12).

<sup>234</sup> Bourguignon (1979:261).

<sup>235</sup> Bourguignon (1973a:12).

<sup>236</sup> Morris (2006:22)

<sup>237</sup> Bourguignon (1979:261); Lewis (1971:99).

<sup>238</sup> Bourguignon (1968:8). It should be noted that spirit possession also often implies soul-absence, with the possessing spirit displacing the soul, Bourguignon (1968:9).

<sup>239</sup> Bourguignon (1968:8; 1973a:12; 1979:247).

Bourguignon argues that both possession trance and trance explanations of ASCs can exist in a single society.<sup>240</sup> She also suggests, however, that possession trance rituals are more common in complex social contexts with sedentary settlement patterns, large population groups and social stratification, while non-possession or ‘trance’ rituals are more common in less complex, predominantly hunter-gatherer social contexts.<sup>241</sup> In addition, women are more likely to become involved in possession trance, while visionary trance behaviour is more likely to be practiced by men.<sup>242</sup> Based on the variety of possible possessing spirits, the multiple roles available within possession trance rituals are particularly suited to providing a symbolic expression of more complex social contexts and allow individuals to play roles not normally available to them within a rigid social structure.<sup>243</sup> As a form of dissociation, possession trance provides an outlet whereby an individual can momentarily escape the control that a social structure normally imposes upon them.<sup>244</sup> This later factor may explain the aforementioned popularity of possession rituals amongst disempowered or marginal segments of society.<sup>245</sup> As this provides a way for such individuals to cope with an existing social structure, possession trance in this context can be viewed as a conservative force that helps to maintain the status quo,<sup>246</sup> although it can be an initiator for change on an individual level.<sup>247</sup> The degree to which the behaviour of actors in possession trance is stereotyped, or the amount of innovation allowed, however, is likely to relate to whether the ritual serves as a conservative force or as a force for social change.<sup>248</sup> Bourguignon also argues that control over highly idiosyncratic, unrestrained behaviour during an ASC is likely to be attempted via the development of a myth to explain the behaviour and the creation of ritual means of coping with it.<sup>249</sup> In cases where a religious institution becomes established, ‘divine’ ASCs may be appropriated by this institution and mediated

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<sup>240</sup> Bourguignon (1979:248).

<sup>241</sup> Bourguignon (1973a:20,22; 1977:17-18; 1979:250). Greenbaum (1973:59) also suggests that possession trance is more common in more structured societies.

<sup>242</sup> Bourguignon (1979:254, 258); cf. Lewis (1971:66-126).

<sup>243</sup> Bourguignon (1973a:22-23); Lewis (1971:66-126).

<sup>244</sup> Bourguignon (1973a:31); Lewis (1971:66-126).

<sup>245</sup> Bourguignon (1973a:31); Lewis (1971:66-126); Ludwig (1968:89); Morris (2006:311).

<sup>246</sup> Bourguignon (1973a:31, 33); Lewis (1971:66-126).

<sup>247</sup> Bourguignon (1973b:337).

<sup>248</sup> Bourguignon (1977:20).

<sup>249</sup> Bourguignon (1977:21).

to the general populace by a religious elite claiming such ecstatic experiences as their own exclusive domain or privilege.<sup>250</sup> Such elite monopoly on ASCs can be used to reinforce claims of privileged interaction with divine beings.<sup>251</sup>

### 1.5.2 The Significance of the Ritual Experience

In relation to the use of ASCs during ritual practice, a number of commentators have emphasised the important role of certain experiential aspects of such mental states in relation to reaffirming the religious beliefs which explain them.<sup>252</sup> As mentioned above, these experiential aspects may include feelings of intense emotion, changes in body image and particularly the dissolution of boundaries between self and others which may be interpreted as an experience of cosmic ‘oneness’, perceptual distortions and hallucinations and the tendency for subjects to attach an increased meaning or significance to their experiences.

Ludwig argues that, “this ‘raw’ sense of significance, which lends import and conviction to the ‘revelations’ attained during mystical consciousness or religious possession states, has been a major factor in the stabilization of many religions, sects, and cults.”<sup>253</sup> Bourguignon, however, adds that the increased suggestibility which is also common to such experiences will have the added result of reinforcing the common faith of those who experience them jointly.<sup>254</sup> The marked difference of these experiences from ‘everyday’ experiences serves to confirm a culture’s traditional explanations of them.<sup>255</sup> Such experiences are particularly important in non-literate societies that rely on direct confrontation with the supernatural for evidence of all religious reality,<sup>256</sup> as opposed to literate societies that are provided with access to the supernatural via religious texts. Rather than ritual action merely being a by-product of religious beliefs, in such societies belief is often enabled, confirmed and mutually supported by the performance of

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<sup>250</sup> Hayden (2003:359); Lewis (1971:132, 170). Cf. Dobkin de Rios & Smith (1977).

<sup>251</sup> Hayden (2003:362).

<sup>252</sup> Bourguignon (1973b; 1979); Dornan (2004); La Barre (1972); Ludwig (1968); Pearson (2002); Peatfield (2001); Ripinsky-Naxon (1993). In the context of psychoactive substances see Booth (1996); Eliade (1964); Flattery & Schwartz (1989); Furst (ed.) (1972); Hodgson (1999); La Barre (1975); Rudgley (1993); Smith (2000); Staal (2001); Wasson et.al. (1986).

<sup>253</sup> Ludwig (1968:81).

<sup>254</sup> Bourguignon (1973b:338).

<sup>255</sup> Bourguignon (1979:244).

<sup>256</sup> Pearson (2002:75).

ritual action.<sup>257</sup> This last point is of particular importance to archaeological considerations of ritual practise and religion, as it suggests a way in which ritual practice, which can be recognised in the archaeological record, can influence religious beliefs, which are not visible archaeologically, rather than merely being a reflection of them. This topic is discussed further in the following chapter.

## **1.6 Altered States of Consciousness in Archaeology**

To assist the development of a method for studying ASCs using archaeological evidence, examples of research demonstrating how material remains have previously been interpreted as evidence for such phenomena are presented here. To date, the archaeological consideration of ASCs has predominantly focused on past shamanic practices. In particular, the archaeological identification of shamanic practices has become a popular topic of research with archaeology of the Americas,<sup>258</sup> reflecting the continuation of such practices into the recent past, or even the present.

While these studies of American material are of limited relevance to the study of Cypriote Bronze Age ritual, they do provide some interesting examples of the identification of shamanism in the archaeological record. VanPool, in particular, has explicitly described a number of artefactual components (*sacra*) commonly associated with shamanic trance rituals, which may constitute convincing evidence for such ritual when found together in an archaeological context.<sup>259</sup> These *sacra* include: shamanic imagery that usually contains patterned geometric shapes associated with tutelary creatures, supernatural non-naturalistic entities and anthropomorphs combining human and animal attributes; instruments (particularly drums); evidence for the consumption of psychoactive substances; and fixed activity areas such as altars, caves and mountain tops. While these criteria are based upon the idea that shamanic-style practices are (or were) a world-wide phenomena, VanPool does recognise that such cross-cultural generalisations must be tempered by a hermeneutic process between the relevant ethnographic and

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<sup>257</sup> Dornan (2004); Lewis (1971:11); Morris & Peatfield (2002:110; 2004:46, 54); Whitley (2008:94).

<sup>258</sup> Boyd (1996); Brown (1997); Freidel et.al (1993); Huckell & VanPool (2006); Rakita (2009); VanPool (2003; 2009); VanPool & VanPool (2007).

<sup>259</sup> VanPool (2009:177-190).

archaeological records. Unfortunately, the criteria are developed predominantly from Americas case studies, restricting their utility in East Mediterranean contexts.

In the Old World, archaeological considerations of ASCs have largely been confined to the study of prehistoric art, particularly Palaeolithic rock art.<sup>260</sup> For instance, Lewis-Williams and Dowson argue that cave paintings from the Upper Palaeolithic represent visual hallucinations experienced during ASCs and associate them with shamanic practices.<sup>261</sup> This interpretation is based upon a neuropsychological model for such hallucinations, argued to be applicable to all cultures as it is based upon the universal behaviour of the human nervous system under ASCs.<sup>262</sup> This model describes three stages of visual hallucination or entoptic phenomena beginning with geometric patterns, which are subsequently adapted and combined with iconic images, followed by a final stage where iconic images dominate (**Fig.1.8**).<sup>263</sup> As the rock art of the African San are ethnographically recorded to depict such hallucinations resulting from shamanic ASCs,<sup>264</sup> they argue that similar practices provide the most convincing explanation for the combination of geometric patterns and human and animal figures depicted in Upper Palaeolithic art.<sup>265</sup>

This interpretation and the model of visual hallucination has, however, been heavily criticised by Helvenston and Bahn, who argue that visual hallucinations corresponding to those described in Lewis-Williams' model can only be induced via the consumption of psychoactive plants which were not available in Palaeolithic Europe.<sup>266</sup> This criticism, however, is based only upon a survey of the visual hallucinations experienced during six naturally-induced trance states.<sup>267</sup> As this hardly constitutes an exhaustive survey, it does not provide a convincing argument against Lewis-Williams' interpretation of the rock-art. Indeed, the experiences recently described by participants in McGowan's experiment on ASCs in Minoan cave ritual seem to contain some of the

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<sup>260</sup> Price (2001:6). For examples of such research see Eliade (1964); Halifax (1982); Lewis-Williams (2001); Lewis-Williams & Dowson (1988); Pearson (2002:51),

<sup>261</sup> Lewis-Williams (1999:165-169); Lewis-Williams & Dowson (1988).

<sup>262</sup> Lewis-Williams (1999:163-165); Lewis-Williams & Dowson (1988).

<sup>263</sup> Lewis-Williams (1999:163); Lewis-Williams & Dowson (1988).

<sup>264</sup> Lewis-Williams (2001).

<sup>265</sup> Lewis-Williams (1999:165-167); Lewis-Williams & Dowson (1988).

<sup>266</sup> Helvenston & Bahn (2003:213-214).

<sup>267</sup> Helvenston & Bahn (2003:214).

elements described by Lewis-Williams' model.<sup>268</sup> Their criticism does, however, emphasise the problems of developing a universal description for the experiential effects of an ASC, particularly when the cause of such states is unknown.

ASCs have also been cited to explain other rock art images. For instance, Ripinsky-Naxon argues that the anthropomorphic shapes depicted in the 15th millennium BCE rock painting from Pla de Petracos in Alicante, Spain, were probably executed either under the influence of hallucinogens or depict the memory of such experiences.<sup>269</sup> Ripinsky-Naxon also suggests that rock art depictions of fungi may indicate the use of psychoactive fungi, such as the *Psilocybe* species and *Amanita* genera, to induce ASCs.<sup>270</sup>

Certain portable artefacts, such as the small Aurignacian ivory statuettes from Southwest Germany (ca.30,000 BCE), have similarly been interpreted as evidence for shamanic practices in the Palaeolithic.<sup>271</sup> Dowson and Porr suggest that the geometric decorations on some of the animal figures may depict entoptic phenomena experienced during ASCs, while the combination of human and lion anatomical features in another statuette (**Fig.1.9**) may again represent a human to animal transformation experience.<sup>272</sup> The statuettes may have been a physical representation of a shaman's supernatural powers and a reminder of their position within a community.<sup>273</sup>

In addition to iconographic evidence, archaeobotanical data has also been cited as evidence for past ASCs via the consumption of psychoactive substances. As a particularly early example, a possible Neanderthal burial from Shanidar Cave, (Burial IV, at least 50,000 BP) contained pollen from eight different flowers, seven of which were psychoactive to some extent.<sup>274</sup> As the flowers seem to have been intentionally added<sup>275</sup>, Pearson argues that they reflect shamanic practices.<sup>276</sup> Without evidence that the psychoactive properties of the flowers were known and exploited by those associated

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<sup>268</sup> McGowan (2006:49, 52).

<sup>269</sup> Ripinsky-Naxon (1993:153).

<sup>270</sup> Ripinsky-Naxon (1993:153-155).

<sup>271</sup> Dowson & Porr (2001:165); Hayden (2003:134-151).

<sup>272</sup> Dowson & Porr (2001:173).

<sup>273</sup> Dowson & Porr (2001:174).

<sup>274</sup> Leroi-Gourhan (1975).

<sup>275</sup> Leroi-Gourhan (1975); Solecki (1971). Contra. Gargett (1989:176) who argues that the flowers may have blown into the cave.

<sup>276</sup> Pearson (1992:65).

with the burial, however, an argument for such a culturally structured use of ASCs is unconvincing.

Later archaeobotanical evidence for the past use of psychoactive substances includes the discovery of opium poppy seeds at a Neolithic Swiss lake village and entire poppy capsules within woven bags associated with Neolithic burials (ca.4200 BCE) from Southern Spain.<sup>277</sup> Evidence for the use of *Perganum harmala* (Syrian Rue) from the fifth to third millennia BCE is also recorded from the Caucasus.<sup>278</sup> Once again, however, these examples do not prove that the psychoactive plants in question were consumed (they may have been exploited for some other purpose) and, therefore, do not provide direct evidence for ASCs.

Archaeological evidence for the consumption of psychoactive substances does appear to exist, however, in the form of charred cannabis seeds recovered from within pipe cups from a pair of late third millennium BCE burials, one in Romania and the other in the Caucasus.<sup>279</sup> Andrew Sherratt also argues that the polypod bowls found in several parts of Eastern Europe in the third millennium BCE (**Fig.1.10**) may have been used to burn cannabis, with a lack of regional variation in the form of these vessels suggesting their use within ritual.<sup>280</sup> As alcohol consumption was not adopted in some parts of this area until the Iron Age, cannabis may have been the psychoactive of choice, with the importance of hemp possibly even celebrated by the cord decoration of the region's distinctive pottery beakers.<sup>281</sup> According to Sherratt, the practice of burning cannabis may date back to the Neolithic in Central Eurasia as focus of social and religious rituals.<sup>282</sup> Archaeobotanical evidence for ephedrine mixed with both cannabis and opium has also been found within ceramic vessels at two second millennium BCE cult sites in Turkmenistan.<sup>283</sup>

Of particular interest to this thesis, evidence for psychoactive substances in association with artefacts which imply their consumption, as seen in these last examples, suggests a more convincing category of evidence for the past use of ASCs, particularly

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<sup>277</sup> Merlin (2003:298); Sherratt (1991:52)

<sup>278</sup> Ecsedy (1979:45).

<sup>279</sup> Sherratt (1991:53; 1995:27).

<sup>280</sup> Sherratt (1991:54)

<sup>281</sup> Sherratt (1997 [1987]:399).

<sup>282</sup> Sherratt (1995:27)

<sup>283</sup> Sarianidi (1994).

compared to iconographic evidence. In addition, as the psychoactive effects of a particular substance are generally known,<sup>284</sup> such evidence may also provide an indication of the nature of the ASCs experience they were used to induce. This matter is discussed further in Chapter 3.

### **1.6.1 Altered States of Consciousness in the East Mediterranean Bronze Age**

Although this thesis focuses primarily upon the specific context of LBA Cyprus, evidence for the possible use of ASCs in the wider East Mediterranean throughout the entire Bronze Age is discussed here in order to establish a relevant contextual background. As mentioned previously, however, archaeological research that considers in detail the phenomena of ASCs within this context is rare. Furthermore, most of this research focuses upon the consumption of psychoactive substances, often with little consideration of any symbolic meaning of the ASCs that they induce. This lack of concern for symbolic meaning is likely to reflect the nature of archaeology in the region, where research focusing on themes of an anthropological nature is relatively rare and ideas concerning ritual and religion remain heavily reliant upon contemporary and later written sources.<sup>285</sup>

#### **Minoan ‘Ecstasy’, ‘Epiphany’ and ‘Possession’**

The lack of detailed research into ASCs within ritual in the East Mediterranean Bronze Age is exemplified by the uncritical use of terms such as ‘ecstasy’, ‘epiphany’ and ‘possession’ in relation to Minoan ritual.<sup>286</sup> For instance, Evans suggested that the images depicted on gold seal rings of the Second Palace Period (ca.1700-1450 BCE, **Fig.1.11**) represented ritual practice he described as ‘ecstatic’, with the purpose of summoning the presence or epiphany of a deity, which were depicted on these rings as a small floating figure, bird or butterfly.<sup>287</sup> The ritual actions depicted included pulling a tree, hugging a stone or pithos and apparent scenes of dancing. Evans did not, however,

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<sup>284</sup> Taking into account the previously mentioned influence of dosage, set and setting on such experiences, Rätzsch (2005:13-14)

<sup>285</sup> Hitchcock (2000:15); Knapp (2005:4); Sherratt (1998:292); Webb (2006:117).

<sup>286</sup> Evans (1930; 1931); Warren (1981). For a critique of the use of such terms in the context of Minoan archaeology, see Morris & Peatfield (2002:107; 2004:37).

<sup>287</sup> Evans (1930:68-70, 140-142).

elaborate upon what was meant by the terms, ‘ecstasy’, ‘epiphany’ and ‘trance’, either in terms of the nature of the experience, or how these ASCs were achieved. McGowan argues that this indicates an implicit assumption that researching such phenomena is beyond the interest or capability of archaeology.<sup>288</sup> Morris and Peatfield add that this lack of research on ASCs in the context of Minoan ritual may also relate to a propensity for Western academics to view such states as a form of superstition, inferior to their own rational, intellectual framework.<sup>289</sup> Similarly, Hamilakis suggests that modern, puritan, middle-class norms of respectability have predisposed archaeological perceptions of ritual activities such as feasting, thereby interpreting evidence for food consumption as elite hospitality, alcohol consumption as toasting and artefacts possibly used to inhale psychoactives as ‘fire boxes’ or ‘incense burners’.<sup>290</sup>

Only recently has the possible use of ASCs in Minoan ritual practice begun to be considered in a detailed and critical way.<sup>291</sup> Morris and Peatfield, for example, adopt the theoretical concept of embodiment to interpret postures identified in Minoan Palace Period figurines from peak sanctuaries as representations of ritual gestures designed to induce ASCs in order to actively engage with the supernatural (**Fig.1.12**).<sup>292</sup> This interpretation was based upon the work of Goodman, who argues that maintaining certain postures for an extended period can restrict blood flow, slow or quicken breathing and heart rate and thereby induce an ASC.<sup>293</sup> Morris and Peatfield argue that previous interpretations of these poses as gestures of supplication or adoration, assumed an intellectualised, externalised form of ritual common to interpretations of modern western religious experience and ignores evidence suggesting that ritual practice often emphasises ‘internalised’ experience.<sup>294</sup> Their ‘embodied’ approach emphasises this experiential aspect of ritual practice, where the human body is used to communicate with the supernatural world.<sup>295</sup> Rather than being a weak and generalised form of worship, Morris and Peatfield argued that these poses had a more dynamic function to access an

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<sup>288</sup> McGowan (2006:51).

<sup>289</sup> Morris & Peatfield (2002:107). Cf. Winkelmann (1997:404).

<sup>290</sup> Hamilakis (2008:4).

<sup>291</sup> McGowan (2006); Morris (2001); Morris & Peatfield (2002; 2004); Peatfield (2001); Tyree (2001).

<sup>292</sup> Morris & Peatfield (2002:106-107; 2004:36).

<sup>293</sup> Goodman (1986). See also Morris & Peatfield (2002:112).

<sup>294</sup> Morris & Peatfield (2002:110; 2004:46, 54).

<sup>295</sup> Morris & Peatfield (2002:110).

experiential domain of Minoan ritual, such as visionary epiphany through trance, healing through the sense of energy and divination through psychological insight.<sup>296</sup>

Morris and Peatfield extend this interpretation to the iconography of the gold seal rings, elaborating upon Evans' argument that they depict scenes of epiphany, suggesting that they are representations of visions experienced during the ASCs ritually induced using restrictive poses or possibly rhythmic dancing.<sup>297</sup> The rings, therefore, were a visible sign of the ability to interact with the supernatural and of the status connected with such ability.<sup>298</sup> Furthermore, as the ritual activity in peak sanctuaries became restricted to only those associated with palaces and towns during the Second Palace Period, cult practices utilising ASCs may have been appropriated by the palace elite as a way of establishing their status.<sup>299</sup>

Morris and Peatfield also describe this proposed Minoan use of ritualised ASCs as a shamanic practice, arguing that the defining feature of shamanism is the use of such states to contact the supernatural world.<sup>300</sup> As this description could be applied equally to any of the examples of ritualised ASCs provided above, however, this use of the term does not demonstrate a nuanced understanding of either shamanism or the range of ethnographically documented instances of ritualised ASCs. In addition, the suggestion that these 'shamanic' Minoan rituals were probably conducted for healing purposes<sup>301</sup> downplays the religious aspects of the rituals, and establishes a conceptual separation between healing and religious belief which may not have existed in past societies.<sup>302</sup>

Tyree broadens Morris and Peatfield's theory regarding the purpose of the poses represented in figurines from peak sanctuaries to argue that similar gestures on contemporary bronze figurines from Minoan cave sites also represented postures designed to ritually induce ASCs intended to provide a supernatural experience.<sup>303</sup> Tyree adds that the caves themselves were the most likely setting for these ritual practices as

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<sup>296</sup> Morris & Peatfield (2002:115; 2004:53).

<sup>297</sup> Morris & Peatfield (2002:115; 2004:44).

<sup>298</sup> Morris & Peatfield (2004:54).

<sup>299</sup> Morris & Peatfield (2002:108; 2004:54). This mirrors the use of such practices by Mayan elites to establish themselves as intermediaries with the supernatural world, Morris & Peatfield (2002:111).

<sup>300</sup> Morris & Peatfield (2004:40).

<sup>301</sup> Morris & Peatfield (2002:115).

<sup>302</sup> Physical and spiritual wellbeing are commonly considered to be inseparable in pre-modern societies, De Waal Malefijt (1968:246-270); Winkelman (1990).

<sup>303</sup> Tyree (2001:41-42).

their dark environment and ability to amplify sound would have made them conducive to inducing ASCs.<sup>304</sup> Interestingly, Tyree also suggests that wine may also have been drunk as a component of the rituals conducted within the caves,<sup>305</sup> which may have contributed further to the induction of ASCs.

More recently, McGowan conducted a series of experiments in order to test the neuro-physiological aspects of these hypotheses, attempting to replicate the extended use of a selection of these Minoan poses in a dark environment with the rhythmic sound of a sistrum added.<sup>306</sup> 86% of the participants in these experiments experienced some form of ASC, including occurrences of various degrees of geometric and iconic visual hallucinations and feelings of moving through space.<sup>307</sup> While these results certainly add weight to the earlier arguments for the use of such Minoan poses to induce ASCs, these interpretations continue to be reliant largely upon inferences derived purely from iconographic evidence.

Comparable interpretations for the iconography of Near Eastern cylinder seals have recently been proposed by Stein (**Fig.1.13**).<sup>308</sup> Stein argues that the combination of zoomorphic imagery and dancing or drinking scenes on certain third Millennium BCE Syrian seals may represent the persistence from the Palaeolithic of shamanic-style practices utilising ASCs.<sup>309</sup> Stein similarly argues that the winged disc commonly depicted on Mesopotamian seals of the LBA (primarily from Nuzi) was a formal representation of a sacred ASC experience.<sup>310</sup> The association of this motif with monsters and demons may indicate the products of associated hallucinations, while scenes of dancing and hunting may indicate a ritual context. Stein further argues that the so-called 'sacred tree' commonly depicted on Near Eastern cylinder seals throughout the Bronze Age, and commonly associated with the winged disc, may, therefore, represent the *Cannabis sativa Linneaus* (marijuana) plant, ingested in order to induce this sacred

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<sup>304</sup> Tyree (2001:43).

<sup>305</sup> Tyree (2001:45).

<sup>306</sup> McGowan (2006).

<sup>307</sup> McGowan (2006:49,52).

<sup>308</sup> Stein (2006; 2009).

<sup>309</sup> Stein (2006).

<sup>310</sup> Stein (2009).

ASC.<sup>311</sup> The reliance primarily upon iconographic evidence for possible ASC hallucinations is, however, again problematic.

### 1.6.2 Psychoactive Substances in the East Mediterranean Bronze Age

As previously discussed, archaeological evidence for the consumption of psychoactive substances may provide a more direct category of evidence for ancient ASCs. Indeed, previous research has identified widespread evidence for the consumption of such substances throughout the East Mediterranean during the Bronze Age, particularly alcohol<sup>312</sup> and opium.<sup>313</sup> These substances appear to have been commonly associated with distinctive, finely made ceramic containers, drinking sets<sup>314</sup> and Base Ring Ware juglets<sup>315</sup> respectively. Iconographic depictions of the plant sources of such substances, such as the opium poppy, have also been noted.<sup>316</sup>

Despite this evidence, research into the consumption of psychoactives in the East Mediterranean Bronze Age remains limited. Restricted primarily to the identification and categorisation of iconography<sup>317</sup> and residue samples,<sup>318</sup> research in this region has yet to fully consider why such substances were consumed and how the specific meanings of the ASCs they produce related to the cultural and social contexts in which they were used. In particular, the lack of consideration for the consumptive context of these substances and the resulting ASCs implies assumptions that these topics are not worthy of consideration. This most likely reflects modern notions which characterise psychoactive consumption as degenerate or amoral behaviour which has detrimental effects on their consumers and society as a whole. As the examples presented earlier in the chapter suggest, however, psychoactives and the ASCs they induce often play important roles in the social and

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<sup>311</sup> Stein (2009); Contra McDonald (2002).

<sup>312</sup> Guasach-Jané (2008); Guasach-Jané et.al (2006); Hamilakis (1999a; 1999b); Katz & Voigt (1986); McGovern (2003); McGovern et.al. (1996); Tzedakis & Martlew (2001).

<sup>313</sup> Bisset et.al. (1996a); Koschel (1996); Merlin (1984); Merrillees (1962; 1974; 1979; 1989).

<sup>314</sup> Steel (1998:290; 2002:109); Tzedakis & Martlew (eds.) (2001); Wright (2004).

<sup>315</sup> Merrillees (1962; 1979).

<sup>316</sup> Askitopoulou et.al (2002); Behn (1986); Hnila (2002); Kritikos & Papadaki (1967); Merlin (1984); Merrillees (1962; 1974; 1979; 1989); Nicgorski (1999).

<sup>317</sup> Askitopoulou et.al (2002); Behn (1986); Berlant (2005); Emboden (1978; 1981; 1989); Hnila (2002); Kritikos & Papadaki (1967); McDonald (2002); Merlin (1984; 2003); Merrillees (1962; 1974; 1979; 1989); Nicgorski (1999).

<sup>318</sup> Bisset et.al. (1996a); Guasach-Jané (2008); Guasach-Jané et.al (2006); McGovern et.al. (1996); Evans (1989); Tzedakis & Martlew (eds.) (2001).

religious life of pre-modern cultures. As such, a more detailed consideration of the roles and meanings associated with the ASCs induced via alcohol and opium consumption in the East Mediterranean Bronze Age may reveal previously ignored, yet potentially important, aspects of social life in this context.

### **Alcohol**

One area where this shortcoming has already been partially addressed is the study of the production and consumption of alcoholic beverages in the East Mediterranean Bronze Age, prompted by the abundance of evidence for artefacts apparently associated with wine, beer and other fermented drinks.<sup>319</sup> While much research still focuses primarily upon the quantitative collection and classification of evidence,<sup>320</sup> a number of studies have begun to give detailed consideration of the social significance and meaning of the production and consumption of alcohol in the East Mediterranean Bronze Age.<sup>321</sup>

The work of Yannis Hamilakis is a particularly prominent example of this trend.<sup>322</sup> In his study of wine consumption in Bronze Age Crete, Hamilakis emphasises the importance of feasts to establishing and maintaining authority and power.<sup>323</sup> Hamilakis argues that sensory feelings and emotions generated and exchanged during social rituals involving the consumption of alcohol would have constituted “the political economy of the body and of bodily memory on the basis of which power dynamics, competition, and negotiation of social roles operated.”<sup>324</sup> Feasting and drinking parties were an effective way to transform wealth into power<sup>325</sup> and, therefore, “may hold the key for understanding complex human relationships such as the establishment and legitimization of authority and the exploitation of human labour.”<sup>326</sup>

Based on the frequency of drinking vessels from Bronze Age Cretan sites, Hamilakis suggests that drinking parties and feasting appear to become more intense

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<sup>319</sup> Day & Wilson (1998); Guasach-Jané (2008); Guasach-Jané et.al (2006); Hamilakis (1999a; 1999b); Katz & Voigt (1986); McGovern (2003); McGovern et.al. (1996); Tzedakis & Martlew (2001); Wright (2004).

<sup>320</sup> For examples see, Guasach-Jané (2008); Guasach-Jané et.al (2006); McGovern (2003); McGovern et.al. (eds.) (1996); Tzedakis & Martlew (2001).

<sup>321</sup> Hamilakis (1999; 2000); Katz & Voigt (1986); Steel (2002). Prominent examples which focus upon more northern areas of Europe include Dietler (1990); Sherratt (1995; 1997 [1987]).

<sup>322</sup> Hamilakis (1999; 2000).

<sup>323</sup> Hamilakis (1999:40; 2000:59); cf Dietler (1990; 2006); Hayden (2001; 2003:173, 183).

<sup>324</sup> Hamilakis (1999:49).

<sup>325</sup> Hamilakis (1999:40; 2000:59).

<sup>326</sup> Hamilakis (2000:61).

towards the end of the EBA, continuing through the MBA period to a peak during the LBA.<sup>327</sup> The LBA (Neopalatial Period) also exhibits more evidence of ritualised consumption in the form of structured depositions of drinking cups, along with the standardised mass production of these vessels. Hamilakis attributes this trend to be the result of increasing competition between elites for authority and control. A corresponding decline in feasting and drinking parties towards the end of the Bronze Age is attributed to the decline of this factional competition, as suggested by the more advanced administration technology of the period. Feasting and drinking parties, therefore, seem to be more prevalent in periods of social and political instability.<sup>328</sup>

Hamilakis also argues that during the period of political stability at the end of the Bronze Age, wine consumption became a restricted ceremonial practice, associated with elite life and exclusivity.<sup>329</sup> Wine, as opposed to beer, is particularly suitable as the drink of elites as the cultivation of grape vines requires a much greater capital investment to establish,<sup>330</sup> making its production the prerogative of groups with strong entitlement relationships, such as subsistence security and institutional rights to land and labour.<sup>331</sup>

As a proponent of embodiment theory in archaeology,<sup>332</sup> however, it is somewhat surprising that Hamilakis fails to discuss the experiential characteristics of alcohol consumption in any detail. In focusing upon the socio-political meanings that alcohol may have, any possible symbolic or personal meanings that may have been associated with the ASCs induced by alcohol consumption are ignored. These later aspects, though, are certainly just as relevant to an anthropological approach to understanding the role of alcohol consumption.

In a study of the social role of alcohol consumption in Bronze Age Cyprus, Louise Steel also argues that rituals associated with alcohol consumption were valued social elements eagerly adopted and modified by groups throughout the East

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<sup>327</sup> Hamilakis (1999:45, 48-9).

<sup>328</sup> Hamilakis (1999:50; 2000:58).

<sup>329</sup> Hamilakis (1999:49).

<sup>330</sup> Hamilakis (1999:43). Katz & Voigt, however, also suggest that a demand for cereals for brewing beer may have provided an early impetus for their domesticated cultivation (1986:34), arguing that societies often spend a considerable amount of resources to maintain a supply of foods with psychoactive effects, Katz & Voigt (1986:27, 33).

<sup>331</sup> Hamilakis (1999:45).

<sup>332</sup> Hamilakis (1999; 2002).

Mediterranean.<sup>333</sup> According to Steel, during the ECA and MCA the consumption of wine was explicitly associated with funerary ritual, suggesting that it was used as a means for group legitimisation through exclusive ceremonies centred on membership of ancestral groups.<sup>334</sup> During the LBA ritual drinking becomes more formalised and standardised and also became associated with monumental administrative buildings, suggesting that it remained under elite control.<sup>335</sup> The Cypriote consumption of alcohol during the Bronze Age will be discussed in further detail throughout this thesis.

While these studies do discuss the possibility that alcohol consumption may have been an important component of ritual practice in the Bronze Age East Mediterranean, they do not elaborate upon this role in terms of the psychoactive properties of alcohol and how these may have been understood in terms of religious beliefs. Indeed, these studies focus only upon the role of alcohol as a ‘social lubricant’, despite numerous examples of the use of alcohol within religious ritual.<sup>336</sup> This failure to consider the possibility of sacred meanings associated with alcohol consumption may again be a reflection of the modern context of scholarship, where alcohol consumption is largely restricted to secular contexts.

## **Opium**

The status of research into opium induced ASCs in the East Mediterranean Bronze Age is even more inadequate. Indeed, despite iconographic<sup>337</sup> and residue evidence<sup>338</sup> suggesting the consumption of opium, there seems to be a great reluctance within Bronze Age archaeology of the region to even acknowledge the use of this substance.<sup>339</sup> This reluctance again seems to relate to a combination of the traditional conservatism of East Mediterranean archaeology<sup>340</sup> and the legal status of opium today.

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<sup>333</sup> Steel (2002:108).

<sup>334</sup> Steel (2002:113).

<sup>335</sup> Steel (2002:110).

<sup>336</sup> Armstrong (1998); Bryan (n.d.); Depauw & Smith (2004); Dietler (1990; 2006); Kiev (1968:144); Manniche (1997); Michalowski (1994); Pinnock (1994); Schoop (2011); Schott (1953).

<sup>337</sup> Askitopoulou et.al (2002); Behn (1986); Hnila (2002); Karageorghis (1976); Kritikos & Papadaki (1967); Merlin (1984); Merrillees (1962; 1974; 1979;1989); Nencini (2002:930); Nicgorski (1999).

<sup>338</sup> Bisset et.al. (1996a); Evans (1989); Koschel (1996); Merrillees (1989); Schiaparelli (1927).

<sup>339</sup> For example, despite the identification of opium residues in a Base Ring juglet from Egypt, Bisset et.al. argue that it is still uncertain whether opium was used in 18<sup>th</sup> Egypt and suggest that this evidence does not vindicate Merrillees’ hypothesis, Bisset et.al. (1996a:203-204). See also Knapp (1989:25); Krikorian (1974); Muhly (1982:253; 1986:46-47).

<sup>340</sup> Hitchcock (2000:15); Knapp (2005:4); Sherratt (1998:292); Webb (2006:117).

Evidence for the Bronze Age consumption of opium was first noted in 1927.<sup>341</sup> Schiaparelli claimed that an alabaster vase from an 18<sup>th</sup> dynasty Egyptian tomb (ca. 1405 BCE), excavated in 1906, contained a vegetable oil containing iron and opium.<sup>342</sup> A recent re-investigation of this claim, however, was unable to identify which of the seven alabaster vases from the tomb had supposedly contained opium and failed to detect morphine (the primary psychoactive opium alkaloid) in any one of them.<sup>343</sup>

In the same year, excavations at the site of Gazi on Crete unearthed a Late Minoan III (13<sup>th</sup> century BCE) sanctuary which contained a large (77.5 cm tall) terracotta figurine of the ‘goddess with upraised arms’ type whose headdress was adorned with three movable pins in the likeness of opium poppy capsules,<sup>344</sup> incised to extract their psychoactive latex (**Fig.1.14**).<sup>345</sup> The figure is described by the excavator, Spyridon Marinatos, as the, “Poppy Goddess, Patroness of Healing” and appears to have her eyes closed, perhaps in an opium induced sleep or ecstasy, and is possibly smiling.<sup>346</sup> Kritikos and Papadaki subsequently suggested that a tubular clay vessel and the remains of a pile of coals also found in the shrine were used for inhaling opium smoke.<sup>347</sup> Discussion of the role of opium in this overtly ritual context, however, is restricted to brief speculation on its consumption during the rituals conducted in the shrine in order to induce a state of ecstasy.<sup>348</sup>

A more detailed discussion of the Bronze Age use of opium was presented by Robert Merrillees who suggested that the distinctive Cypriote Base Ring (hereafter BR) juglet (**Figs.3.41-43**), found in large numbers in Egypt, was a vessel designed to hold opium for trade,<sup>349</sup> a crucial point for this study given previous suggestions that psychoactive substances are often associated with distinctive material culture. Merrillees noted that the juglet was the most prevalent of the BR shapes found in Egypt<sup>350</sup> and that the shape of the juglet bore a remarkable similarity to the capsule of the opium poppy

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<sup>341</sup> Schiaparelli (1927).

<sup>342</sup> Schiaparelli (1927:154).

<sup>343</sup> Bisset et.al. (1996b:200-201).

<sup>344</sup> Marinatos (1937:287, Fig 8).

<sup>345</sup> Kritikos & Papadaki (1967:23)

<sup>346</sup> Marinatos (1937:288-290, Fig 8). See also Behn (1986:196).

<sup>347</sup> Kritikos & Papadaki (1967:24).

<sup>348</sup> Behn (1986:196); Kritikos & Papadaki (1967:24).

<sup>349</sup> Merrillees (1962:287-292).

<sup>350</sup> Merrillees (1962:288; 1974:32).

(Fig.1.15).<sup>351</sup> Merrillees also argued that the plastic decoration on early forms of the juglet depicts incisions made on the poppy capsules to extract the opium latex, while the series of white strips painted on later varieties depicts the latex oozing out of a set of multiple cuts, indicating the use of a new technique of extracting the opium (Figs.1.16 & 1.17).<sup>352</sup> Even the dimensions and variations of the BR juglet bodies consistently falls within the range of poppy capsule sizes and shapes.<sup>353</sup> On this basis Merrillees concluded that the LBA Cypriotes exported opium, dissolved in water or wine, throughout the East Mediterranean within these vessels.<sup>354</sup> The subsequent extraction and identification of opium residues from BR juglets<sup>355</sup> has largely confirmed Merrillees' hypothesis. These vessels and the results of organic residue analysis conducted upon them are discussed in further detail in Section 3.3.1.

Merrillees speculates briefly on the role of this soluble form of opium within LBA societies, suggesting a medicinal use as a panacea for common ills, similar to the way aspirin is consumed today.<sup>356</sup> This interpretation, however, seems heavily influenced by modern concepts of medicine and fails to account for the common association of cult and healing in pre-industrial societies.<sup>357</sup> In addition, it does not take into account the fact that the strong psychoactive properties of opium, whilst possibly therapeutic in themselves, would have been significantly more noticeable than any medicinal properties.

Around the same time, Kritikos and Papadaki published a list of iconographic and textual evidence for the consumption of opium in the East Mediterranean from the Bronze Age through to the classical period.<sup>358</sup> The Bronze Age evidence listed includes the artefacts from Gazi, depictions of poppies on a pyxis, a gold signet ring and metal pins from the Aegean and poppy-shaped artefacts from Egypt (see Section 3.2.2).<sup>359</sup> This

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<sup>351</sup> Merrillees (1962:289; 1968:154; 1974:32).

<sup>352</sup> Merrillees (1962:289-290).

<sup>353</sup> Merrillees (1962:289).

<sup>354</sup> Merrillees (1962:289, 290; 1968:154; 1974:32).

<sup>355</sup> Bisset et.al. (1996a:204), Evans (1989); Koschel (1996:161); Stacey (2008, pers.comm.). It should be noted, however, that both Bisset et.al. and Koschel dismiss Evans' earlier analysis results, presumably as a specific compound was not identified, nor were the results published in detail, Bisset et.al. (1996b:201); Koschel (1996:160).

<sup>356</sup> Merrillees (1962:292). Arnott also discusses the possible medicinal use of opium in the Bronze Age as an anaesthetic, Arnott (1996:268).

<sup>357</sup> Merlin (2003:296). For examples of this association, see De Waal Malefijt (1968:246-270).

<sup>358</sup> Kritikos & Papadaki (1967).

<sup>359</sup> Kritikos & Papadaki (1967:24, 27 & 35).

work, however, consists purely of a list of evidence for the ancient use of opium and again lacks any detailed treatment of the meaning behind the consumption of such a psychoactive substance. In the authors' defence, however, it should be pointed out that this work was actually formulated for the purpose of pharmacological research.<sup>360</sup>

Despite a number of more recent compilations of iconographic and historical evidence suggesting the ancient exploitation of opium,<sup>361</sup> there remains a distinct lack of analysis of the archaeological context of the substance's consumption or detailed discussion of its use and social meaning. Indeed, much of the research concerning the Bronze Age use of opium has been conducted, not by archaeologists, but by scholars from fields such as pharmacology<sup>362</sup> and botany.<sup>363</sup> The most comprehensive review of evidence for ancient opium use, for example, was conducted by the botanist Mark Merlin who discusses archaeobotanical and iconographic evidence from Neolithic and Bronze Age sites throughout the East Mediterranean and Europe.<sup>364</sup> While Merlin does suggest that the use of opium in religious ritual could have been the main reason for its cultural diffusion in the prehistoric period,<sup>365</sup> again, there is little discussion of the archaeological context of the evidence and any social roles and meanings related to the consumption of opium and the ASCs it can induce.

While detailed analyses of archaeological contexts should hardly be expected of non-archaeologists, on the rare occasion that the social role and meaning of opium consumption is considered by archaeologists, it often amounts to unfounded and even erroneous speculation. For instance, in discussing the function of an ivory smoking pipe<sup>366</sup> and a clay cylinder from one of the LBA temples at Kition on Cyprus (see Sections 3.3.1 and 6.1.2), the excavator, Vassos Karageorghis, suggests that both objects were used for smoking opium during religious ritual, with the cylindrical tube used by

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<sup>360</sup> Conducted within the Laboratory of Pharmacognosy, University of Athens, Kritikos & Papadaki (1967).

<sup>361</sup> Aragón-Poce et.al. (2002); Askitopoulou et.al. (2002); Behn (1986:196); Hnila (2002); Merlin (1984; 2003).

<sup>362</sup> Aragón-Poce et.al. (2002); Askitopoulou et.al. (2002); Kritikos & Papadaki (1967).

<sup>363</sup> Merlin (1984; 2003:302-311).

<sup>364</sup> Merlin (1984).

<sup>365</sup> Merlin (1984:188).

<sup>366</sup> "The character of the object and the fact that round one of its two round openings (opening of the upper part) there are distinct traces of burning, leaves no doubt as to its function as a smoking pipe." Karageorghis (1976:127).

worshippers and the pipe by priests and priestesses.<sup>367</sup> These claims, however, are not supported by the presence, at either Gazi or Kition, of direct evidence for the use of opium, such as organic residues, nor are reasons for attributing a different user to each apparatus provided. Furthermore, as the temple in which the pipe was discovered was suggested to have been dedicated to a goddess of fertility, perhaps of the Astarte/Aphrodite type,<sup>368</sup> Karageorghis claims that, “the use of poppies and opium in sanctuaries of Astarte or Aphrodite in the East Mediterranean was quite frequent, the goddess being associated with fertility; the use of opium contributed to the sacrifices in her honour by exciting sexual desire.”<sup>369</sup> As the aphrodisiac properties of opium consumption are actually quite ambiguous (see Section 3.4.1),<sup>370</sup> this claim, and its later reaffirmation by Pedro Behn,<sup>371</sup> serves to highlight the inadequate state of research into the consumption of psychoactives such as opium, and the wider topic of ASCs, within East Mediterranean archaeology.

One consideration which does begin to approach the role and meaning attributed to opium in the East Mediterranean Bronze Age in a more detailed manner is Ann Nicgorski’s recent discussion of a pair of rhyta from the LBA cemetery at Mochlos on Crete, both of which are shaped and decorated as incised poppy capsules (**Fig.1.19**).<sup>372</sup> Nicgorski suggests here that the poppy may have functioned as a symbol of the sleep of death, providing a contrast to the symbolism provided by the six armed octopi also on the rhyta which may have been symbols of regeneration: “Coupled with the six-armed octopus, a symbol of regeneration, the poppy capsule rhyta from Mochlos express the

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<sup>367</sup> Karageorghis (1976:128).

<sup>368</sup> Karageorghis (1976:128). Contra Karageorghis & Demas (1985:260), where a male fertility deity is suggested.

<sup>369</sup> Karageorghis (1976:129).

<sup>370</sup> Lee (2006:46, 65-66); Rättsch (2005:410); Roberts & Wink (1998:448); Te Duc (1957) cited in Lee (2006:67). The idea that opium was an aphrodisiac may actually derive from the 19<sup>th</sup> century BCE association of opium smoking dens and prostitution, reflecting an ignorance at this time of the actual effects of the substance on its consumer, Hodgson (1999:72).

<sup>371</sup> “Since opium is also connected with erotica, due to its being an aphrodisiac, the poppy is associated with sex and pregnancy.” Behn (1986:197). Behn also suggests that it can be simply be assumed that the consumption of opium had the same function in the Bronze Age that it had in later periods (soporific, narcotic, aphrodisiac, sedative and anaesthetic), Behn (1986:197).

<sup>372</sup> Nicgorski (1999).

hope that death is only one phase in a natural cycle that leads to rebirth and renewed life.”<sup>373</sup>

Nencini also speculates on the possible consumption and symbolic value of opium from the Bronze Age to the classical period, arguing that the discovery of its representation in religious contexts leads to the ‘obvious’ conclusion that it was taken during religious ceremonies.<sup>374</sup> Nencini argues that opium was probably consumed during agricultural fertility rituals and also suggests that coming in and out of the ASCs produced by its consumption may have provided a symbolic representation of death and reincarnation.<sup>375</sup> Although an intriguing possibility, Nencini does not provide any archaeological evidence to support these assertions.

### **Other Psychoactive Substances**

In contrast to the abundance of evidence for the use of alcohol and opium in the East Mediterranean during the Bronze Age, evidence for the use of other psychoactive substances is scarce and exists primarily in the form of often ambiguous iconography for psychoactive plant species.

A prominent example of such iconographic evidence is William Emboden’s suggestion for the use of the Egyptian blue water lily (*Nymphaea caerulea* Sav.), mandrake (*Mandragora officinarum*) and occasionally opium in Dynastic Egyptian shamanistic practices related to the Osiris cult.<sup>376</sup> As the blue water lily and mandrake were commonly depicted (often together) as offerings on wall paintings from the 5<sup>th</sup> to 18<sup>th</sup> Dynasties (**Fig.1.18**), Emboden argues that they were consumed for their narcotic properties by a priestly caste in order to induce a “shamanic state of ecstasies.”<sup>377</sup> While the iconographic evidence certainly suggests that these two plants were somehow significant to the ancient Egyptians, Emboden does not, however, provide sufficient evidence for the nature of their psychoactive properties, or present any archaeobotanical

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<sup>373</sup> Nicgorski (1999:541).

<sup>374</sup> Nencini (2002:930).

<sup>375</sup> Nencini (2002:930).

<sup>376</sup> Emboden (1978; 1981; 1989). According to Emboden, *Nymphaea caerulea* Sav. was considered symbolic of the death and resurrection of Osiris, Emboden (1978:397; 1989:67). Cf. Manniche (1997:30-31). Berlant (2005) makes a similar, although less convincing, argument for the Egyptian White and Triple crowns being representative of the psychoactive mushroom *Psilocybe (Stropharia) cubensis*.

<sup>377</sup> Emboden (1978:407); cf. Emboden (1981; 1989). McDonald (2002) also argues, somewhat unconvinclly, that the ‘Tree of Life’ commonly depicted in East Mediterranean Bronze Age iconography represented (*Nymphaea caerulea* Sav.).

or organic residue evidence for their consumption. As such, any link between the depiction of these plants and their use to induce ‘shamanic’ ASCs is yet to be established.

Similarly, Ripinsky-Naxon argues that a 13<sup>th</sup> Century BCE kouroutrophos figurine from National Archaeological Museum, Athens, depicts a woman and child with mushroom forms (**Fig.1.20**), suggesting the ritual use of psychoactive fungus species.<sup>378</sup> Roughly contemporary ceramic mushrooms in the museums of Argos and Nafplion may also indicate the significant role of these plants.<sup>379</sup>

While all of these considerations of psychoactive substances make implicit reference to ASCs, with the exception of Hamilakis and Steel’s work (which focuses on the role of alcohol within social rituals, as opposed to those of a more religious nature), these studies remain primarily concerned with the identification and categorisation of iconography and residue samples. Little consideration is given to the role played by the ASCs induced by the psychoactive substance in question. In short, the wider context of use, or meaning, is ignored. Clearly, this current research does not allow for a detailed and nuanced understanding of the possible role of such phenomena within the societies of the time. The recent number of detailed archaeological considerations of ASCs in other regions and time periods, particularly in relation to shamanism,<sup>380</sup> serve to further highlight this deficiency within the archaeology of the East Mediterranean Bronze Age. Conversely, however, the majority of such studies are based upon indirect, primarily iconographic, forms of evidence that limit their strength of argument. The need for a study that combines direct archaeological evidence for the use of ASCs with a detailed and nuanced consideration of their meaning is clear.

## ***1.7 Investigating Altered States of Consciousness***

The anthropological and archaeological approaches to the study of ASCs presented above suggest a number of ways to study such mental phenomena in LBA Cyprus. In particular, the identification of wine and opium residues in distinctive pottery

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<sup>378</sup> Ripinsky-Naxon (1993:158).

<sup>379</sup> Ripinsky-Naxon (1993:245).

<sup>380</sup> Boyd (1996); Chippendale (2000); Demattè (2004); Freidel et.al (1993); Huckell & VanPool (2006); Lewis-Williams (1999; 2001); Lewis-Williams & Dowson (1988); Pearson (2002); Price (2001); Rakita (2009); Rudgley (1995); Staal (2001); VanPool (2003; 2009); VanPool & VanPool (2007).

vessels via organic residue analysis<sup>381</sup> suggests a category of direct evidence for ASCs that is more convincing than other, indirect forms of archaeological data which rely largely upon inference, such as iconographic representations. Discounting the extremely unlikely possibility that opium was stored within these pots for some purpose other than its consumption, such evidence provides convincing evidence for the induction of ASCs.

In light of suggestions that the experiential characteristics of an ASC may have an influence on the way in which such mental phenomena are interpreted, the ability to identify a specific psychoactive substance is significant. As the neuropsychological response to such substances appears to be common to all humans, it may be possible to infer a number of these experiential characteristics by considering evidence for the human reaction to the consumption of a particular psychoactive. Although these experiential characteristics are known to vary somewhat depending upon the psychological mindset of the consumer, the amount consumed and the physical and cultural setting in which the experience takes place,<sup>382</sup> it is only the psychological mindset of the consumer that is difficult, if not impossible, to establish archaeologically. Here, the setting of consumption can be understood to refer to the physical and cultural contexts established for a particular episode of consumption (See Section 2.1.1 for a detailed discussion of these concepts of ‘context’). In addition, although it is extremely difficult to establish the concentration at which a psychoactive substance was ingested based upon archaeological residues, the size of certain vessels may provide some indication as to the amount which may have been consumed.

In considering the ethnographic examples presented above the meaning associated with ASCs can be understood to consist of both the particular cultural interpretation of a given ASC with regard to the relevant world view (‘symbolic meaning’) and the way in which their use related to social, economic and political aspects of society (‘socio-political meaning’, see Section 2.4). Also from the examples presented above, it appears that both of these components of meaning are in turn strongly influenced by the specific cultural context in which the ASC is adopted. Thus the cultural context of an ASC can be

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<sup>381</sup> Bisset et.al. (1996a:204), Evans (1989); Guasach-Jané (2008); Guasach-Jané et.al (2006); Koschel (1996:161); Stacey (2008, pers.comm.). McGovern (1997; 2003); Tzedakis & Martlew (2001); Tzedakis et.al. (2008).

<sup>382</sup> Rättsch (2005:13-14).

seen to not only influence the altered consciousness experience itself, but also the subsequent understanding, or meaning, associated with that experience. This can be viewed as a somewhat hermeneutic relationship between the experience and its interpretation with a given context; an initial experience may contribute to a particular interpretation which may influence subsequent experiences, thereby further reaffirming the original interpretation. This hermeneutic relationship may provide another factor to explain why ASCs are so frequently adopted into ritual practice.

These observations suggest that understanding the cultural context of an ASC is vital to interpreting the meaning of such mental states. The ethnographic studies presented above suggest that the aspects of a culture which have the most influence upon the meaning associated with an ASC include socio-political organisation, economy and religious beliefs and ideologies.

To develop an understanding of the role and meaning of ASCs for which there is convincing archaeological evidence, therefore, requires a methodological framework which allows this evidence to be considered in light of the physical context of its discovery, the neuropsychological aspects of the altered consciousness experience of the relevant psychoactive and the socio-political, economic and religious aspects of the relevant cultural context. The theoretical background required to develop a methodological framework based on such a range of contextual information is discussed in the following chapter.

## Chapter 2. Theory and Approach

Over the past few decades explicit discussion of the theoretical approach used by archaeologists in their research has become an increasingly important component of that research.<sup>383</sup> It is considered particularly important in prompting the identification of any possible preconceptions, biases and assumptions made during the course of research.<sup>384</sup> Despite these observations, however, the explicit use of theory is often lacking within the traditional cultural-historical approaches that are still common in Cyprus and the wider East Mediterranean region.<sup>385</sup> Given that the aim of this thesis is to investigate symbolic and cognitive aspects of behaviour such as the ritualised use of ASCs, explicit discussion of theoretical frameworks appropriate to interpreting such behaviour from the archaeological record is vital. This chapter, therefore, presents a discussion of the theoretical approaches most suited to this task, primarily consisting of a focus upon post-processual approaches incorporating Contextual Analysis, theoretical approaches to the study of ritual and religion and a brief review of the limitations of using ethnographic and historical sources. This is followed by a discussion of the methodology by which these frameworks will be used to investigate the ritual use of ASCs in Late Cypriote society.

The theoretical framework used in this thesis is largely derived from the post-processual theoretical movement. Post-processual or interpretive<sup>386</sup> approaches are considered most appropriate to understanding aspects of the past which depend on human agency,<sup>387</sup> of which symbolic and psychological aspects of behaviour are a central component. Post-processual approaches are also considered particularly useful in areas of archaeology dealing with complex societies about which there is a considerable amount of detailed information.<sup>388</sup> As a result, such approaches have been adopted by a number

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<sup>383</sup> Hodder (1999); Hodder & Hutson (2003); Johnson (1999:3-6); Shanks & Tilley (1987b); Shanks & Hodder (1998); Whitley (1998).

<sup>384</sup> Johnson (1999:5).

<sup>385</sup> Clarke (2005:9-10); Hitchcock (2000:15); Knapp (1993:22; 2005:4); Knapp et al. (1994:430); Sherratt (1998:293); Steel (2004a:215, Note 2); Webb (2006:117).

<sup>386</sup> Shanks & Hodder (1998).

<sup>387</sup> Hodder (1999).

<sup>388</sup> Hodder (1999).

of recent studies concerning the Bronze Age East Mediterranean<sup>389</sup> and are similarly considered largely appropriate to the goals of this study. Earlier processual approaches, due to their emphasis upon developing cross-cultural generalisations about human behaviour, are ill-suited to the consideration of symbolic behaviour and individual thought,<sup>390</sup> despite more recent (and largely unsuccessful) attempts to develop frameworks that integrate such aspects of human behaviour.<sup>391</sup>

## **2.1 Post-processual Approaches**

Central to post-processual approaches to studying material culture is the idea that archaeologists are, in fact, interpreting the meaning of material culture.<sup>392</sup> This is based on the belief that material culture is “meaningfully constituted; produced in relation to symbolic schemes, structured according to the system of meanings of a social group.”<sup>393</sup> At the same time, “society is constituted through meanings ascribed and negotiated by social agents.”<sup>394</sup> Put simply, artefacts were made, used and discarded in relation to human motives and concepts.

Hodder sees material culture as having three broad types of meaning: technical meaning, ideational or symbolic meaning and operational meaning involving the historic context of changing ideas and associations of the object which make its use non-arbitrary.<sup>395</sup> The example of a trowel exemplifies this non-arbitrary nature of meaning, as it can have a different meaning to an archaeologist, a concreter and a gardener.<sup>396</sup> This implies that meaning is not inherent, but is fluid, flexible and multiple, “a product of a situation and the person/people for whom the situation is meaningful.”<sup>397</sup> In addition, as it can often be difficult to separate functional from symbolic meaning, except heuristically,

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<sup>389</sup> Bolger (1996; 2002; 2003); Given & Knapp (2003); Hitchcock (1999; 2000; 2003; 2004, 2005, 2009); Knapp (1986, 1993, 1996a, 1996b; 2008); Manning (1993, 1998); Sherratt (1992, 1998); Webb (1999, 2002; 2005).

<sup>390</sup> Hodder & Hutson (2003); Johnson (1999), Shanks and Tilley (1987a; 1987b)

<sup>391</sup> Renfrew (1994).

<sup>392</sup> Hodder (1987, 1999); Hodder & Hutson (2003); Shanks & Tilley (1987a, 1987b); Shanks & Hodder (1998).

<sup>393</sup> Shanks & Tilley (1987a:107).

<sup>394</sup> Shanks & Hodder (1998:84).

<sup>395</sup> Hodder (1987:1).

<sup>396</sup> Hodder & Hutson (2003:158).

<sup>397</sup> Hodder & Hutson (2003:157).

interpreting the meaning of material culture can be a difficult process.<sup>398</sup> Material culture may have had an original meaning, but given the inter-subjective context of its production and use, this meaning may not necessarily be the only meaning, or even the privileged one.<sup>399</sup> While this is quite an extreme viewpoint, it does highlight the problems with the idea of conveying meaning from an 'objective' past to the present.

Interpretation then, refers to translation as a way of recovering meaning from the past and as meaning is non-arbitrary, this involves mediation, a dialogue between the past and present.<sup>400</sup> As a result, post-processual approaches have adopted much theory from semiology and structural linguistics,<sup>401</sup> arguing that archaeological remains constitute a set of signs to be read; understood and interpreted by means of their relationship to other objects.<sup>402</sup> The meaning of a room or other material artefact is not located solely within that artefact, but is partially dispersed and inscribed or located in the other rooms and artefacts found in association with it.<sup>403</sup> In addition, the archaeological record is structured by the social construction of reality and strategies of interest, power and ideology as a form of power.<sup>404</sup>

An important concept in the interpretation of material culture is the role of structure, with social structures viewed as actively created and re-created in the context of specific power relations and the strategies of agents.<sup>405</sup> Here, agency refers to actions that are perpetrated by a knowledgeable individual -where knowledgeability is essentially the awareness of social rules- who could, at any stage of activity, have acted differently.<sup>406</sup> While an individual's actions are guided by structure, this itself is now understood as being subjectively interpreted and in turn reproduced through an agent's actions.<sup>407</sup> This

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<sup>398</sup> Hodder (1989); Hodder & Hutson (2003); Shanks & Hodder (1998).

<sup>399</sup> Barrett (2000); Shanks & Tilley (1987a, 1987b).

<sup>400</sup> Shanks & Hodder (1998); Shanks & Tilley (1987a, 1987b).

<sup>401</sup> Tilley (1990a).

<sup>402</sup> Hodder & Hutson (2003). Barrett (2006:200) does, however, point out that material artefacts do have physical qualities that can limit their flexibility when employed as signifiers, a constraint that does not affect the use of a sound system in a language.

<sup>403</sup> Hitchcock (2000).

<sup>404</sup> Hodder (1987); Shanks & Tilley (1987a).

<sup>405</sup> Hodder (1987).

<sup>406</sup> Bourdieu (1977); Giddens (1984). See also Barrett (1994; 2006); Dobres & Robb (2000); Dornan (2002); Hodder & Hutson (2003).

<sup>407</sup> Giddens (1984).

‘duality of structure’ recognises that although material culture is produced and used in relation to existing structures, agents can choose to either reproduce or transform them.

Material culture, then, can be seen as a communicative system that actively structures social practices and is structured by them; is both constraining and enabling.<sup>408</sup> Patterns of archaeological remains thus serve as ‘memory traces’ of the structures and principles composing social practices and strategies including power interests and ideologies which constrained and enabled human action.<sup>409</sup> Post-processual approaches to studying material culture, therefore, emphasise the relationship between structure and context. The importance of context in interpreting the meaning of material culture is reflected in the development of theory dealing with contextual analysis in archaeology.<sup>410</sup>

### 2.1.1 Contextual Analysis

Hodder and Hutson describe an object’s context as the totality of the relevant dimensions of variation around that object, where ‘relevant’ refers to significant relationships to the object, necessary for discerning the object’s meaning.<sup>411</sup> Just as linguistic signs alone have no meaning, objects without a context are muted, and it is only by placing objects ‘with their text’ (con-text), that they can be understood.<sup>412</sup>

Hodder argues that a context should be viewed as a series of relevant similarities and differences, that once identified can be built up into various types of contextual associations, from which contextual meaning can be derived.<sup>413</sup> Identifying the relevant dimensions along which similarities and differences are to be measured is done heuristically by finding those dimensions which show significant patterns of similarities and differences in relation to a particular theory. As all artefacts in the archaeological record, however, can be related to one another somehow, the boundaries of a context must be closed somewhere, shutting off or framing some possibilities. The social context

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<sup>408</sup> Giddens (1984); Hodder (1989).

<sup>409</sup> Hitchcock (2000); Shanks & Tilley (1987a).

<sup>410</sup> Hodder (1987); Hodder & Hutson (2003). Cf. Barret (1987).

<sup>411</sup> Hodder & Hutson (2003:188).

<sup>412</sup> Hodder (1987); Hodder & Hutson (2003); Shanks & Hodder (1998).

<sup>413</sup> Hodder (1987); Hodder & Hutson (2003).

of the interpreting archaeologist, therefore, becomes another level of context which must be considered to ensure the rigour of the interpretation process.<sup>414</sup>

There is a further ambiguity in the definition of a context. While the context of an artefact provides meaning to the artefact, it is in turn defined by the meaning of the artefacts which constitute it.<sup>415</sup> The process of interpreting the meaning of an object within a given context, therefore, requires mediation between this specific and the general understanding of that object, derived from the totality of other relevant contexts. This mediation of understanding is defined by the concept of hermeneutics, whereby detail must be understood in terms of the whole and the whole in terms of detail; a hermeneutic circle.<sup>416</sup> Understanding is achieved through a play back and forth between the detail and the whole until there is harmony.

At the same time, the interpretation of meaning is recognised as not only dependent upon past contexts, but also upon where and under what circumstances the interpretation takes place and the person who does the interpretation.<sup>417</sup> Interpretation, therefore, is a product of both the past and the present, with various interpretations possible, depending upon a range of contexts, including that of the interpreter. Prejudgments and prejudice are unavoidable and indeed, are essential to achieving understanding.<sup>418</sup> Archaeologists ask questions based on what they already know and on the basis of prejudice and the answers received draw the interpreter into further prejudged questions, with the constraints of evidence forcing the hermeneutic circle to spiral.<sup>419</sup>

This inevitability of prejudice has led to an emphasis on multivocality within the post-processual movement.<sup>420</sup> If the interpretation of meaning is derived via a certain set of prejudgements, then hypotheses derived from alternative sets of prejudgements also need to be considered. While such 'relativism' has been described by some as introducing an 'anything goes' environment for archaeological interpretation,<sup>421</sup> Hodder and Hutson

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<sup>414</sup> Hodder (1987).

<sup>415</sup> Hodder (1987, 1999).

<sup>416</sup> Hodder (1999); Hodder & Hutson (2003); Shanks & Tilley (1987b).

<sup>417</sup> Hodder (1999); Hodder & Hutson (2003); Shanks & Tilley (1987a, 1987b).

<sup>418</sup> Shanks & Hodder (1998). Cf. Barret (2007:203).

<sup>419</sup> Hodder & Hutson (2003).

<sup>420</sup> Hodder & Hutson (2003); Shanks & Hodder (1998).

<sup>421</sup> Binford (1989); Renfrew (1989; 1994:9).

point out that acceptable hypotheses will still be constrained by the physical data available.<sup>422</sup>

## **2.2 Religion and Ritual**

As ritual practice is a central theme of this thesis, explicit consideration of theoretical concerns relating to both religion and ritual are of central importance. This section will particularly focus upon theoretical approaches suited to developing a general understanding of the roles that the cognitive aspects of religion and the physical action of ritual can play in human societies and how these related to other aspects of social life. As a central concern for archaeological research, the ways in which either might be identified in the archaeological record are also discussed.

Despite the importance of theory in archaeological research, approaches to ancient ritual and religion have often been under-theorised, once again, particularly in the east Mediterranean region.<sup>423</sup> According to Kyriakides, the lack of explicit theoretical concern for these topics has commonly led to over-imaginative interpretations of ritual practice or religious beliefs that have subsequently discouraged their study by other scholars.<sup>424</sup> Furthermore, Hawkes' suggestion that these aspects of past societies are amongst the most difficult to interpret from archaeological evidence<sup>425</sup> seems to have further introduced a degree of pessimism over whether ritual and particularly religious beliefs are viable topics of archaeological research.<sup>426</sup> Given that ritual and religion appear to be ubiquitous and integral components of human social life,<sup>427</sup> however, ignoring these topics can severely limit understanding of past societies. Thankfully, interest in the archaeology of ritual and religion has been renewed of late, thanks primarily to the introduction of more robust theoretical frameworks, predominantly derived from anthropology.<sup>428</sup>

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<sup>422</sup> Hodder (1999:159); Hodder & Hutson (2003).

<sup>423</sup> Kyriakides (2007a:3).

<sup>424</sup> Kyriakides (2007a:2). See also Insoll (2004:77).

<sup>425</sup> Hawkes (1954)

<sup>426</sup> For example, see Wasilewaska (1994). Contra Bell (2007:283); Fogelin (2008).

<sup>427</sup> Glazier (1997:3).

<sup>428</sup> Dornan (2004); Hodder (ed.) (2010); Insoll (2004); Kyriakides (ed.) (2007); Whitley & Hays-Gilpin (eds.) (2008).

At a very general level, religion can be defined as, “an institution consisting of culturally patterned interactions with culturally postulated superhuman beings.”<sup>429</sup> It can also be characterised as a system of metaphysical beliefs that is concerned with these interactions and beings. Ritual, however, has proven to be particularly difficult to define, both for archaeologists and scholars from other disciplines.<sup>430</sup> While ritual is often described as action characterised by formalism, traditionalism, invariance, rule-governance and performance,<sup>431</sup> some scholars consider the term to only pertain to practices with an overt religious motivation, distinguishing them from everyday, ‘secular’ practices.<sup>432</sup> In this case, ritual can be defined as physical attempts to interact somehow with the supernatural forces described in a particular religion (to interpret, manipulate or appeal to them).<sup>433</sup> Other scholars, however, also define prescribed secular practices, such as the installations of the office of a civic dignitary, as rituals, preferring to use the expression ‘cult’ for overtly religious ritual.<sup>434</sup>

Debate over the definition of ritual, however, can be considered a product of a modern, Durkheimian distinction between the ‘sacred’ and the ‘profane’ which is ill suited to the study of ancient societies.<sup>435</sup> The idea of secular rituals not structured by religious beliefs ignores that they constitute the fundamental understanding of the world into which all aspects of life fit, particularly in pre-enlightenment societies.<sup>436</sup> Indeed, anthropological studies suggest that there is often no distinct concept of religion per se, as religious beliefs and practices cannot be separated from how people organise their families, govern themselves, hunt, farm or trade.<sup>437</sup> While recognising that not everyone entertains religious thoughts all the time and that not all activities are guided by metaphysical beliefs,<sup>438</sup> archaeologists need to accept the possibility that such beliefs can

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<sup>429</sup> Spiro (1987:197). Haviland (2002:363) similarly defines religion as, “beliefs in the supernatural that guide humans in their attempts to make sense of the world and deal with problems they view as important, but defy solution through the application of known technology or techniques of organisation.”

<sup>430</sup> Bell (2007); Hill (1995:97, 101); Insoll (2004:10); Rappaport (1999:23).

<sup>431</sup> Bell (1997:138-169).

<sup>432</sup> Barrett (1994:77); Haviland (2002:363); Hill (1995:98); Webb (1999:1,11).

<sup>433</sup> Haviland (2002:363).

<sup>434</sup> Renfrew (1985; 2007:110); Webb (1999). Rappaport (1999:25) also suggests that not all rituals are religious and not all religious acts are ritual.

<sup>435</sup> Bell (1997:198); Bradley (2005:30, 119); Hill (1995:97); Insoll (2004:16).

<sup>436</sup> Insoll (2004:12).

<sup>437</sup> Bell (1997:198); See also Bowie (2006:19-20), Hayden (2003:5).

<sup>438</sup> Fogelin (2007a:60); Insoll (2004:17); Morris (2006:10).

structure any activity, regardless of the social system being considered.<sup>439</sup> As there was probably no clear distinction between religious ritual and routine or domestic activities in the past, the application of such categories in the present is, therefore, questionable. Ritual, then, is defined for this thesis as any structured practice, which may or may not reflect a range of religious belief and can extend from the private to public domain, and involve one or many people.<sup>440</sup> This variation in the formality of rituals demonstrates differing degrees of what can be called ‘ritualisation’ (discussed further below).<sup>441</sup> Varying degrees of ritualisation are reflected in the six basic genres of ritual suggested by Bell: rites of passage (life cycle rites), calendrical and commemorative rites, rites of exchange and communication, rites of affliction (to heal, exorcise, protect or purify); rites of feasting, fasting and festivals and political rituals.<sup>442</sup>

In terms of the approaches used to study ritual and religion, anthropology has long recognised that there is a strong dialectic relationship between the two and commonly considered both topics together. Within this discipline a range of theoretical approaches have developed that emphasise different aspects of religion and ritual, often in relation to their role in human societies. These have variously been categorised as intellectualist, emotionalist, structuralist, functionalist, interpretive, hermeneutic, symbolic, cognitive, phenomenological, sociological, performative and practice-based approaches.<sup>443</sup> The constraints of this thesis, however, preclude discussing each approach in detail.

Archaeological approaches, on the other hand, have tended to focus primarily upon ritual, which is more likely to leave physical traces, creating a simplistic dichotomy between ritual and religion; action and belief.<sup>444</sup> The majority of theoretically explicit archaeological approaches to ritual can generally be characterised as adopting either structuralist or practice orientated approaches.<sup>445</sup>

Structuralist approaches, exemplified in the works of Geertz, Van Gennep, Turner and Douglas, see religion and ritual as a form of communication, often an ideology linked

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<sup>439</sup> Hill (1995:97); Insoll (2004:18, 150); Webb (1999:2).

<sup>440</sup> Bradley (2005:34).

<sup>441</sup> Bell (1997:81-82); Bradley (2005:34).

<sup>442</sup> Bell (1997:93-137).

<sup>443</sup> Bell (1997); Bowie (2006); Morris (2006:3-7).

<sup>444</sup> Fogelin (2007a:56); Insoll (2004:78).

<sup>445</sup> Fogelin (2007a:56-58).

to political authority.<sup>446</sup> They emphasise the relationship between the ideas, values, theologies and symbols expressed in ritual and the social organisation of the groups conducting them.<sup>447</sup> Rituals are understood to enact or promote symbolic meanings in an easily understood format, instilling in people a sense of their place in the universe.<sup>448</sup> Later functional-structuralist approaches focus upon the social functions of ritual, such as forming and maintaining social bonds, socialising individuals via the unconscious appropriation of community values and categories of knowledge and experience and channelling and resolving conflict.<sup>449</sup> Key to most structuralist approaches is the idea that religion is a particularly stable, long-lasting and static cultural phenomenon.<sup>450</sup> Archaeological research which adopts this approach has, therefore, commonly viewed ethnographic and historic sources as legitimate forms of evidence for the study of earlier, related cultures.<sup>451</sup> Structuralist approaches, however, have been criticised for being ahistorical and assuming a relatively passive role for ritual participants, overlooking their ability to effect change.<sup>452</sup>

Practice based approaches to ritual and religion, on the other hand, see these as more dynamic social phenomena; creative strategies by which human beings continually reproduce and reshape their social and cultural environments.<sup>453</sup> Such approaches are exemplified in the works of Sahlins, Bloch and Bell. While practice theories retain a focus upon the political dimensions of social relationships, these are considered in relation to the way in which positions of dominance and subordination are variously constituted, manipulated and resisted. Rather than merely being a passive expression of authority, ritual is seen as an active part of a historical process in which past patterns are reproduced, but also reinterpreted or transformed. Bell encapsulates this ritual agency under the term 'ritualisation', which describes the way in which agents associate certain actions with forces seen to derive from beyond the immediate (i.e. the supernatural) as part of the negotiation of ritual authority.

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<sup>446</sup> Bell (1997:33-46); Morris (2006:4).

<sup>447</sup> Bell (1997:45-46).

<sup>448</sup> Fogelin (2007:57).

<sup>449</sup> Bell (1997:59).

<sup>450</sup> Fogelin (2007:57).

<sup>451</sup> Fogelin (2007:57).

<sup>452</sup> Bell (1997:76); Morris (2006:4).

<sup>453</sup> Bell (1997:76-83).

Given that practice based approaches view ritual as deeply embedded within human society, it follows that ritual should be analysed in its cultural context, not just as a category of action unrelated to other forms of action.<sup>454</sup> As Bell remarks, “for each and every ritual, there is a thick context of social customs, historical practices and day-to-day routines that ... influence whether and how a ritual action is performed.”<sup>455</sup> These associations are commonly reflected in replicated symbols and gestures that create homologies (structural resonances) between different ritual contexts.<sup>456</sup> For example, symbols of birth can mark not only rites for a newborn, but can also be seen in other rites of passage and even in ancestral ceremonies that link the dead to the fertility of successive generations. As these systematic linkages are of central importance for understanding the significance of a single ritual act, it therefore becomes vital to consider the wider socio-cultural context when seeking to interpret archaeological evidence for a specific ritual site. Bell further argues that both the symbolic meaning of a ritual and its relationship to the organisation of society should be considered together.<sup>457</sup> In this way ritual can be viewed as a means by which the symbolic cultural and social systems are able to interact and harmonise with each other.<sup>458</sup> This focus upon context also suggests that practice approaches to the study of ritual are particularly well suited for use in combination with contextual approaches to archaeological interpretation.<sup>459</sup>

Consideration of the wider context also appears to be of significant importance in understanding changes in ritual practice and religious belief. Bell argues that when a society passes through social and historical changes it will probably witness concomitant changes in its ritual system.<sup>460</sup> Not only can the structure of certain rituals change, but more often the meaning associated with them is also altered, as people look to them with different concerns and questions.<sup>461</sup> At the same time, however, the formalism, traditionalism and invariance that commonly characterise rituals make them particularly

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<sup>454</sup> Bell (1997:81). See also Morris (2006:310), who argues the same for religion.

<sup>455</sup> Bell (1997:171).

<sup>456</sup> Bell (1997:173-174).

<sup>457</sup> Bell (1997:61). Cf. Fogelin (2007a:66).

<sup>458</sup> Bell (1997:61).

<sup>459</sup> Indeed, archaeological post-processual approaches largely derive from ideas used to develop anthropological practice approaches.

<sup>460</sup> Bell (1997:190).

<sup>461</sup> Bell (1997:223).

resistant to change, particularly when compared to other forms of social custom.<sup>462</sup> This therefore suggests that ritual is a particularly effective means of mediating tradition and change, as a medium for appropriating some changes while maintaining a sense of cultural continuity.<sup>463</sup>

Some final observations, noted in anthropological studies of ritual, are of central relevance to this thesis. The first concerns the role of feasting in pre-industrial societies. As discussed in the previous chapter, feasting incorporating alcohol consumption is commonly recognised as a social activity in which the ambitious use surplus agricultural commodities to generate political or social debts or to achieve political or social ends.<sup>464</sup> Bell, however, also points out that while there may be little overt testimony to the presence of deities during feasting, there is often a great deal of emphasis on the public display of religio-cultural sentiments, with participants often concerned with publically expressing their commitment and adherence to basic religious values.<sup>465</sup> Shared participation in a feast is commonly a ritual means for defining and reaffirming the full extent of the human and cosmic community.<sup>466</sup> Hayden similarly argues that ancient feasting probably included very strong ritual elements to justify the collection and use of surpluses and to enforce debt obligations with ritual pacts and sanctions.<sup>467</sup> Feasting, therefore, should be viewed as a social activity that commonly (but not always)<sup>468</sup> involves significant degrees of ritualisation linking it to the supernatural.

The second observation of relevance relates to the importance accorded to the ritual experience. In particular, it has been noted that an active, 'embodied' ritual experience is often a central component of ritual in pre-modern societies,<sup>469</sup> vital for the validation of associated religious beliefs.<sup>470</sup> As noted in the Introduction, however, many archaeological approaches to religion and ritual fail to consider the dynamic processes

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<sup>462</sup> Bell (1997:211).

<sup>463</sup> Bell (1997:251).

<sup>464</sup> Dietler (1990; 2006); Hamilakis (1999:40; 2000:59); Hayden (2001; 2003:173, 183).

<sup>465</sup> Bell (1997:120).

<sup>466</sup> Bell (1997:123).

<sup>467</sup> Hayden (2003:183).

<sup>468</sup> Renfrew (2007:120).

<sup>469</sup> Dornan (2004); Lewis (1971:11); Morris & Peatfield (2002:110; 2004:46, 54); Pearson (2002:75);

Whitley (2008:94).

<sup>470</sup> Dornan (2004).

that link ritual experience, religious belief and ideology.<sup>471</sup> Religion is commonly characterised as an ideology that structures individual behaviour to serve sectional interests, with the role of subjective individual experiences often ignored.<sup>472</sup> According to Firth, however, it is not intellectual or moral proofs that give religious concepts validity, but rather, emotional proofs.<sup>473</sup> Such emotional proofs are commonly derived from embodied ritual experiences that channel and give meaning to religious beliefs and symbols.<sup>474</sup> At the same time, however, such spiritual experiences can also be a mechanism for changes in religious belief and ideology. Ritual should therefore be understood as the central mediator in a dynamic feedback loop between shared religious belief and subjective religious experience.

In ritual contexts where ASCs are interpreted as direct contact with the supernatural, such powerful and emotive spiritual experiences are likely to strongly influence, and be influenced by, religious belief. According to Ludwig, dramatic displays of ASCs in a religious context can serve to convince participants of the continued personal interest of spiritual beings, reaffirm local beliefs and sense of spiritual control and endow the utterances of a trancer with increased importance.<sup>475</sup> At the same time, the enhanced emotional arousal commonly felt during group rituals can be particularly effective in fostering collective group identity. Raised serotonin levels can reduce aggression, resulting in enhanced group socialisation,<sup>476</sup> while the projection of sacred images representing the community can promote an emotional response that sees individuals identifying themselves with a sense of a larger reality; a sense of collective community or 'cosmic oneness'.<sup>477</sup> The significance of these aspects of ritual experiences for both an individual and the group therefore emphasises the importance of explicitly considering the experiential characteristics of any ritually induced ASCs.

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<sup>471</sup> Dornan (2004:25).

<sup>472</sup> For an example of this trend, see Knapp (1986:67-83; 1988; 1996b).

<sup>473</sup> Firth (1996:30).

<sup>474</sup> Dornan (2004:29).

<sup>475</sup> Ludwig (1968:89).

<sup>476</sup> Whitley (2008:94).

<sup>477</sup> Bell (1997:24);

### 2.2.1 Archaeologically Identifying Ritual

Early attempts to identify ritual in the archaeological record concentrated upon identifying those of an overtly religious nature, or ‘cult’.<sup>478</sup> In an effort to develop universal criteria, Renfrew suggested a number of features which may indicate cult<sup>479</sup> These include: the use of attention focusing devices such as special natural settings, buildings, fixtures or equipment; the concept of a boundary zone between this world and the next, indicated via conspicuous public display or hidden exclusive mysteries and ideas of cleanliness or pollution reflected in architecture; the presence of supernatural powers indicated by the image of a deity/ies or ritual symbol; and evidence for participation and offering, such as devices for inducing religious experience (dance, music, psychoactives), sacrifices and the presence of offerings.<sup>480</sup>

While useful in many cases, Renfrew’s criteria do have their limitations. As Hill points out, these criteria seem to be based upon features from sites already known to be cultic and may not be as universally applicable as claimed.<sup>481</sup> In addition, as both religious belief and ritual are culturally defined,<sup>482</sup> potential variation in both is infinite. Webb<sup>483</sup> also points out that the criteria do not resolve methodological issues of how to identify altars, votives, cult equipment or images. Furthermore, as these criteria were designed purely to identify cult practices, they are poorly suited to the identification of ritual of a less overt religious nature.

The concept of structured deposition, however, may be of more use in identifying such rituals. Structured deposition refers to archaeological deposits which were, “deposited in a particular manner, obeying certain rules which were important to the actors involved.”<sup>484</sup> Hill suggests that structured deposition can be identified through the recognition of patterns of associations and disassociations between different types of finds and their spatial distribution.<sup>485</sup> For example, the repeated association of a particular type of figurine in a particular context is likely to be the result of behaviour structured by

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<sup>478</sup> Renfrew (1985:15).

<sup>479</sup> Renfrew (1985:18-20).

<sup>480</sup> Renfrew (1985:18-20); Renfrew & Bahn (1996:391).

<sup>481</sup> Hill (1995:97).

<sup>482</sup> Webb (1999:1).

<sup>483</sup> Webb (1999:14).

<sup>484</sup> Richards & Thomas (1984: 214, 215).

<sup>485</sup> Hill (1995:95).

some convention, and thereby equivalent to ritual.<sup>486</sup> As ritual practices are characterised by formalism, traditionalism and invariance, they generally involve repetitive actions and performances likely to create such patterning. Indeed, this quality of ritual behaviour actually makes it more recognisable in the archaeological record than other, less repetitive activities.<sup>487</sup> These qualities further suggest a tendency for a particular ritual site to be repeatedly used, perhaps even for a number of different rituals.<sup>488</sup>

### **2.3 Ethnographic and Historical Analogy**

As exemplified in the previous and following chapters, this thesis will consider both ethnographic and historical sources of evidence to assist the interpretation of the possible meaning of ASCs associated with Late Cypriote ritual. Inference by analogy from such sources has long been a fundamental component of archaeological interpretation<sup>489</sup> and is particularly useful in helping to formulate an understanding of symbolic meanings, such as those associated with religious beliefs.<sup>490</sup> The use of analogy as an interpretive aid does, however, have significant limitations which need to be noted.

The early use of ethnographic and historical sources to interpret archaeological remains commonly involved an uncritical use to infer similar or identical behaviours from the prehistoric cultures being studied.<sup>491</sup> With the development of processual archaeology the use of ethnographic sources and ethnoarchaeology became more theoretically explicit. Middle Range Theory was developed in an attempt to determine universal laws of cultural behaviour using ethnographic observations, independent of cultural context.<sup>492</sup> The existence of such universal laws, however, has recently been refuted by archaeological and anthropological theorists, who question the legitimacy of analogies made beyond the boundaries of shared cultural traits.<sup>493</sup> As social

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<sup>486</sup> While Hill (1995:95, 98) argues that structured deposition is not necessarily an indicator of ritual, this view is based upon the view that ritual practices are distinct from everyday, mundane practices, a distinction previously dismissed.

<sup>487</sup> Kyriakides (2007b:9).

<sup>488</sup> Kyriakides (2007b:15). This phenomenon, however, can also create certain problems of interpretation.

<sup>489</sup> Wylie (1985).

<sup>490</sup> Fogelin (2007a:65).

<sup>491</sup> Wylie (1985:65-73).

<sup>492</sup> Johnson (1999:48-63). For specific examples see Binford (1967; 1972a).

<sup>493</sup> Johnson (1999:60); La Motta & Schiffer (2001); Metcalf & Huntington (1991:17-18).

anthropologists argue, all societies are unique and human behaviour is carried out within distinct historic and cultural contexts.<sup>494</sup> Furthermore, although analogy was valuable in broadening the horizons of inquiry, it often came at the cost of compromising methodological rigour.<sup>495</sup> Analogies do not prove anything, nor can they be scientifically tested.<sup>496</sup> As such, the use of such analogies in archaeological reasoning was often viewed as faulty or misleading.<sup>497</sup>

In response, more recently there have been attempts to develop methodological frameworks which allowed ethnographic analogies to be made with greater intellectual rigour, primarily by emphasising the contexts across which analogies are made.<sup>498</sup> La Motta and Schiffer, for instance, suggest that the strength of an analogy is directly related to the number of contextual parallels across which the analogy is made, describing a range of “critical variables” which define such contexts.<sup>499</sup> These can include cultural relationships, social complexity, forms of person-artefact interaction, artefact type and segments in the life history or ‘*chaînes opératoires*’ of an artefact.<sup>500</sup> Such an approach has been characterised as formal analogy.<sup>501</sup> Such analogy has, however, been criticised on the basis that the parallels upon which they are based may be trivial or have no bearing on the feature to be explained and an increasing number of them can not be said to make one analogy more probable than another.<sup>502</sup>

Relational analogy, on the other hand, describes a comparison made with a cultural group known to be closely related linguistically, ethnologically or historically to that represented by the archaeological evidence in question.<sup>503</sup> As such analogy is far less cross-cultural, there is a greater likelihood that features characteristic of a culture, area or

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<sup>494</sup> Cameron (2006:31); Metcalf & Huntington (1991:18).

<sup>495</sup> Wylie (1985:81).

<sup>496</sup> Johnson (1999:60); Lewis-Williams (1999:171).

<sup>497</sup> Wylie (1985).

<sup>498</sup> Cameron (2006:24); La Motta & Schiffer (2001); Wylie (1985).

<sup>499</sup> La Motta & Schiffer (2001).

<sup>500</sup> La Motta & Schiffer (2001); Lewis-Williams (1999:160).

<sup>501</sup> Johnson (1999:61)

<sup>502</sup> Lewis-Williams (1999:161).

<sup>503</sup> Metcalf & Huntington (1991:19). Cf. Wylie (1985).

tradition may be shared.<sup>504</sup> Relational analogies are, therefore, now generally considered to be stronger than formal analogies.<sup>505</sup>

A final point of note concerning the archaeological use of analogies, of central relevance to this thesis, concerns the use of neuropsychological analogies. Lewis-Williams has argued that as all humans share an identical nervous-system, analogies made on the basis of such common physiology will in fact be quite solid.<sup>506</sup> For example, neuropsychological research has shown that the kinds of hallucination experienced in ASCs are broadly uniform regardless of the manner in which they are induced or the cultural context in which they are used.<sup>507</sup> As such, the physiological aspects of ASCs experienced by ancient people, induced via the consumption of a specific substance, for instance, can be considered closely analogous to those described in modern sources. As noted previously, however, the way in which such experiences are understood remains highly context-dependant.

## ***2.4 Methodological Approach***

Within this thesis, contextual analysis will be utilised in an attempt to interpret the meaning, both symbolic and socio-political/functional, of ASCs in Late Cypriote society. These meanings are respectively considered to refer to: the way in which the phenomena are understood in relation to metaphysical beliefs, primarily from the point of view of those experiencing them; and the way in which their use related to social, economic and political aspects of Late Cypriote society, particularly in terms of ritualised strategies linked to the legitimisation or subversion of authority. With the potential to be continuously interpreted and reworked by individual agents, these meanings furnish ideas about what such phenomena represent, both symbolically and socio-politically, and the correct way (when, where and how) to use them.<sup>508</sup>

In the present study, analysis will begin with a detailed consideration of different classes of evidence for ASCs in Late Cypriote society (Chapter 3), primarily consisting of ceramic vessels that can be associated with the consumption of psychoactives. The

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<sup>504</sup> Metcalf & Huntington (1991:19); Wylie (1985).

<sup>505</sup> Johnson (1999:61); Metcalf & Huntington (1991:19); Wylie (1985).

<sup>506</sup> Lewis-Williams (1999:163).

<sup>507</sup> Lewis-Williams (1999:163).

<sup>508</sup> Barrett (2000); Wobst (2000).

archaeological contexts (depositional and site-wide) within which this evidence has been discovered will then be considered, with mortuary contexts and non-mortuary contexts treated separately (Chapters 4 and 5 and Chapter 6 respectively). To develop a detailed interpretation of the meanings associated with these artefacts and, by extension, the ASCs with which they may be associated, however, this evidence also needs to be connected with a wider range of contextual evidence beyond the immediate archaeological context. Such associations could include: what the range of evidence at each site can tell us about the specific practices conducted there; current understandings of the range of behaviours and social strategies conducted in similar Late Cypriote contexts (particularly in relation to ritual); interpretations of the meanings associated with ASCs from a range of other contexts (already discussed at length in the previous chapter) and the particular neuropsychological effects of the ASCs suggested by the evidence. The reasons why such specific aspects of context are considered relevant to the analysis are discussed in further detail below.

As discussed in Section 2.1.1, a detailed and nuanced contextual analysis should consider evidence at both a specific and a general level. As such, the Late Cypriote evidence will be considered from the point of view of a selection of detailed mortuary and non-mortuary case studies which are then compared and contrasted to any patterns observable in the wider corpus of tombs and non-mortuary sites. Where similarities or patterns are observed in the data, an attempt will be made to approach a hermeneutic balance between specific and general interpretations, particularly aiming to avoid automatically using these similarities to suggest identical meanings. The goal in such mediation is to gain a nuanced understanding of the meanings that ASCs may have had in Late Cypriote society and how these may have varied in different contexts.

It is also necessary here to point out why certain evidence was considered relevant to the topic of research for the purposes of a contextual analysis; that is, how the context has been ‘framed’. The most obvious framing of evidence is the choice to focus upon material from the LCA, to appropriately restrict the scale of the thesis. This decision was based primarily upon the fact that this is a relatively well defined context, both chronologically and geographically, from which there is strong evidence for opium-induced ASCs in the form of BR juglets. While the consideration of a wider geographical

context was possible,<sup>509</sup> this would have significantly increased the amount of material to be considered; in particular, significantly increasing the range of cultural contexts to be considered.

The second major factor framing the contexts studied in this thesis concerns the focus on the ritual use of ASCs. This choice was based primarily on preliminary observations that the Late Cypriote evidence for such phenomena overwhelmingly derive from sites associated with ritual activity (tombs and ‘cult’ buildings) and that ethnographically, such phenomena are commonly associated with cult. The distribution of artefactual evidence for ASCs at ‘non-ritual’ Late Cypriote sites, however, will also be considered as its presence or absence does have a bearing upon the interpretation of the evidence from ritual sites. As distinctive ceramic vessels associated with psychoactive substances via organic residue analysis have the potential to provide the most direct and contextualised evidence for the induction and experience of ASCs, this material will be considered in most detail.

With regard to other classes of evidence considered relevant to the present contextual analysis, the neuro-physiological effects of the psychoactives associated with these Late Cypriote vessels (see Section 3.4) are also fundamentally linked to the contextual meaning of their use. As discussed above, neuro-physiological responses to the ingestion of a particular psychoactive are largely common to all humans, allowing for strong analogies to be made between such experiences recorded in the present and those suggested for Late Cypriote contexts.

Late Bronze Age textual references possibly suggesting the ritual use of ASCs from nearby regions (primarily from Anatolia, the Levant and Egypt) are also contextually relevant as they are a source of evidence that may actually provide an insight into the range of metaphysical beliefs and symbolic meanings associated with such phenomena. Although not from Late Cypriote contexts, this material does derive from contemporary contexts which belonged to an international East Mediterranean cultural ‘koine’ that demonstrated significant interregional interactions in terms of material

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<sup>509</sup> As BR juglets are found throughout the east Mediterranean.

culture, and presumably, some of the practices and beliefs that went with it.<sup>510</sup> Analogies based on this textual material can therefore be considered as relational analogies to some extent and are, therefore, viable forms of evidence to assist the interpretation of the meanings associated with ASCs from Late Cypriote contents. The degree to which analogous meaning can be inferred from such sources, however, needs to remain answerable to the physical evidence. On the other hand, analogies derived from the sources discussed in the previous chapter are not as methodologically plausible given the complete absence of cultural links between them and Late Cypriote society. This material is only considered in order to represent a variety of examples of the ritual use of ASCs.

With these theoretical and methodological considerations in mind, the interrogation of the evidence can proceed.

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<sup>510</sup> Eriksson (2008:306-307); Feldman (2002:2); Hitchcock (1999); Knapp (2008:264-280); Voskos & Knapp (2008); Smith (2003b). The links between Enkomi and Ugarit, in particular, appear to have been quite strong, Eriksson (2008:306-307); Schaeffer (1972:520-521); Steel (2004a:185).



### **Chapter 3. Evidence for Altered States of Consciousness**

This chapter discusses in detail the different forms of evidence for ASCs from Late Bronze Age Cyprus upon which the contextual analysis that comprises the core of this thesis is based. The focus of this discussion is to establish the degree to which certain categories of archaeological remains can provide convincing evidence for the LCA utilisation of ASCs, prior to considering the archaeological context in which it is found in Chapters 4 and 5. As the primary inadequacy of previous approaches to the study of ASCs in the East Mediterranean Bronze Age has been the lack of direct evidence for such mental phenomena, explicit evaluation of such evidence is fundamental to the development of the arguments presented in this thesis.

With this in mind, the evidence discussed in this chapter is considered in three distinct categories; textual evidence from Late Bronze Age, primarily from Ugarit; Cypriote iconographic evidence for ASCs; and Late Cypriote artefacts, primarily ceramic vessels, associated with the consumption of psychoactive substances. This distinction is made to emphasise the fact that the first two categories represent an indirect, and therefore, somewhat tentative, form of evidence for ASCs. The latter category, however, has the potential to provide direct and highly contextualised evidence for the induction and experience of such states and is, therefore, a more suitable form of evidence with which to develop a detailed contextual analysis. Conversely, however, textual and iconographic evidence can provide detailed information that might not be obtainable from other classes of archaeological evidence, even in cases where such evidence has been divorced from its archaeological context.

As discussed in Section 2.4, in cases where strong evidence for the consumption of a particular psychoactive is identified, it is also possible to infer certain experiential aspects of the ASCs they induce, based on the known neuro-physiological properties of the relevant substance. As such, this chapter includes a discussion of such properties of any psychoactive substances that artefactual evidence suggests were consumed on Cyprus during the LCA. This chapter concludes with a brief discussion of a largely unsuccessful program of organic residue analysis conducted as a component of this thesis in an attempt to extend and strengthen the current corpus of such evidence.

### **3.1 Textual Evidence**

As discussed previously, textual references can greatly assist the difficult process of interpreting past beliefs from the physical remnants of certain rituals, particularly in cases where there is also a significant amount of contextual archaeological data against which such evidence can be measured. Although the corpus of Late Cypriote texts currently includes only the limited administrative use of the undeciphered Cypro-Minoan script,<sup>511</sup> LBA texts from Ras Shamra-Ugarit may be able to shed light on certain aspects of Late Cypriote society. Located on the Levantine coast, only ca.100km east of the easternmost point of Cyprus, Ugarit appears to have had strong economic and cultural ties with the island, particularly Enkomi, at this time.<sup>512</sup> Although it is dangerous to assume that LBA Cyprus and Ugarit shared identical religious beliefs, such close ties do suggest that mutual influence was probably exerted on particular aspects of society, possibly including ritual and religious belief. Similar texts concerning LBA ritual practices also exist from other parts of the East Mediterranean, particularly Egypt, Anatolia (Hittite) and Mesopotamia and are briefly discussed here. However, lesser intensity of contacts with these regions does not warrant detailed discussion of such texts.

#### **3.1.1 The *Marzihu/Marzēah* at Ugarit**

The texts from Ras Shamra-Ugarit of most relevance to this thesis are those that concern the *mrzh* (*marzihu*, *marzēah* in Hebrew), a Western Semitic word commonly associated with a religious ritual involving the excessive consumption of alcohol.<sup>513</sup> *Marzēah* is specifically interpreted as a reference to an organization or gathering and occurs in literary and epigraphic texts spanning some 3,000 years.<sup>514</sup> It first occurs in two administrative texts from Ebla dating to the second half of the third Millennium BCE, and is also found in texts from Ugarit, Emar, Moab, Phoenicia, Elephantine, Nabatea, Palmyra; in the rabbinic literature; twice in biblical literature (Amos 6:7 and Jer 16:5) and

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<sup>511</sup> Keswani, (1993:75); Smith (2003:281-286; 2009:28).

<sup>512</sup> Eriksson (2008:306-307); Schaeffer (1972:520-521); Steel (2004a:185).

<sup>513</sup> Armstrong (1998:93); McLaughlin (2001:66); Pardee (1996: 278-279); Pope (1972:190-193); Wyatt (2002:404).

<sup>514</sup> McLaughlin (2001:1).

finally at Mabeda in texts dating to the sixth century CE.<sup>515</sup> In his review of these sources, McLaughlin identifies three elements consistently present in extra-biblical *marzēah* texts: the elite status of the participants, a religious connection and alcohol.<sup>516</sup> The term occurs in nine Ugaritic texts dating to ca.1200 BCE, four in Akkadian and five in alphabetic Ugaritic.<sup>517</sup>

Evidence suggesting that the *marzēah* was an elite activity or group includes the discovery of the relevant tablets at Ugarit within elite areas (royal and temple archives or the private collections of wealthy individuals) and texts linking members of the *marzēah* to the ownership of buildings and vineyards or transactions involving large sums of money.<sup>518</sup> In addition, the consistent use of terminology for members of the *marzēah* and their leader suggests that it was an organised and easily identifiable group of elites.<sup>519</sup> The common association of the *marzēah* with a patron deity suggests religious connections, although worship of these patrons does not seem to be the primary purpose of the *marzēahs* dedicated to them.<sup>520</sup> As the consumption of alcohol (normally wine) is the only activity regularly connected to the *marzēah*, it appears that getting drunk was a major purpose of this group/activity.<sup>521</sup> Indeed, on a pair of bilingual inscriptions from Palmyra, the *marzēah* leader is also referred to as a συμποσιαρχοζ (symposiarchos), suggesting parallels with the Ancient Greek symposium.<sup>522</sup>

Of the nine *marzēah* texts from Ugarit, seven are legal texts that provide details of contracts involving the leader or members of a *marzēah*.<sup>523</sup> While these documents do provide evidence for the elite status of *marzēah* members,<sup>524</sup> the association of such

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<sup>515</sup> McLaughlin (2001:1).

<sup>516</sup> McLaughlin (2001:66); cf. Pardee (1996: 278-279); Wyatt (2002:404). Although Pardee argues that there is no evidence of ‘cultic’ activity in connection with the *marzēah* this appears to be related to a narrow definition of ‘cult’ and the absence animal sacrifice in *marzēah* texts (1996:278; 2002:184, Note 2).

<sup>517</sup> McLaughlin (2001:11).

<sup>518</sup> McLaughlin (2001:67); Pope (1972:193); Wyatt (2002:404).

<sup>519</sup> McLaughlin (2001:68).

<sup>520</sup> McLaughlin (2001:69); Pardee (1996: 278-279); Wyatt (2002:404).

<sup>521</sup> McLaughlin (2001:69-70); Pardee (1996: 278-279); Wyatt (2002:404).

<sup>522</sup> McLaughlin (2001:70).

<sup>523</sup> McLaughlin (2001:11-24).

<sup>524</sup> For instance, RS 14.16 refers to “the men of the *marzēah*” who were involved with a large amount of money and RS 15.88 is a royal document confirming the King’s eternal ownership of a “house of the men of the *marzēah* ... granted ... to the men of the *marzēah*”, McLaughlin (2001:11-14)..

groups with a patron deity and the ownership of vineyards,<sup>525</sup> they provide little evidence for the activities engaged in by *marzēah* members.

The remaining two Ugaritic *marzēah* texts, however, derive from mythological texts, one of which (KTU1.114; RS 24.258) retains a significant amount of narrative text. McLaughlin provides the following translation for KTU1.114:<sup>526</sup>

El slaughtered game in his house,  
Beasts in the midst of his palace;  
He invited the gods to the carving:  
“Eat, O gods, and drink,  
Drink wine to satiety,  
New wine to drunkenness.”  
Yarih arched his back like a dog,  
Scavenged beneath the tables.  
Any god who recognised him  
prepared food for him,  
But whoever did not recognise him  
Struck him with a stick beneath the table.  
He approached Athtart and Anat.  
Athtart prepared a haunch for him,  
Anat a shoulder ...  
The porter of El’s house chided them,  
“Look, why have you prepared a haunch for a dog,  
For a cur you have prepared a shoulder?”  
He chided El, his father.  
El sat, he assembled his drinking feast;  
El sat in his *marzēah*.  
El drank wine to satiety,

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<sup>525</sup> RS 18.01 indicates that a vineyard dedicated to the Hurrian Ishtar is divided between the “men of the *marzēah* of (the village of) Aru,” and the “men of the *marzēah* of (the village of) Siyannu,” while CAT 4.642 also suggest the ownership of a vineyard by a *marzēah*, McLaughlin (2001:17,20).

<sup>526</sup> McLaughlin (2001:24-26).

New wine to drunkenness.  
El went to his house,  
He stumbled to his court.  
Thukamuna and Shunama supported him.  
The “creeper” approached him,  
The one having two horns and a tail.  
He floundered in his (own) faeces and urine,  
El collapsed like the dead,  
El was like those who descend to the underworld.  
Anat and Athtart went hunting.  
? holy Ba'al(?)

...

Reverse

...

?

Athtart and Anat...

And with them they brought back...

When they healed, look, he awoke.

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What one should put on his brow:

Hairs of a dog

And the top of a pqq-plant and its stem

Put together with virgin olive oil.

This text describes a feast or banquet, also described as a sacrifice, given by the father of the gods, El, to which he invites a number of other deities.<sup>527</sup> While Pardee reads the use of the term *marzēah* here to refer to a social institution or grouping,<sup>528</sup> McLaughlin argues that the use of the indirect object in this instance implies a reference to a place, probably a room within El's palace, set apart from his personal quarters, where

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<sup>527</sup> Armstrong (1998:94); McLaughlin (2001:27); Pope (1972:170); Wyatt (2002:404).

<sup>528</sup> Pardee (1996:279; 2002:184, Note 2).

the “drinking feast” takes place.<sup>529</sup> El’s main activity in his *marzēah* appears to be drinking until inebriated, at which he is so successful that he has to be helped from the room, subsequently soils himself and passes out.<sup>530</sup>

As the final three lines appear to provide a prescription for a hangover, the consumption of alcohol appears to be the central theme of the entire tablet.<sup>531</sup> McLaughlin argues, therefore, that in this case, “the *marzēah* is a place dedicated to the consumption of large amounts of alcohol. Secondly, since the text projects human activity into the divine realm, by virtue of his presidency in the divine *marzēah*, El probably functions as the patron of its human counterpart.”<sup>532</sup> According to Pope, the narrative describes human behaviour projected into the realm of the gods.<sup>533</sup> As such, an important component of the *marzēah* appears to be to induce an altered state of consciousness, drunkenness, an activity which is linked to the supernatural via the patronage of one or more deities. This point will be discussed further below.

The second mythological text from Ugarit often cited as a reference to the *marzēah* is part of the *Rapa’ūma* texts (KTU 1.20-1.22; RS 3.348, RS 2.[019], RS 2.[024]). The *Rapa’ūma* referred to here are generally interpreted as deceased and deified ancestors, possibly previous kings.<sup>534</sup> The Ugaritic *Rapa’ūma* texts describe El inviting the *rpum* (*Rapa’ūma*, *Rephaim* in Hebrew) to a communion ritual apparently to invoke their power on behalf of a new king.<sup>535</sup> The *Rapa’ūma* also appear in the Ugaritic Funerary Text (KTU 1.161; RS 34.126) in which they are invited to participate in a funerary rite for the king Niqmaddu III designed to allow the deceased king to join his ancestors.<sup>536</sup>

The section of the *Rapa’ūma* texts specifically cited as a reference to the *marzēah* (KTU 1.21; RS 2.[019])<sup>537</sup> describes El inviting the *Rapa’ūma* to his *marzēah*, apparently

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<sup>529</sup> McLaughlin (2001:29).

<sup>530</sup> McLaughlin (2001:30).

<sup>531</sup> McLaughlin (2001:77).

<sup>532</sup> McLaughlin (2001:31).

<sup>533</sup> Pope (1972:201).

<sup>534</sup> Lewis (1996:117-118); Pardee (1996:274); Wyatt (2002:314).

<sup>535</sup> Parker (1997:196-205); Wyatt (2002:314-323). Cf. Pitard (1992).

<sup>536</sup> Lewis (1996:118); Pardee (2002:85-89).

<sup>537</sup> McLaughlin (2001:32-33); Parker (1997:205, Note 1); Wyatt (2002:317, Note 22).

to be held in a ‘shrine’ within his house/palace.<sup>538</sup> In this case, however, the relevant tablet is quite fragmentary and the word *mrz’y* (a possible alternative spelling to *mrz’h*) is not present in full (*rz’y* only remain), leading Pardee to argue that the text should not actually be considered as a reference to the *marzēah*.<sup>539</sup> Pardee’s minimalist rejection of this possible alternative spelling of *marzēah* (he provides no alternative interpretation), however, seems unjustified, particularly as Ugartic references to the *marzēah* written in Akkadian preserve at least two different spellings of the word.<sup>540</sup> Both KTU 1.20 and KTU 1.22 contain references to drinking (“the wine of ecstasy/happiness/first pressing” in the case of the latter).<sup>541</sup> The context of the word within the text is, therefore, consistent with this reading.<sup>542</sup>

A similar connection between alcohol consumption and the *Rapa’ūma* is suggested in KTU 1.108 (RS 24.252), a prayer text which appears to be an invitation for various deities to join in a feast (particularly by drinking) at which Rāpi’u, the first deity named, requests Ba’al to transmit the powers of the *Rapa’ūma* to the living king.<sup>543</sup> Pardee suggests that this text may even reflect the presence of the various deities in their *marzēahs*,<sup>544</sup> a somewhat surprising interpretation considering his own arguments against a relationship between mortuary cult and the *marzēah* (see below).<sup>545</sup>

Given this apparent association of the *Rapa’ūma* with the *marzēah*, the Ugartic *marzēah* has also been equated with the Mesopotamian *kispum*,<sup>546</sup> a mortuary ritual involving the sharing of food and drink with deceased ancestors, apparently conducted first at a deceased’s interment and at regular intervals afterwards.<sup>547</sup> Both McLaughlin and Pardee, however, take exception to this association, rightly pointing out that there is

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<sup>538</sup> McLaughlin (2001:33). Here McLaughlin argues that both the occasion and the venue (the ‘shrine’) should be understood as El’s *marzēah*.

<sup>539</sup> A word ending in ‘*rz’y*’ is commonly read as *mrz’y* (*marzēah*). Pardee (1996:278), however, disputes this reading.

<sup>540</sup> McLaughlin (2001:11-18; Note 94).

<sup>541</sup> Wyatt (2002:323, Note 52).

<sup>542</sup> McLaughlin (2001:32).

<sup>543</sup> Pardee (1996:276; 2003:192-195). Cf. Wyatt (2002:395-398)

<sup>544</sup> Pardee (2002:193).

<sup>545</sup> Pardee (1996).

<sup>546</sup> Pope (1981:176).

<sup>547</sup> McLaughlin (2001:71); Pardee (1996: 275-276). For detailed discussion of the *kispu*, see Tsukimoto (1985).

currently no evidence for a direct connection between the *marzēah* and the *kispum*.<sup>548</sup> Pardee further argues that none of the textual evidence from Ugarit justifies a connection between the *marzēah* and mortuary cult,<sup>549</sup> while McLaughlin points out that KTU1.114 contains no direct references to the *Rapa'ūma*, ancestors, ancestor veneration or funerary ritual.<sup>550</sup> McLaughlin further argues that there are few indications in any of the extra-biblical *marzēah* texts that ritual activity such as feeding the dead was an essential element of the *marzēah*.<sup>551</sup> The fact that clear references to the *marzēah* in relation to mortuary ritual do exist,<sup>552</sup> however, suggests the possibility that such links are simply not articulated in other *marzēah* texts. Regardless of whether or not the Ugartic *marzēah* can be considered equivalent to the Mesopotamian *kispum*, the apparent invitation of the *Rapa'ūma* to participate in the *marzēah* (in KTU 1.21 and possibly KTU 1.108) certainly suggests links with ancestor veneration. Presumably both Pardee and McLaughlin are adopting rather strict and narrow definitions of mortuary or funerary cult that encompass only the treatment of human remains, rather than a broader definition of mortuary ritual that also includes a wider variety of practices, including ancestor veneration.

These links between the *marzēah* and ancestor veneration are considered in detail by Armstrong, who argues that the Ugaritic *marzēah* was an ancestor veneration ritual in which the participants were expected to achieve an alcohol induced ASC in order to interact with the underworld.<sup>553</sup> Armstrong argues that both textual and archaeological evidence from Ugarit point to the existence of a strong family ideology in which “the dead were understood to lead some sort of existence in an afterlife while remaining members of the corporate family.”<sup>554</sup> While the ancestors could provide aid to the living, their spirits required sustenance in return in order to avoid eternal torment.<sup>555</sup> Such beliefs are attested to in the Tale of Aqhat (KTU 1.17-1.19; RS 2.[004], 3.340 & 3.366), another mythic narrative from Ugaritic tablets, which describes the cultic obligations of Daniel,

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<sup>548</sup> McLaughlin (2001:71); Pardee (1996: 276).

<sup>549</sup> Pardee (1996).

<sup>550</sup> McLaughlin (2001:74-77).

<sup>551</sup> McLaughlin (2001:77).

<sup>552</sup> McLaughlin (2001:79).

<sup>553</sup> Armstrong (1998:111). See also Pope (1972), who argues that it was a funerary banquet.

<sup>554</sup> Armstrong (1998:86).

<sup>555</sup> Armstrong (1998:86).

who is entreating the gods for a son.<sup>556</sup> These duties include erecting stelae for ancestral spirits and providing funerary offerings to the gods, activities designed to “free his [father’s] spirit from the earth.”<sup>557</sup> Armstrong also cites the frequent discovery of ‘libation tubes’ and ‘offering basins’ built into or above Ugaritic tombs as archaeological evidence further suggesting this concept of ancestor veneration at Ugarit.<sup>558</sup> A review of this evidence by Pitard, however, suggests that these can no longer be considered as installations designed to provide liquid offerings for the deceased.<sup>559</sup>

In relation to KTU1.114, Armstrong argues that as the ‘divine banquet’ is described as both a sacrificial occasion and a *marzēah*, the use of both terms in the context of a single festal meal suggests that intoxication is the element that distinguishes this banquet from other kinds of sacrificial meals.<sup>560</sup> Furthermore, Armstrong also argues that El’s ‘divine banquet’ can be understood as a sacrifice given to El’s ancestral spirits (*Rapa’ūma*). As the gods themselves were present, the recipients of the sacrifice made by Ugarit’s gods must have been deities (other members of the family) who were no longer amongst the living.

Given the suggested association between the Ugaritic *marzēah* and ancestor veneration ritual, the description (in KTU1.114) of El collapsing “like those who descend into the earth” has been suggested as a reference to El accessing the underworld via his drunkenness.<sup>561</sup> Armstrong, therefore, argues that the *marzēah* should be interpreted as the ritual use of alcohol in order to bridge the gulf between the living and the dead.<sup>562</sup> El’s incontinence, in this case, may indicate a socially recognised level of intoxication consistent with achieving an ASC.<sup>563</sup>

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<sup>556</sup> Armstrong (1998:90); Pardee (1996:279). Cf. Wyatt (2002:246-312).

<sup>557</sup> Armstrong (1998:90).

<sup>558</sup> Armstrong (1998:92-93). Cf. Schaeffer (1939:49-56).

<sup>559</sup> Pitard (1994).

<sup>560</sup> Armstrong (1998:94, 99).

<sup>561</sup> Armstrong (1998:104,110); Wyatt (2002:404; 412, Note 43).

<sup>562</sup> Armstrong (1998:87).

<sup>563</sup> Armstrong (1998:101).

### 3.1.2 Ritual Alcohol Consumption in Egyptian and Hittite Texts

Roughly contemporary texts from other parts of the East Mediterranean suggest similar symbolic associations between alcohol consumption and the supernatural. These primarily consist of Egyptian and Hittite references to drunkenness and ritual alcohol consumption.

In Hittite ritual, for instance, the consumption of alcoholic beverages (or perhaps even stronger psychoactives) has been suggested to have been a component of the ‘Drinking the God’ ritual.<sup>564</sup> Hittite texts describe this ritual as a component of festival feasts in which the king consumes a beverage that allows him to establish a mystical union with the god who is a guest at the feast.<sup>565</sup> Schoop argues that this ritual is likely to be represented by banquet scene iconography (see below, Section 3.2.2) such as that depicted on the İnandiktepe vase (**Fig.3.2**).<sup>566</sup> This close association between alcohol consumption and religious ritual may suggest that alcohol induced ASCs were also used by the Hittites to contact the supernatural.

In ancient Egypt, alcohol also seems to have had a prominent role in many religious rituals, with extreme drunkenness apparently the goal of certain ceremonies.<sup>567</sup> During the ‘Festival of Intoxication’ for instance, participants re-enact the mythical drunkenness of Sekhmet/Hathor, which saved humanity from her wrath.<sup>568</sup> An inscription on a Ptolemaic ostrakon, which describes a late version of this ritual, suggests the belief that this drunkenness allowed participants to interact with the goddess: “When they are drunk, they will see the *mr.t*-goddess.”<sup>569</sup> Wine in particular was extensively used in Egyptian religious rituals and appears to have been associated with divine qualities.<sup>570</sup> A symbolic link between drunkenness and the supernatural may further be reflected in the Ramesside papyrus Anastasi IV, which contains an admonition that excess beer can cause

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<sup>564</sup> Schoop (2011:Note 16).

<sup>565</sup> Bryce (2002:190); Haas (1994:669-673).

<sup>566</sup> Schoop (2011:Note 14). See (Özgüç 1988: Fig..64).

<sup>567</sup> Brunner (1986).

<sup>568</sup> Depauw & Smith (2004); Darnell (1995). This festival is recorded in numerous inscriptions, frescoes and wall carvings from the Middle Kingdom through to the Ptolemaic period.

<sup>569</sup> Depauw & Smith (2004:70, 85).

<sup>570</sup> Poo (1995).

an aspect of the soul (the *ba*) to become separated from the body: “Beer makes him cease being a man. It causes your soul [*ba*] to wander...”<sup>571</sup>

An Egyptian association between drunkenness and mortuary ritual is also reflected in the activities conducted as part of the Beautiful Festival of the Valley.<sup>572</sup> This festival was particularly popular during the 18<sup>th</sup> Dynasty (ca.1550 - ca.1292 BCE) and centres on the visit of the sacred icon of Amun-Ra to the mortuary temples of New Kingdom rulers on the other side of the west bank of the Nile, following by a feasts where the living could be reunited with their deceased relatives.<sup>573</sup> As large quantities of alcohol appear to have been consumed during these feasts, Bryan argues that such Egyptian mortuary banquets used ritual drunkenness in order to commune with deceased family and ancestors.<sup>574</sup>

This variety of textual sources suggests that a symbolic association between drunkenness and the supernatural may have been a component of religious belief systems in a variety of East Mediterranean cultures during the LBA. The existence of beliefs associating extreme drunkenness with the underworld suggested by Ugaritic and Egyptian texts may indeed partially explain the common occurrence of evidence for alcohol consumption in Bronze Age tombs throughout the East Mediterranean. Such beliefs may have provided an explanation for the experiential characteristics of such ASCs (for example, incontinence, reduction of motor skills and unconsciousness) that made sense in terms of prevailing worldviews or belief systems. This possible interpretation, therefore, seems worthy of serious consideration when analysing the pottery assemblages found in Late Cypriote tombs.

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<sup>571</sup> Papyrus Anastasi IV; 11.9-12.3, translated in Caminos (1954:182). Cf Manniche (1997:32).

<sup>572</sup> Bryan (n.d.); Cf. Boyle (2005); Manniche (1997). For a detailed account, see Schott (1953).

<sup>573</sup> Manniche (1997); Schott (1953); Taylor (2001:42).

<sup>574</sup> Bryan (n.d.); Cf. Boyle (2005). Cf, Manniche (1997:30-31), who suggests a similar role for the narcotic properties of the Blue Water Lily, which is often depicted in 18<sup>th</sup> Dynasty banquet scenes.

### **3.2 Iconographic Evidence**

As discussed in Chapter 1, iconographic representations are the primary form of evidence presented to date to suggest the possible use of ASCs throughout the East Mediterranean Bronze Age. Notable examples include: interpretations of the poses depicted by Minoan Palace Period figurines and seals as poses used to ritually induce ASCs;<sup>575</sup> Stein's interpretation of the iconography of certain Near Eastern cylinder seals as representations of shamanic-style practices utilising ASCs, perhaps induced by the consumption of cannabis;<sup>576</sup> and Emboden's similar interpretation based on representations of the blue water lily and mandrake fruit in Dynastic Egyptian wall paintings.<sup>577</sup> In these examples ASCs are considered to have been induced in a ritual context to enable practitioners to interact with the supernatural. Unfortunately, although these studies provide interpretations more anthropologically informed than most archaeological research in the East Mediterranean, their reliance solely upon iconographic data severely limits the confidence with which they can be accepted.

As mentioned above, however, iconography can provide detailed information that might not be obtainable from other classes of archaeological evidence. Indeed, depictions of ritual activity can be extremely useful in elucidating modes of behaviour and performance which, due to their 'irrational' or non-practical nature, may otherwise be extremely difficult to identify or understand without such imagery. Iconography that depicts artefacts considered to be primary evidence for ASCs could also be particularly useful in developing an understanding of the way in which such artefacts, and the ASCs they are associated with, were used. As with all iconographic and textual sources, however, it is important to recognise that such images are not objective depictions of past reality, but were produced and circulated by agents acting out specific agendas.

The iconographic evidence from LBA Cyprus relevant to a study of ASCs appears to consist entirely of images suggesting the consumption of certain psychoactive substances. These images belong to a category of iconographic representations common across the East Mediterranean Bronze Age that apparently depict either the consumption

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<sup>575</sup> McGowan (2006); Morris (2001); Morris & Peatfield (2002; 2004); Peatfield (2001); Tyree (2001).

<sup>576</sup> Stein (2006; 2009).

<sup>577</sup> Emboden (1978; 1981; 1989).

of alcoholic beverages, often described as ‘banquet scenes’, or the depiction of opium poppies, occasionally suggestive of the exploitation of their psychoactive latex.

### 3.2.1 Alcohol Consumption and ‘Banquet Scenes’

Images interpreted as the depiction of alcohol consumption, often referred to as ‘banquet scenes’, include Mesopotamian, Syrian and Anatolian images of individuals using straws to consume a liquid, probably beer, from a large pot (**Fig.3.1**),<sup>578</sup> or images of seated individuals raising a drinking vessel, usually a bowl, in front of them (**Figs.3.2-3.4**).<sup>579</sup> The latter type of image is also found in the Aegean. These images are commonly found on cylinder seals, frescoes (in the Aegean), decorative relief panels and votive plaques. In all cases they suggest an elite, and possibly even divine, status for those consuming the alcohol, particularly in the case of the seated individuals, who are often attended by servants. In a review of these depictions, Pinnock suggests that the alcohol consumption should be associated with a range of different rituals, including: the ‘Sacred Marriage’ ritual between the king and a goddess; certain civilian feasts at which the king interacts with his people, such as victory celebrations; and rituals of the Cult of the Deceased Kings, probably the *kispum* or *marzēah*.<sup>580</sup> Significantly, this suggests that the consumption of alcohol depicted in such scenes was commonly associated with ritualised interaction with the supernatural. A final point worth noting with regard to these scenes is the possibility that the consumptive practices depicted were exclusive to the elite/royalty during these ritual occasions. It should be recognised, however, that the social context in which these images were produced and displayed presumably restricted the subject matter to the depiction of such spheres of activity. As such, it is certainly possible that these activities were also emulated in subordinate levels of society.

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<sup>578</sup> Joffe (1998:304-305, Fig.3.5); Katz & Voigt (1986:Figs.3. 7, 10); Teissier (1984:10-11, 63-64, Cat. Nos. 63, 88, 89, 209, 352-360); Weisgerber (2005). Straws with filtered ends were probably used to avoid the husks that floated on the surface of unfiltered beer.

<sup>579</sup> Barnett (1985: Pl.I,1); Evans (1935:379-396, Pl.XXXI); Loud (1939:Pl.4); Murray (2000:Fig.3. 23.19); Ozguc (1988 Fig.64); Teissier (1984: 10-11, 64, Cat.Nos.63, 203-208, 350, 361-364, 366); Wright (2004:35-49, Figs.3. 15-17); Yasur-Landau (2008:Pl.LXVII). While it is also possible that images depicting a figure raising a cup/goblet before their face represent libation instead of drinking, examples where the vessel is raised to the mouth and the prevalence of ancient Near Eastern textual references attesting to the importance of ritualised alcohol consumption argue against this interpretation.

<sup>580</sup> Pinnock (1994). For the later possibility, see also Barnett (1985); Carter (1995:300-305); Courtois et.al (1986:70).

Such likely depictions of alcohol consumption and ‘banquet scenes’ also exist within the Late Cypriote iconographic repertoire and include scenes depicted on seals, pictorial pottery and bronze objects. A list of these images<sup>581</sup> is presented in **Table 3.1**, below, with a more detailed list provided in **Table EA3.1** in the electronic appendices, on the attached CD.<sup>582</sup>

At present, there only appears to be a single Late Cypriote example of a banquet scene involving the consumption of a beverage from a pot via a straw, occurring on a faience Common Style cylinder seal from Swedish Tomb 2 at Enkomi (**Table 3.1, Image b, Fig.3.6**). In this case, the figure drinking is seated and approached by a procession of four others, possibly servants or devotees, suggesting the drinker is an individual of high status and, as suggested for Near Eastern banqueting scenes, probably during a ritual feast. If this image does indeed depict the consumption of beer,<sup>583</sup> then it would constitute the only current evidence (in the absence of textual or organic residue analysis evidence, see Section 3.3.2) for the consumption of beer during the LCA, a period when wine seems to have been the alcoholic beverage of choice, at least for elite segments of society.<sup>584</sup> Although it is likely that beer was consumed during this period, its lesser importance in comparison to wine suggests that this depiction may represent the adoption of a Near Eastern motif rather than the reality of ritual and/or high status consumptive practices. The LCI date for the seal places it in the period shortly after the Cypriote adoption of the cylinder seal from the Near East,<sup>585</sup> perhaps explaining the use of a motif that does not necessarily reflect Late Cypriote practices. As the seal is Common Style, however, it does appear to have been manufactured in Cyprus.

Late Cypriote ‘banquet scenes’ depicting seated individuals raising a cup or goblet before their face are more frequent, occurring on a cylinder seal from Akhera-

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<sup>581</sup> Designed to be exhaustive lists of the relevant LCA iconography, currently available from published sources. There may, however, be further examples that are either unpublished or have escaped the author’s attention.

<sup>582</sup> Tables detailing much of the primary data used in this thesis are presented in electronic format on the attached CD due to the strict word count restrictions imposed by the University of Nottingham.

<sup>583</sup> Katz & Voigt (1986:28-31); Weisgerber (2005).

<sup>584</sup> Steel (1998; 2002; 2004b).

<sup>585</sup> Porada (1948:178); Webb (2002:113)

**Table 3.1 - LCA Iconographic Representations of Alcohol Consumption and Banquet Scenes.**

	Site	Object Type	Context	Date	Image Description	References
	<b>Seal Images</b>					
<b>a</b>	Akhera-Chiflik Paradisi	Cylinder seal, Common Style	Tomb 3	LCIIC	Banquet scene. 2 Seated figures raise cups/goblets. ( <b>Fig.3.5</b> )	Karageorghis (1965: 71-138); Porada (1986:292-294, Pl.XVIII:5); Webb (1999:194, Fig.3.79.5).
<b>b</b>	Enkomi-Ayios <i>Iakovos</i>	Faience cylinder seal, Common Style (19mm high)	Tomb 2 of SCE excavations	LCI	Banquet scene. Seated figure drinking from a pot via a straw/drinking siphon. ( <b>Fig.3.6</b> )	Gjerstad et.al. (1934:474, no.67, pl.CL,11, Pl LXXVI); Dikaios (1946:72).
<b>c</b>	Enkomi-Ayios <i>Iakovos</i>	Hematite cylinder seal, Elaborate Style (25mm high, 10mm diam.	Tomb 93 of BM excavations.	LC	Banquet scene. Seated figure possibly drinking. ( <b>Fig.3.7</b> )	Kenna (1967b: Fig.3.4, 1972: Fig.3.79:2).
<b>d</b>	Enkomi-Ayios <i>Iakovos</i>	Broken cylinder seal, Elaborate Style (16mm high)	Surface find from Enkomi	LCII	Procession (?) scene with genius presenting a beak-spouted jug. ( <b>Fig.3.8</b> ).	Karageorghis (2002:50-51, Fig.101).
<b>e</b>	Enkomi-Ayios <i>Iakovos</i>	Haematite cylinder seal, Derivative Style (35mm high).	Enkomi French Mission Trial Trench	LCII	Master of Animals scene with genius presenting a jug (?)( <b>Fig.3.9</b> ).	Karageorghis (2002:50-51, Fig.3.99).
<b>f</b>	Idalion - <i>Ambelleri</i>	Hematite cylinder seal, Elaborate Style (15mm high, 7mm diam.).	Looted tomb	LC	Procession scene with one figure holding a jug and a bowl/ladle above a conical rhyton and amphoroid crater. Other two figures hold goblets aloft ( <b>Fig.3.10</b> ).	Karageorghis (1959:111-118; 2002: Fig.100); Webb (1999:194, Fig.3.79.1).
<b>g</b>	Unprovenanced	Cylinder seal, Common Style. 25mm high.	Unknown	LC	Banquet scene. 2 seated figures raise cups/goblets ( <b>Fig.3.11</b> ).	Porada (1986:293-294, Pl XVIII:6); Webb (1999:194, Fig.3.79.3).
<b>h</b>	Unprovenanced	Cylinder seal, Common Style.	Unknown	LC	Banquet scene. Seated figure raises a cup/goblet ( <b>Fig.3.12</b> ).	Porada (1986:293-294, Pl XIX:1); Webb (1999:194, Fig.3.79.6).

	Site	Object Type	Context	Date	Image Description	References
i	Unprovenanced	Cylinder seal, Common Style.	Unknown	LC	Possible banquet scene. Seated figure raises a possible goblet ( <b>Fig.3.13</b> ).	Porada (1986:293-294, Pl XIX:2); Webb (1999:194, Fig.3.79.4).
j	Unprovenanced	Haematite cylinder seal, Elaborate Style (27mm high).	Unknown	LCII ?	Two genii face each other presenting jugs. A winged disc appears immediately above the jugs ( <b>Fig.3.14</b> ).	Boardman (2001:64-65, Fig.3.206); Karageorghis (2002:51, Fig.102); Webb (1999:198, Fig 72.2).
k	Unprovenanced	Haematite cylinder seal Elaborate style (30mm high, 11mm diam.).	Private collection of Jonathan Rosen, New York	LCII ?	Two genii bearing jugs (?) flank a goddess (?) with a horned headdress. Two eagles appear beside and below them. Image is badly worn. ( <b>Fig.3.15</b> ).	Kenna (1967c); Porada (1986:293-294, Pl XIX:3).
	<b>Pottery</b>					
l	Enkomi-Ayios <i>Iakovos</i>	Late Helladic IIIA1 pictorial crater	British Tomb 67 'Sunshade' crater	LCIIA	Chariot scene with 5 vases floating in the field (beak-spouted jug, goblet, ladle, conical rhyton and amphoroid crater) ( <b>Fig.3.16</b> ).	Murray et.al. (1900:37, Fig.3.67); Vermeule & Karageorghis (1982:21-22, III.21).
m	Enkomi-Ayios <i>Iakovos</i>	Late Helladic IIIB pictorial crater	Unknown	LCIIC?	Two warriors stand facing each other over a high table and raise kylikes aloft ( <b>Fig.3.17</b> ).	Buccholz (1999:406-408, Fig.3.72d).
n	Unprovenanced	PWP pyxis	Unknown	LCIII	A human figure holding a carinated goblet ( <b>Fig.3.18</b> ).	Iacovou (1988:23, 71, Figs 34-36).
o	Kourion - <i>Kaloriziki</i>	Bichrome III Amphora	Tomb 11	CGI-III	A human figure holding a jug/juglet directly over a very large amphora/crater ( <b>Fig.3.19</b> ).	Karageorghis & Des Gagniers (1976:97-98).
p	Unprovenanced, probably from near Platani	Bichrome III 'Hubbard' Amphora	Unknown	CGI-III	Banquet scene. Seated female figure drinking from a jug via a straw/drinking siphon. Female pours from a juglet into this jug. Six identical juglets depicted nearby ( <b>Fig.3.20</b> ).	Dikaios (1936:56-72); Karageorghis & Des Gagniers (1976:7-9).

	Site	Object Type	Context	Date	Image Description	References
	<b>Figurines</b>					
<b>q</b>	Alambra	Bird-head figurine in BR ware. 18cm high.	Tomb 12?	LC	A bird-head figurine holding a footed bowl/goblet ( <b>Fig.3.21</b> ).	Karageorghis (1993:8, Pl.V:6); Merrillees (1988:43-44).
<b>r</b>	Enkomi-Ayios <i>Iakovos</i>	Bronze Figurine. 15cm high, 7cm wide.	Adjacent to Batiment 18 Q5W	LCIIIA Pit is LCIIIB/ CGI	Seated, robed male holding a goblet before him ( <b>Fig.3.22</b> ).	Schaeffer (1952:371-377, pls.LXXIV-LXXV); Catling (1964:No.253-255, Pl.45d); Courtois et.al (1986:69-72, Pl.XVIII:1, 2); Webb (1999:194, 229-231, Fig.3.79).
<b>s</b>	Enkomi-Ayios <i>Iakovos</i>	Bronze Figurine	Sol II? in Q.6W. Point Top. 275	LCIIIA/ B	Seated, robed male holding a bowl before him ( <b>Fig.3.23</b> ).	Schaeffer (1952:371-377, pls.LXXIV-LXXV); Catling (1964:No.253-255, Pl.45d); Courtois et.al (1986:69-72, Pl.XVIII:3); Webb (1999:194, 229-231, Fig.3.79).
	<b>Other</b>					
<b>t</b>	Kition	Rim and handles of a large bronze amphora. 39.7cm diam.	Probably looted from a tomb by Cesnola	LCIII?	Handles bear identical relief ornaments depicting three pairs of genii holding beak-spouted jugs ( <b>Fig.3.24</b> ).	Catling (1964:No.157-158, Pl.23b,c).
<b>u</b>	Kourion-Kaloriziki	Rim and handles of a large bronze amphora (40cm diam.)	Tomb 40, salvaged from previously looted tomb.	GC? (Once dated LCIII)	Handles bear identical relief ornaments depicting three pairs of genii holding beak-spouted jugs. Rim is decorated by 70 identical beak-spouted jugs ( <b>Fig.3.25</b> ).	Catling (1964:No.158-159, Pl.24).
<b>v</b>	Unprovenanced	Four-sided wheeled stand (31cm high, 15cm wide/diam.).	Unknown	LCIIIA	Panel depicts a figure carrying a beak-spouted jug in one hand and presenting a goblet in the other. Approaches a seated figure ( <b>Fig.3.26</b> ).	Catling (1964:No.36, 208-210, Pl.35); Karageorghis (2002:Fig.204).

*Chiflik Paradisi*, Tomb 3 (**Table 3.1, Image a, Fig.3.5**) and three unprovenanced cylinder seals (**Table 3.1, Images g-i, Figs.3.11-13**). These images are all executed in Common Style and depict either one (**Images h & i**) or two (**Images a & g**) robed individuals sitting before a table with the cup/goblet in one hand and a weapon of some sort in the other (usually an axe, but a bow and arrow and a mace (?) also occur).<sup>586</sup> In three of these four ‘banquet scenes’ a lion also appears, on the table before the figures (**Image g**), in a cage in front of the figure (**Image h**) or under/decorating the seat upon which the figure sits (**Image i**). The example lacking a lion (**Image a**) may depict a small animal, possibly a bird, on the table between the seated figures.

Interestingly, drinking figures brandishing weapons appears to be a motif that is largely restricted to these Cypriote examples. In considering these four seals, Porada argues that the repeated association between the weapons and the lions suggest that the figures were meant to represent lion killers, with the lions symbolic of elements controlled, combated or defeated.<sup>587</sup> The presence of cups/goblets in the hands of these figures, however, also suggests that the images symbolise a feast or celebration, perhaps commemorating such military events. Furthermore, the presence of possible offering stands (**Images g & i**) and other, smaller animals, particularly birds (**Images a, h & i**), may also indicate a ritual context for this drinking event, possibly including the sacrifice of these smaller animals. As such, it seems that these images depict the ritualised consumption of alcohol (probably wine), perhaps following or preceding a battle. Apart from the robes they appear to wear, however, there is little to indicate the identity of the seated figures or whether their activities have any association with the supernatural.

Another image which may depict a ‘banquet’ or related scene is found on the Elaborate Style cylinder seal from British Tomb 93 at Enkomi (**Table 3.1, Image c, Fig.3.7**). Here a seated figure appears to raise an unidentifiable object to his or her lips while confronted by a standing winged figure and an attendant (?) bearing a sistrum. Although the abstract nature of the object that is raised to the seated figure’s

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<sup>586</sup> Note, however, that the identification of a cup/goblet in the hand of the figure in **Image i** is uncertain. Although Porada interprets this object as a two-pronged object, she discusses the seal together with the other three ‘banquet scenes’ in which the figures hold cups/goblets, Porada (1986:292-294).

<sup>587</sup> Porada (1986:294).

lips precludes the possible identification of the substance consumed, the combination of apparent consumption and a supernatural winged figure suggests the possibility of ritualised psychoactive consumption to contact the supernatural. If so, the rhythmic sounds produced by the sistrum may also have had a role in inducing such ASC. While it is possible that the object raised to the figure's lips is also an instrument, the similarity with Late Cypriote 'banquet scenes' suggests otherwise.

The banquet scene image of a seated, robed figure holding a cup is also represented by a pair of bronze figurines found in LCIII deposits at Enkomi (**Table 3.1, Images r & s, Figs.3.22-23**). In both cases the figure is clearly male, one with coiffured hair/headdress, a goblet in the right hand and a now-missing object apparently in the left (**Image r**) and the second bald headed and holding only a hemispherical bowl (**Image s**). The former figure also appears to have sat originally on a bronze throne that was found in a slightly later context only 3.5m away, upon which sat another male figure in bronze, this time empty-handed.<sup>588</sup>

The motif depicted in these two figurines presents a strong parallel to Near Eastern and specifically LBA Levantine 'banquet scenes' in which a seated and robed male holds a bowl in the right hand.<sup>589</sup> Schaeffer in particular emphasises Ugaritic influences and even suggests that both figurines represent El presiding over his *marzēah*.<sup>590</sup> Catling, however, suggests that the figurine holding the goblet (**Image r**) recalls Aegean 'banquet scenes' such as the image on the Tiryns gold signet ring and the Knossos Camp-Stool fresco.<sup>591</sup> Others have also pointed out that the youthful appearance of the figures and absence of clear divine attributes argues against them representing El, 'father of the gods'.<sup>592</sup> As Webb rightly points out, it is still unclear exactly who these figurines were meant to represent,<sup>593</sup> although their rendering in bronze does suggest they represented figures of importance. Furthermore, given the close parallels to certain Levantine, particularly Ugaritic, images, an association with ritualised alcohol consumption occasions such as the *marzēah* remains a distinct possibility.

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<sup>588</sup> Schaeffer (1952:371-377, pls.LXXIV-LXXV) cited in Webb (1999:194). See also Catling (1964:No.253-254, Pl.45c-e); Courtois et.al (1986:69-72, Pl.XVIII:1, 2).

<sup>589</sup> Barnett (1985:4); Negbi (1976:54, Fig.3.57, 62); Yasur-Landau (2008:Pl.LXVIII:a-c).

<sup>590</sup> Schaeffer (1971:516-525). See also Courtois et.al (1986:70).

<sup>591</sup> Catling (1964:255). Cf. Evans (1935:Pl.XXXI); Niemeier (ed.) (1981: No.179).

<sup>592</sup> Courtois et.al (1986:70); Also Webb (1999:231).

<sup>593</sup> Webb (1999:231).

Four other Late Cypriote images of figures holding drinking vessels may also relate to such ‘banquet scenes’. The most detailed of these is found on one panel of the unprovenanced four-sided bronze stand currently in the collection of the Duke of Buccleuch (**Table 3.1, Image v, Fig.3.26**). This image depicts two individuals approaching a seated person that is holding a stringed instrument. The first attendant carries a similar instrument and the second carries a beak-spouted jug in one hand and raises a goblet in front of his face in the other hand. This scene, therefore, appears to show the seated figure in the process of being served the goblet of alcohol that is represented in other ‘banquet scenes.’

The other three images possibly related to the banquet scene include: a BR ‘bird-head’ figurine from Alambra (Tomb 12?) that holds a footed bowl/goblet in both hands against its left breast (**Table 3.1, Image q, Fig.3.21**); an LHIII B (LCIIC) pictorial crater from Enkomi depicting a pair of armoured figures facing each other across a high table and raising kylikes aloft (**Table 3.1, Image m, Fig.3.17**); and an unprovenanced LCIII PWP pyxis that bears a scene in which a human figure with a figure-of-eight shield holds a carinated goblet in its free hand (**Table 3.1, Image n, Fig.3.18**). The limited subject matter of these last three images, however, makes it difficult to assess the degree to which these relate to other Late Cypriote ‘banquet scenes’, although the images on the latter two examples certainly suggest wine consumption.

Another Late Cypriote motif that may relate to the ritualized consumption of alcohol is that of the jug bearing genius, a supernatural lion-headed hybrid creature common in Aegean iconography. This motif occurs on four cylinder seals<sup>594</sup> (two from Enkomi and two unprovenanced, **Table 3.1, Images d, e, j & k, Figs.3.8, 9, 14 & 15**) and on the handles of two bronze amphoras (LCIII or CG), from Kition (probably looted from tomb) and Kourion-Kaloriziki, Tomb 40, (**Table 3.1, Images t & u, Figs.3.24 & 25**). The first of the two Enkomi seals (a surface find, **Image d**), although fragmentary, depicts what appears to be a ritual scene including two human figures, possibly a goddess and god<sup>595</sup>, a bull-headed figure holding the leg of an animal and a genius holding a beak-spouted jug with a fluted body, possibly Bucchero

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<sup>594</sup> A very worn unprovenanced Elaborate Style cylinder seal formerly in the Coleville Collection and now in the Collection of Jonathen Rosen, New York may constitute a fifth possible example, Kenna (1967c); Porada (1986:Pl.XIX3). The damage to this seal, however, heavily obscures the objects borne by the pair of genii depicted upon this example.

<sup>595</sup> Suggested by Karageorghis (2002:51). This interpretation is reinforced by the horned headdress worn by one of the figures.

ware, before its face. The second Enkomi seal, from a French excavation trial trench, (**Image e**), appears to be a ‘Master of Animals’ scene in which the ‘Master’ is flanked by a pair of lions and attended by a genius presenting what appears to be a schematised jug. The first unprovenanced seal (**Image j**) appears to depict another ritual scene with a bull-headed figure and a female holding a lion between them and a pair of genii standing on the backs of lions facing each other and raising jugs in front of their faces, with a winged disc immediately above. The second unprovenanced seal (**Image k**) also appears to depict a pair of jug-bearing genii, this time flanking a possible goddess with a horned headdress. The image of a pair of jug-bearing genii facing each other is repeated on the two bronze amphoras (**Images t & u**). In both cases the vessels are beak-spouted jugs and in the case of the example from Kourion, the rim of the amphora was decorated with this vessel repeated 70 times.

This motif of the jug-bearing genius is one which appears to derive from Minoan iconography. This Minoan genius in turn appears to derive from the image of the Egyptian hippopotamus goddess Tawaret (god of fertility and childbirth), adapted into a hybrid bipedal creature with a lion’s head, long dorsal appendage and a cinched waist.<sup>596</sup> Depictions of the Minoan genius carrying or occasionally pouring from a beak-spouted jug (ewer) are commonly interpreted as an act of libation using water, possibly as a symbol of life, fertility and creation.<sup>597</sup> The image depicted on the Tiryns ring,<sup>598</sup> which depicts four genii bearing jugs towards a seated individual raising aloft a goblet (**Fig.3.4**), however, also suggests that the jugs they were depicted with may occasionally have been meant to contain alcohol for consumption, rather than water for libation.<sup>599</sup> Another scene depicted on a serpentine triton shell from Mallia,<sup>600</sup> in which one genius pours liquid from a beaked ewer into the hands of a second genius to drink (**Fig.3.27**),<sup>601</sup> further suggests that the liquid contained within these genius-borne vessels may have been for consumption, and not only libation.

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<sup>596</sup> Weingarten (1991). Cf. Chryssoulaki (115); Hitchcock (2009:97-98).

<sup>597</sup> Chryssoulaki (116); Hitchcock (2009:99-100); Rehak (1995a). Evans (PMK II 430-467) suggests this may have been a rain bringing ceremony. There are also Mycenaean images of genii possibly pouring libations from jugs over pillars, Warren (1990:193, Fig.3.1). Here, however the genii are not actually pouring any liquid over the pillars, merely holding jugs above them.

<sup>598</sup> Niemeier (ed.) (1981: No.179).

<sup>599</sup> Contra Hitchcock (2009:101) who suggests that the genii are libating the small trees depicted.

<sup>600</sup> Baurain & Darque (1983).

<sup>601</sup> Contra Rehak (1995a:217) who suggests that this scene depicts ablution or purification.

Karageorghis proposes a similar association with libation for the jug-bearing genii on the fragmentary Enkomi seal (**Image d**).<sup>602</sup> Webb also suggests that the jugs borne on this seal and by the pair of genii on the unprovenanced seal (**Image j**) may have been the Cypriote equivalent of the Aegean beaked ewer, tentatively identified as BR squat wide-mouthed jugs or spindle bottles.<sup>603</sup> The fluted body of the jug from the former seal, however, is suggestive of Bucchero ware, although it also appears to have a beaked spout, which is unknown on vessels of this ware. Such Cypriote vessels were unlikely to have been used merely for water, but instead have been suggested to contain scented oils, honey or perhaps even opium, at least in the case of the BR and Bucchero vessels (see below). In addition, the use of the jug-bearing genius to decorate a pair of bronze amphorae, and the beak-spouted jug alone on the rim of the Kourion example, can also be considered an association with alcohol consumption, perhaps wine. With regard to the possibility that the jugs portrayed in these Cypriote images contained either alcohol or opium, it is possible that the winged disc depicted immediately above the jugs/genii on the unprovenanced seal (**Image j**) may have represented a ritual ASC such as ecstatic flight, induced by the consumption of such substances. As discussed above, a similar interpretation has already been made by Stein for the Near Eastern winged disc motif.<sup>604</sup> Without more definitive evidence (particularly organic residues) from these pottery types, however, such a hypothesis must be considered tentative. Regardless, the iconographic context of Late Cypriote jug-bearing genii certainly seems to be a ritual one and the creatures themselves are also clearly linked to the supernatural world.

Another category of Late Cypriote images that may relate to the consumption of alcohol consists of those in which a particular set of pottery vessels is depicted. On both an Elaborate Style cylinder seal from Idalion – *Ambelleri* (**Table 3.1, Image f, Fig.3.10**) and the Late Helladic IIIA1 Sunshade Crater from Enkomi, British Tomb 67 (**Table 3.1, Image l, Fig.3.16**) the same set of five pottery vessels is depicted; rhyton, ladle, crater, jug and goblet. On the seal a figure holds a jug in one hand while apparently pouring liquid from a ladle, through a conical rhyton positioned above a pedestal-based crater. Two other figures hold aloft goblets/kylikes. On the pictorial crater, the same vessels float in the field either side of a sword-bearing figure that

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<sup>602</sup> Karageorghis (2002:51).

<sup>603</sup> Webb (1999:198).

<sup>604</sup> Stein (2009).

follows a chariot. Although the arrangement of vessels is slightly different, the ladle, rhyton and crater appear together behind the sword-bearer and the goblet and jug (in this case a beaked ewer) float before him.<sup>605</sup> As the craters and goblets can be associated with the consumption of alcohol, it is possible that the entire set of five vessels depicted relate to this activity. Indeed, although conical rhyta have often been associated with libation ceremonies,<sup>606</sup> organic residue analysis of an LHIII A2/B conical rhyton from Midea also suggests that both barley beer and wine were used in such vessels.<sup>607</sup> Indeed, it is most likely that the consumption and libation of alcoholic beverages both occurred concurrently from the same vessels, as documented in certain Hittite ritual texts.<sup>608</sup> These texts also document a frequent association between predominantly bull-headed Hittite rhyta and wine consumption.<sup>609</sup> The two figures on the seal bearing their goblets aloft certainly recall the banquet scenes discussed above. At the same time, the arrangement of the figures on the seal and the identical set of vessels also imply the kind of formulaic action that could be interpreted as ritual.

The final images worth mentioning here derive from a pair of Cypro-Geometric vessels (1050-750 BCE). Although dating to the period immediately after the LCA, their subject matter appears relevant to a consideration of earlier alcohol consumption practices. On the unprovenanced Bichrome III ware ‘Hubbard’ Amphora a seated, possibly female, figure apparently consumes a beverage from a jug via a straw (**Table 3.1, Image p, Fig.3.20**), recalling earlier banquet scenes involving consumption via this method. In this case, however, an attendant also appears to be adding another substance to this jug from a small juglet. Six identical juglets appear behind the attendant or on a table between the two figures. On a Bichrome III amphora from Kourion - *Kaloriziki* Tomb 11, a human figure holds a jug or juglet directly over a very large crater (**Table 3.1, Image o, Fig.3.19**). Due to the ambiguity of perspective introduced by the immense size of the crater, it is difficult to tell whether the vessel held above the crater is meant to depict a jug or a juglet similar to those depicted on the Hubbard Amphora. As such the image may depict wine being

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<sup>605</sup> An unprovenanced crater fragment from Enkomi that may have come from the same vessel and depicts a male head with a cup and another beaked ewer floating in the field to either side, Vermeule & Karageorghis (1982:22, III.22).

<sup>606</sup> Furumark (1941:69-71); Webb (1999:201); Yon (1986:275-278). Contra Koehl (1981:183).

<sup>607</sup> Evans reported the discovery of barley beer and wine residues, although the details of the analysis are unpublished, Tzedakis & Martlew (2001:Cat.No.164). Koehl also suggests that they could have been used in combination with a strainer to strain wine, Koehl (1981:183).

<sup>608</sup> Gorney (1995:152).

<sup>609</sup> Gorney (1995:166).

poured into the crater, or if a juglet is indeed depicted, the addition of a secondary liquid to the wine. The possible significance of adding a second substance to alcohol from a juglet, suggested by at least one of these Cypro-Geometric examples, will be discussed further below.

In total, there are at least 18 Late Cypriote examples (plus four possibly related Cypro-Geometric examples) of images likely to be associated with the consumption of alcohol. These predominantly consist of scenes apparently related to the Near Eastern banquet scene or of the jug-bearing Minoan genius and suggest a possibly link between the consumption of alcohol (probably wine), ritual practice and the supernatural.

### 3.2.2 Opium Poppy Representations

As mentioned in Chapter 1, LBA images of poppies derive mostly from the Aegean. Examples from throughout the East Mediterranean, outside Cyprus, include:

- an LHII (ca.1450 BCE) gold signet ring from the Acropolis Treasure of Mycenae (**Fig.3.28**) depicting a seated female figure being offered three poppies;<sup>610</sup>
- LHI (ca.1550 BCE) bronze pins with quartz heads shaped like opium poppy capsules (**Fig.3.29**);<sup>611</sup>
- Second Millennium BCE gold pins from Anatolian sites such as Kültepe-Kanesh with heads shaped like opium poppy capsules (**Fig.3.30**);<sup>612</sup>
- an LMIIIA1 (ca.1390-1370 BCE) pyxis from Pachyammos, Crete, decorated with images of birds eating from poppies and a poppy flanked by a Horns of Consecration (**Fig.3.31**);<sup>613</sup>
- an XVIIIth Dynasty Egyptian blue faience vase from Tell-el-Amarna in the shape of an opium poppy capsule (**Fig.3.32**);<sup>614</sup>
- a pair of rhyta from the LBA cemetery at Mochlos on Crete, both shaped and decorated as incised poppy capsules (**Fig.1.19**);<sup>615</sup>

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<sup>610</sup> National Archaeological Museum, Athens: N.M. 942; Tzedakis & Martlew (1999: 269, Cat.275).

<sup>611</sup> National Archaeological Museum, Athens: N.M. 8635-8637; Tzedakis & Martlew (1999: 270, Cat.276-278).

<sup>612</sup> Merrillees (1979:168, Pl.XXXVIA).

<sup>613</sup> Heraklion Archaeological Museum: H.M. 9501; Tzedakis & Martlew (1999: 271, Cat.279); Zervos (1956: Figs.3.739-740).

<sup>614</sup> Behn (1986:194, Fig.3.1a); Gabra (1956:43). See Gabra (1956:40-45) for further suggestions of Egyptian depictions of the opium poppy.

<sup>615</sup> Nicgorski (1999:540).

- an LM III (13<sup>th</sup> century BCE) terracotta figurine (77.5 cm tall) of the ‘goddess with upraised arms’ type from a sanctuary at Gazi (Crete) whose headdress was adorned with three movable pins in the likeness of incised opium poppy capsules (**Fig.1.14**).<sup>616</sup>

Of particular note, the last two of these examples depict poppy capsules that are incised. As opium latex is retrieved by incising the opium poppy (*Papaver somniferum* Linnaeus) seed capsule (see Section 3.4.1),<sup>617</sup> these two examples should be interpreted as symbolising opium, rather than the plant itself. While it is possible that the poppy’s abundance of seeds may have symbolically associated it with fertility, as is similarly argued for the pomegranate,<sup>618</sup> representations of incised poppies emphasise that the psychoactive opium latex was also important. Even in cases where a poppy capsule is depicted without incisions, however, an emphasis upon the capsule, rather than the flower, is likely to be a symbolic reference to either opium or the multitude of seeds held within. In the pyxis from Pachyammos and the figurine from Gazi, a strong association between the poppy/opium and the supernatural is also apparent.

There are a small number of comparable Late Cypriote depictions of the opium poppy listed on **Table 3.2**. A more detailed list is provided in **Table EA3.2** in the electronic appendix (on the attached CD).

The most notable Late Cypriote poppy iconography comes from an unprovenanced Elaborate Style cylinder seal held in the British Museum bearing a scene that depicts what appears to be a ritual sacrifice procession involving five figures, in which an opium poppy is depicted between two of the figures (**Table 2, Image w, Fig.3.33**). Four of the figures approach the fifth figure who may be a god or ‘priest’. The god/priest and the first figure in the procession are both human-headed and hold a dog or caprid aloft between them, with knives in the other hand (all five figures hold knives in one hand). A rosette floats in front of the god/priest’s forehead. Next in line is a bull headed figure holding a possible bird with the opium poppy growing beneath the bird, in front of the figures legs. Behind this figure is a lion

<sup>616</sup> Marinatos (1937:287, Fig 8). See also Kritikos & Papadaki (1967:23).

<sup>617</sup> Merlin (1984:93); Räsch (2005:404-405); Rudgley (1998:181).

<sup>618</sup> Ward (2003:532). Due to its blood-red juice and the frequent discovery of pomegranate-shaped vases in tombs, the pomegranate may have been symbolic of both fertility and death, Immerwahr (1989:408); Ward (2003).

headed figure with an axe or sceptre and then a winged and bird-headed figure holding what may be a caprid.

	Site	Object Type	Context	Date	Image Description	References
	<b>Seal Images</b>					
w	Unprovenanced	Cylinder seal, Elaborate Style.	Unknown	LC	Procession/sacrifice scene with opium poppy growing upward from ground line. ( <b>Fig.3.33</b> ).	Porada (1992:367-368, Fig.3.22).
	<b>Other</b>					
x	Kition-Kathari	Ivory sceptre head. 18mm high.	Temple precinct, Floor IIIA.	LCIIC/ IIIA	Sceptre-head is carved in the likeness of a poppy capsule ( <b>Fig.3.34</b> ).	Karageorghis & Demas (1985:49); Karageorghis (1985:110, Pl.CXII, CXCI); Smith (2009:97-98, Fig.3.III.11a).
	<b>Possible?</b>					
y	Kition-Chrysopolitissa	Ivory sceptre head. 21mm high	Tomb 9, upper burial.	LCIIC/ IIIA	Sceptre-head carved in the likeness of a poppy capsule or pomegranate. More reminiscent of a pomegranate, but could be a hybrid image ( <b>Fig.3.35</b> ).	Karageorghis (1974:69, No.132, Pl.LXXXVII, CLXX); Smith (2009:97-98, Fig.3.III.11b).
z	Kition-Chrysopolitissa	Gold diadem. 216mm long, 54mm high	Tomb 9, upper burial.	LCIIC /IIIA	Diadem possibly decorated with five flowering opium poppies ( <b>Fig.3.36</b> ).	Karageorghis (1974); Smith (2009:100, Fig.3.III.13).
aa	Various: See <b>Table EA3.3</b> in the electronic appendix for individual examples.	Carnelian Pendants	Various	LC	Opium poppy capsule. ( <b>Figs.3.37-38</b> ).	Peltenburg (1986:163-164).

**Table 3.2 - LCA Iconographic Representations of Opium Poppies.**

As the poppy capsule is depicted on a thin straight stalk that grows up from the ground line, this representation appears to be quite unequivocal. While it is possible that the poppy depicted here is meant to represent a species other than the opium poppy (*Papaver somniferum* Linnaeus) this seems unlikely given the strong evidence for Late Cypriote opium exploitation and the fact that it is an unripe and flowerless capsule that is depicted.

The ritual character of the scene featuring this poppy is readily apparent. The procession of figures bearing both animals and knives most likely depicts a ceremony involving the sacrifice of the animals. Moreover, the participation of apparently supernatural beings further characterises this scene as religious iconography. As such, it is possible that the poppy depicted here was meant to represent the consumption of opium during such a ritual to induce ASCs, enabling interaction with these supernatural entities. If so, the rosette depicted before the head of the god or priest may be symbolic of such epiphany. In such a context, this figure may indeed represent a human ritual leader whose privileged role included the consumption of opium to engage with ‘gods’ and/or ‘spirits.’

Another clear depiction of an opium poppy exists in the form of an ivory sceptre head from Kition (**Table 2, Image x, Fig.3.34**). Although similar ivory sceptre heads commonly depict what appear to be pomegranates, in this case the wide, flat crown with nine rounded elements corresponds to the stigmatic disc and rays of the opium poppy capsule. In contrast, the pomegranate crown/calyx is thinner and higher and usually has five to seven pointed elements/sepals.<sup>619</sup> This object probably sat atop a sceptre borne as a marker of privilege and status. The discovery of this object in Kition’s Temple Precinct<sup>620</sup> (see Section 7.1.2) further suggests that this status may have been derived from a position of ritual authority, once again implying a link between opium, ritual and the supernatural.

A second ivory sceptre head from Kition (Tomb 9, **Table 2, Image y, Fig.3.35**), in this case discovered mounted atop a ca.20cm long ivory rod, has also been suggested by Joanna Smith to depict an opium poppy.<sup>621</sup> In this case, however, the crown is higher, with six pointed elements, making this sceptre head more

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<sup>619</sup> Ward (2003:531).

<sup>620</sup> Karageorghis & Demas (1985:49).

<sup>621</sup> Smith (2009:97-98, Fig.3.III.11b).

reminiscent of a pomegranate and comparable to a number of LBA ivory sceptre heads found across the East Mediterranean.<sup>622</sup>

Interestingly, Smith also interprets a glass vessel of the type traditionally viewed as a ‘pomegranate’ vase<sup>623</sup>, from the same tomb at Kition, as another depiction of an opium poppy capsule (**Fig.3.39**).<sup>624</sup> While the high, narrow crown depicted in this case almost certainly represents that of a pomegranate, Smith argues that the predominant blue colour of the body suggests the blue hue of an unripe poppy capsule, with the horizontal white and yellow bands representing the opium latex oozing out of the scored capsule.<sup>625</sup> This interpretation suggests the intriguing possibility that such vessels, and possibly some of the more ambiguous ivory sceptre heads, were actually hybrid images meant to represent both the opium poppy and the pomegranate at the same time. Indeed, this exact combination of motifs appears in a faience imitation of the poppy-shaped Base Ring juglet from Egypt in which the standard trumpet-mouth is replaced with a jagged opening apparently mimicking the pomegranate crown/calyx (**Fig.3.40**).<sup>626</sup>

With regard to Bronze Age pomegranate iconography, it is interesting to note Sara Immerwahr’s argument that the fruit’s red juice and the prevalence of glass pomegranate vases in tombs throughout the East Mediterranean suggest that it had a symbolic role associated with journeying to the Underworld.<sup>627</sup> Furthermore, Cheryl Ward adds that the large number of seeds in a pomegranate also suggest the possibility that this fruit was also a symbol of fertility.<sup>628</sup> Given the prevalence of Base-Ring juglets in Cypriote tombs (See Chapter 5) and the multiplicity of seeds in the opium poppy capsule, very similar arguments could be made for the opium poppy. Indeed, as noted in Section 1.6.2, Nicgorski has already suggested that the poppy-shaped LBA Rhyta from Mochlos symbolized both death and regeneration.<sup>629</sup>

If the glass pomegranate vessels were indeed designed to be symbolic of both the pomegranate and the opium poppy, then a possible candidate for any substance contained within would be a solution of pomegranate juice or wine and opium. Such a

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<sup>622</sup> Ward (2003).

<sup>623</sup> Immerwahr (1989).

<sup>624</sup> Smith (2009:98-99, Fig.3.III.12).

<sup>625</sup> Smith (2009:98-99)

<sup>626</sup> Karageorghis & Merrillees (2007:Fig.3.1).

<sup>627</sup> Immerwahr (1989:408).

<sup>628</sup> Ward (2003:530, 538). See also Merlin (1984:201).

<sup>629</sup> Nicgorski (1999:540-541).

mixture may even be mentioned in Hittite records describing the addition of one or more substances to pomegranate juice to produce something that congeals (*n-at mahhan igaitta*).<sup>630</sup> Without organic residue evidence, however, this hypothesis must be considered tentative at best. It is, however, intriguing that almost all fragments of such blue glass bottles from the Temple Precinct at Kition were found in Temenos A and Temple 5,<sup>631</sup> areas where other artefacts linked to opium consumption have been found (see Section 6.1.2).

The 'rosette' design found on a sheet-gold plaque, again from Kition Tomb 9 (**Table 2, Image z, Fig.3.36**) may be another Late Cypriote iconographic reference to the opium poppy,<sup>632</sup> on this occasion, in bloom. The characteristic centre of such rosette designs may depict the closed poppy capsule,<sup>633</sup> with the surrounding rows of petals possibly representing the cluster of stamens that surround a poppy capsule and the petals themselves. The fact that this design depicts three rows of petals, rather than two, however, does make this interpretation unlikely. Furthermore, the psychoactive opium latex is not produced by the opium poppy until after the petals fall off, further reducing the likelihood that such floral designs are a reference to the psychoactive.

The final possible Late Cypriote iconographic reference to the opium poppy identified to date is seen in the distinctive pendants that are found at numerous sites in Cyprus and throughout the East Mediterranean, commonly carved in carnelian and also occasionally in faience (**Table 2, Image aa, Fig.3.37-38**).<sup>634</sup> While these pendants have previously been suggested to represent a pomegranate, cornflower or lotus seed pod,<sup>635</sup> their shape is far more reminiscent of the capsule and wide, flat crown (stigmatic disc) of the poppy. Again, the apparent emphasis on the capsule of the poppy without petals suggests that these pendants are symbolic of the psychoactive opium latex and/or fertility. Helen Hughes-Brock has, in fact, previously linked these poppy-shaped carnelian pendants with the LBA trade of opium suggested

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<sup>630</sup> Hoffner (1974:120). Although the Egyptian New Kingdom beverage *šdh* has been suggested as a similar mixture of pomegranate wine and mandrake root (*Mandragora officinarum*), Rättsch (2005:799), recent organic residue analysis has confirmed that it was in fact red wine, Guasch-Jané (2008:52-53); Guasch-Jané et.al. (2006).

<sup>631</sup> Smith (2009:99).

<sup>632</sup> Smith (2009:100).

<sup>633</sup> Smith (2009:100).

<sup>634</sup> Peltenburg (1986:163-164). For examples from outside Cyprus, see Andrews (1994:Figs.3.48a, 65n); Hughes-Brock (1999:Fig.3.2); McGovern (1980:157-159); Merrilees (1968: PL.XXXVI); Merlin (1984:260-268); Patch (2005:Cat.No.125a-b). Note that faience examples are often found in Egypt.

<sup>635</sup> Andrews (1994:Figs.3.65n); Dikaios (1969-1971:290,299); Muhly (1986:47); Patch (2005:Cat.No.125b); Peltenburg (1986:163-164).

by the distribution of BR juglets throughout the East Mediterranean.<sup>636</sup> As there are no known carnelian sources on Cyprus, it is likely that these pendants, or at least the raw material, were imported from Egypt.<sup>637</sup>

When considered alongside the poppy-shaped BR juglet, these examples of poppy iconography suggest that the image of the bare opium poppy seed capsule was readily recognisable in Late Cypriote society. Given that opium residues have been found within vessels adopting this characteristic shape (see below), it seems likely that this poppy iconography was considered symbolic of this psychoactive latex and possibly also the ASCs induced by its consumption. As the two clearest examples of this image are associated with a ritual scene involving supernatural beings (**Image w**) and a depositional context within a temple precinct (**Image x**), a symbolic association with ritual practice and the supernatural world may also be inferred. It therefore seems that these Late Cypriote images of the opium poppy represented a sacred plant or substance that enabled interaction with the supernatural world and its inhabitants via its consumption.

### **3.3 Evidence for Consumption of Psychoactives**

This section presents a detailed consideration of various forms of artefactual evidence suggesting the consumption of psychoactive substances from Late Cypriote contexts. This evidence consists primarily of ceramic containers for which organic residue analysis confirms that a particular psychoactive substance was once held within one or more examples. This can provide direct and contextualised evidence for the possible induction and experience of ASCs, necessary for developing a detailed contextual analysis of such mental phenomenon.

#### **3.3.1 Opium Consumption Evidence**

##### **Base Ring Ware Juglets**

As noted in Section 1.6.2, multiple strands of evidence suggest that the distinctive BR juglet or bilbil<sup>638</sup> held a liquid solution of opium. This vessel type is discussed in detail here.

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<sup>636</sup> Hughes-Brock (1999:280).

<sup>637</sup> Peltenburg (1986:163).

<sup>638</sup> The Arabic name initially given to closed Cypriote vessels discovered in Egypt, but now synonymous with the poppy-shaped BR juglet, Merrillees (1974:158).

BRI ware is hand-made and traditionally characterised by a well mixed clay of hard and metallic character, well fired in an oxygen-poor environment to a light or dark brown through to grey colour, often with a grey or even black core.<sup>639</sup> It has an evenly burnished slip ranging in colour from red, red-brown, grey-brown, grey, brown-black to black, with the surface often mottled red and brown/black.<sup>640</sup> Decoration commonly consists of the addition of plain or hatched plastic relief bands arranged into wavy lines, antithetic curves or spirals, although incised or painted patterns also occur (**Fig.3.41-42 & 3.48**).<sup>641</sup> On PBR vessels, which essentially have the same fabric as BRI, these relief lines often end in what appears to be a snake's head (**Fig.3.46-47**).<sup>642</sup> BRII ware is also hand-made and traditionally characterised as coarser and 'clumsier' than BRI ware with larger particles of sand or grit in the clay.<sup>643</sup> The slip is only lightly burnished or wet-smoothed and any decoration is painted in matte, white paint (**Fig.3.43 & 3.49**).<sup>644</sup> Particularly on the juglets, this decoration often consists of a series of three to five parallel lines. Petrographic analysis of BR ware suggests that it was produced on Cyprus at a variety of regional production centres.<sup>645</sup>

The BR juglet generally has a globular or piriform body, a narrow, tapering neck that widens into a funnel-shaped mouth, a strap handle from the neck to the shoulder and a high (conical or trumpet) or low base-ring (**Fig.3.41 & 3.43**).<sup>646</sup> They are generally 10-15cm high. This is the classical bilbil shape common to both BRI and BRII ware that is suggested by Merrillees to mimic the shape of an opium poppy capsule (see below). Variations on this shape include the occasional example with cut-away or trefoil spouts, double juglets that consist of two very small juglets joined together at the body and mouth (**Fig.3.42**) and PBR juglets lacking the ring base (**Fig.3.46**). Other vessel shapes that are often also described as BR juglets include

<sup>639</sup> Åström (1972:137). Cf. Vaughan (1991).

<sup>640</sup> Åström (1972:137). Cf. Vaughan (1991).

<sup>641</sup> Åström (1972:170-171).

<sup>642</sup> Åström (1972:126, 136).

<sup>643</sup> Åström (1972:173). Vaughan (1991), however, points out that there are problems with the typological distinction between BRI and BRII wares, with overlap between many features observed. From a regional perspective, the changes in fabric used to characterise the difference between the two do not occur simultaneously. Vaughan, therefore, suggests an alternative, four-fold typology based on finish (Metallic Slip, Red Burnished, Matte Slip and Uncoated). This typology, however, has not been widely adopted and a distinction between tradition BRI and BRII wares is often very clear in relation to decoration (plastic relief vs painted). As BR jugs and juglets almost always bear such decoration, the traditional typology is used in this thesis.

<sup>644</sup> Åström (1972:173-174). Cf. Vaughan (1991).

<sup>645</sup> Vaughan (1987; 1989; 1994; 1997). See also Artzy et.al. (1981).

<sup>646</sup> Åström (1972:145-161).

examples with elongated bodies that are better defined as ‘spindle bottles’ (**Fig.3.45**) and squat, wide-necked examples (**Fig.3.44**) common in BR II ware that rarely feature painted decoration on the body and have either handles from the rim to the shoulder, or plastic ‘rivets’ in relief where the handle meets the neck and body. It is important to note here, that any morphological resemblance to an opium capsule appears to be lacking in these final two BR II shapes.

As briefly discussed in Section 1.6.2, Robert Merrillees has long argued that the shape of the BR bilbil juglet appears to be based on the distinctive morphology of the seed capsule of the opium poppy (*Papaver somniferum* L.).<sup>647</sup> In this regard, the body of the juglet matches the body of the poppy capsule (**Fig.1.15**), with the base ring mimicking the stigmatic disc and the narrow neck corresponding to the thin stalk.<sup>648</sup> Merrillees even argues that the plastic relief lines that occur where the handle meets the neck of most BR I juglets is a depiction of the thalamus, moved away from the body of the ‘capsule’ to accommodate the handle. Merrillees also argued that the plastic decoration on the body of BR I juglets depicts opium latex oozing from one or more incisions made on the capsule (**Fig.1.16**), while the series of parallel white strips painted on BR II varieties depicts the latex oozing out of a set of multiple cuts made with a more efficient multi-bladed tool (**Fig.1.17**), indicating the use of a new technique for extracting the opium.

Based on these morphological characteristics Merrillees concluded that both BR I and II juglets were containers designed to advertise to a largely illiterate market that they contained opium.<sup>649</sup> Such ‘commodity branding’<sup>650</sup> would also explain the relatively high degree of conservatism, in terms of pottery production, exhibited in the continuity of this shape over a number of centuries,<sup>651</sup> not to mention its copying in other wares and in materials besides clay (see below). Merrillees also argued that the narrow neck of these juglets would have only allowed the passage of liquids, suggesting that the opium was likely to have been dissolved in water, wine or syrup such as honey.<sup>652</sup> As discussed above in relation to the faience bottles combining pomegranate and poppy motifs, pomegranate juice or wine is another possibility for

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<sup>647</sup> Merrillees (1962:289; 1968:154; 1974:32).

<sup>648</sup> Merrillees (1962:289-290).

<sup>649</sup> Merrillees (1962:288-289; 1968:154; 1974:32).

<sup>650</sup> Wengrow (2008) argues that such practices can be considered as a prehistoric form of commodity branding.

<sup>651</sup> Merrillees (1962:288; 1968:156-157).

<sup>652</sup> Merrillees (1962:288, 290; 1968:157; 1974:34)

this solvent. The reported discovery of olive oil residues from a single BR juglet sherd (probably from Palestine),<sup>653</sup> suggests a fifth, less palatable option. Regardless of the precise make-up of this mixture, the small capacity of the BR juglet and its widespread distribution throughout Cyprus, the Levant and Egypt<sup>654</sup> suggest that the contents were a highly valued and widely traded commodity.<sup>655</sup>

Despite these arguments, the suggestion that BR juglets contained opium was initially met with a high degree of scepticism, primarily founded upon arguments that there are no historical references to opium or botanical remains of the opium poppy from the Bronze Age Near East.<sup>656</sup> With regard to the first point, however, the identification of specific plant species from ancient textual sources is notoriously difficult. Indeed, in texts from the East Mediterranean region the opium poppy has actually been suggested as a possible candidate for particular terms in Sumerian (*hul.gil*),<sup>657</sup> Akkadian and Hittite (*gāyatum*),<sup>658</sup> and Hieratic Egyptian (*špn/ špnn*, mentioned multiple times in the Ebers Papyrus).<sup>659</sup> Iron Age references to opium from the region have also been suggested for texts in Assyrian (*sām<sub>arau</sub>/sām<sub>irru</sub>*)<sup>660</sup> and Ancient Greek (the substance *népenthes* associated with Helen of Troy/Sparta),<sup>661</sup> while a number of ancient Greek gods have similarly been associated with opium or the poppy, including Persephone, Hermes, Hypnos and Morpheus.<sup>662</sup> As such, the existence of opium in Bronze Age textual sources appears to be very much a matter of debate.

The claim that there are no Bronze Age botanical remains of *Papaver somniferum* L. from the region is, in fact, incorrect. On the Greek mainland, *Papaver somniferum* L. seeds have been uncovered from LBA levels at Tiryns, Assiros and

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<sup>653</sup> Evans (1989:154); Merrillees (1989:151).

<sup>654</sup> Åström (1972:143-161); Åström & Åström (1972:724-741); Bergoffen (1989; 1991; 2001; 2005); Maguire (2009); Merrillees (1974; 1983); Yon (1983).

<sup>655</sup> Merrillees (1962:288). Indeed, it appears that the BR juglet was the most prevalent Late Cypriote pottery form to be exported, Bergoffen (2001:33-34; 2005:); Merrillees (1962:288; 1974:30-31; 1983).

<sup>656</sup> Knapp (1989:25); Muhly (1982:253; 1986:46-47). Cf. Krikorian (1975).

<sup>657</sup> Terry & Pellens (1970:54) cited in Merlin (1984:153-154). Contra. Krikorian (1975:99-104).

<sup>658</sup> Vincentelli (1976:27). Contra. Krikorian (1975:99-104). Interestingly, the possible Hittite reference to opium is found in an inventory of tribute from Alasia sent to various temples after its conquest by King Tudkhaliash IV, Baurain (1984:272-274).

<sup>659</sup> Gabra (1956:48-54).

<sup>660</sup> Thompson (1949:225-227). Contra. Krikorian (1975:99-104).

<sup>661</sup> Kritikos & Papadaki (1967:18); Merlin (1984:213-217). For the context of this term, see Odyssey 4:243-251, Fagles (1996:131).

<sup>662</sup> Merlin (1984:210-223).

Kastanas, MBA levels at Ayios Mamas and EBA levels at Kastanas.<sup>663</sup> Although not adequately published, a footed bowl or ceramic drum found in the burnt palace at Beycesultan, Western Anatolia (ca.1900 BCE), contained a quantity of seeds identified by the excavator as opium poppy seeds.<sup>664</sup> A complete, but unscored *Papaver somniferum* L. seed capsule was also discovered within an 18th Dynasty tomb at Deir el-Medina (Tomb 1389, ca.1450 BCE).<sup>665</sup> Also worthy of mention is a review of archaeobotanical reports from Bronze Age Anatolian sites that documented numerous occurrences of *papaveraceae* seeds, albeit from unspecified species.<sup>666</sup>

These examples clearly demonstrate that the opium poppy was known of in the East Mediterranean region during the Bronze Age. While they do constitute a relatively small number of archaeobotanical samples for a region as large as the East Mediterranean, two factors are likely to have heavily influenced the recovery of such evidence. Firstly, as pointed out by Kroll, poppy seeds are extremely small and fragile, so their discovery in Bronze Age contexts requires fortuitous conditions of preservation.<sup>667</sup> Secondly, in cases where the opium poppy is being cultivated solely for its psychoactive latex, botanical remains are unlikely to have been brought back to settlements, with the possible exception of the storage of a seed stock for future planting.

The dismissal of this textual and botanical evidence for the Bronze Age exploitation and consumption of opium, occasionally on rather spurious grounds, and similar treatment of its iconographic depiction suggests a strong reluctance within the archaeology of the region to acknowledge the use of this substance. This reluctance is probably linked to a combination of the traditional conservatism of East Mediterranean archaeology<sup>668</sup> and the chequered recent history and current legal status of this substance. As opium is commonly associated with morally and legally objectionable behaviour (substance abuse or vice) in the modern world, the influence of modern values upon archaeological interpretation appears to be quite marked in this case.

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<sup>663</sup> Kroll (1981:99-100; 1982:Table.1; 1983:134); Valamoti (2007:99).

<sup>664</sup> Seton-Lloyd (1997, pers. comm.) cited in Merlin (1984:160-161).

<sup>665</sup> Bruyère (1937:109, 201). Contra. Germer (1985:45) who suggests that the determination of *Papaver somniferum* L. is not secure.

<sup>666</sup> Hnila (2002:324-325).

<sup>667</sup> Kroll (1981:99-100).

<sup>668</sup> Hitchcock (2000:15); Knapp (2005:4); Sherratt (1998:292); Webb (2006:117).

The relatively recent identification of opium alkaloid residues via organic residue analysis from BR juglets, however, appears to have confirmed Merrillees' suggestion that these juglets held opium,<sup>669</sup> firmly dismissing denials of opium exploitation in the LBA. Analysis conducted on the solid residues found within a BRI juglet from the Egyptian collection of the Martin-von-Wagner-Museum of the University of Würzburg discovered traces of morphine, codeine and narcotine; all primary opium alkaloids (see section 3.4.1).<sup>670</sup> Much more recently, analysis conducted by the British Museum on residues found within a BRII juglet from their own collection detected trace amounts of Papaverine, another opium alkaloid.<sup>671</sup> Given these recent results, it is also worth noting earlier analyses that have claimed the presence of opium residues from BR juglets, but cannot be considered as definitive proof by modern analytical standards. These include the discovery of an isoquinoline derivate (a probable degradation product of papaverine) in a pair of BR juglet sherds by Evans,<sup>672</sup> traces of an indeterminate "opium derivative" from BR juglets claimed to have been found during tests conducted for James Stewart at the University of Sydney<sup>673</sup> and the "impression of ... crude opium" from a pair of BRI juglets from the Museum of Fine Arts in Boston.<sup>674</sup>

As organic residue analyses have confirmed that Merrillees' hypothesis regarding the content of BR bilbils was correct, these vessels can now be considered to be solid evidence for opium consumption, probably via ingestion. While such residue evidence can only reasonably be expected from a limited number of examples of a particular pottery type, in the case of such distinctive containers, particularly in terms of their apparent depiction of the botanical source of their contents, this evidence should be viewed to be indicative of the contents of the majority of examples. Furthermore, although it is possible that such vessels were recycled once

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<sup>669</sup> Contra. Bisset et.al. (1996a:204).

<sup>670</sup> Bisset et.al. (1996a:204), Koschel (1996:161). Unfortunately, the exact provenance of this vessel is unknown, as it was purchased from an antiquities dealer in Cairo, Bisset et.al. (1996a:203). The lack of lipids detected in this vessel suggest that the opium was not dissolved in an oil, as these would be expected to survive better than any other residues.

<sup>671</sup> Stacey (2008, pers.comm.), the results of this analysis are yet to be published.

<sup>672</sup> Using IR, TLC, GLC and HPLC, Evans (1989), Cf. Knapp (1991:26). Contra. Bisset et.al. (1996b:201); Koschel (1996:160) who dismiss these results, presumably as a specific compound was not identified, nor were the results published in detail.

<sup>673</sup> Stewart (1965, pers.com.) cited in Merrillees (1968:157).

<sup>674</sup> Sjöqvist (1940:200).

their contents had been consumed,<sup>675</sup> it is unlikely that contexts containing multiple examples represent such an idiosyncratic function. While it is also possible that the opium stored within these vessels was not consumed, the fact that the value of a psychoactive substance derives from the effects of its consumption suggest that it was meant to be consumed. Furthermore, it should be possible to identify such variations in the use of these vessels through a contextual analysis that establishes any patterns in their depositional context.

As such, for the purposes of a contextual analysis, the poppy-shaped BR juglet (*bilbil*) is considered solid artefactual evidence for the probable induction of ASCs via the consumption of opium. These vessels therefore constitute a primary source of data for this detailed contextual analysis of ASCs in Late Cypriote society. In Chapters 5 and 6 the depositional context of every published example of a BR *bilbil* found on Cyprus will, therefore, be considered as part of this contextual analysis. On taphonomic grounds, however, fragments not restorable to complete vessels cannot be considered as contextual evidence for the consumption of the vessel's contents.<sup>676</sup> As such only complete or restorable examples are considered in this study.

In terms of the forms of BR juglets that do not appear to mimic an opium poppy (the spindle bottle and squat, wide-necked juglet), this morphological variation, combined with the absence of any residue evidence regarding their contents, means that these vessels cannot currently be considered as evidence for opium consumption. This certainly seems to have been the case for the squat wide-necked juglet, as the significantly increased width of the neck and mouth suggest that it was designed to contain a more viscous substance than the *bilbil* and spindle bottle. Given the apparent symbolic connection between the opium poppy and the distinctive BR *bilbil* shape, it may be that these vessels did not contain opium at all.

Conversely, given that there are now very strong arguments for a link between the BR *bilbil* shape and opium, it is worth considering whether the vessels in other wares and materials that share this shape may also have held opium. As such, vessels sharing morphological similarities with the BR *bilbil* are discussed below, with a

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<sup>675</sup> For discussion of possible instances of this practice with regard to BR juglets from Egypt, see, Merrillees (1968:157). The preservation of Egyptian cloth/mud seals on some examples found in Egyptian tombs (Merrillees 1968:158; 1974:34; 2008) further suggests such re-use. Unfortunately, there is currently no way of determining such different instances of use (or function) in the life-cycle of a vessel using organic residue analysis.

<sup>676</sup> Cf. Last (2006:125).

particular emphasis given to earlier and later wares which may have performed as functional precedents and antecedents.

The clearest example of a likely functional precedent of the BR bilbil is the Proto Base Ring (hereafter PBR) juglet, although it now seems that rather than strictly being considered a precursor of BR ware, PBR ware may actually represent regional variation in early BR ware deriving from the influence of various regional MC traditions.<sup>677</sup> Indeed, it appears that in the north of the island, BR ware evolved from Black/Red Slip wares (see below), while in the south and west it derives from Drab Polished 'blue core' ware.<sup>678</sup> Despite this apparent regional variation and the fact that many PBR juglets are missing the distinctive ring base of the BR bilbil, they conform to the bilbil in all other respects of form and decoration (**Fig.3.46**). Given apparent attempts of regional workshops to mimic this characteristic shape, PBR juglets should also be considered to have been containers for opium, despite the fact that no opium residues have yet been found within these vessels. As such, in Chapters 5 and 6 they are considered alongside the BR bilbil as solid evidence for the induction of ASCs via the consumption of opium.

### **Other Base Ring Ware Vessels**

Another vessel in BR ware whose shape appears to mimic the opium poppy is the BR jug (**Fig.3.47-49**). These vessels are effectively larger analogues of the BR bilbil juglet (commonly 20-30cm high), although the neck is cylindrical and proportionally wider with a slightly everted rim, rather than the conical, trumpet mouth common to the smaller vessels.<sup>679</sup> Decoration similarly consists of plastic relief bands on the neck and body of BRI jugs and parallel lines of matte white paint on BR II jugs, again apparently representing opium oozing from incisions on the poppy capsule.

On the basis of the morphological similarities to the BR bilbil juglet, it seems likely that the BR jugs were also associated with opium in some way. If they contained a liquid solution of opium, the increased size and wider necks suggests that they probably contained a mixture different to that held within the juglets. The wide neck and mouth, however, would have also made these vessels difficult to seal, suggesting that they were more likely to be used as serving vessels, perhaps for wine

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<sup>677</sup> Merrillees (1965:142). See also Herscher (1998; 2001).

<sup>678</sup> Herscher (1981:81; 1998). See also Åström (1972:126-137).

<sup>679</sup> Cf. Åström (1972:145-161). A distinction between the BR jug and juglet is generally quite clearly defined by these differences in size and the width of the jug necks.

within which the opium solution from a BR juglet had been mixed. If so, they might be viewed as a component of a ceramic set that included the smaller juglets and possibly other BR vessels.

Without any residue evidence for the contents of these vessels, however, the possibility that they contained opium, or any other substance for that matter, must remain hypothetical. Indeed, it is also possible that some of these vessels were not actually produced to transport any contents, but were instead made as items of display. The discovery of a set of nine particularly large BRI jugs within Tomb 21 at Kalavassos-Ayios Dhimitrios (the largest over 70cm high),<sup>680</sup> suggest just such an ornamental function, at least for these examples, as they may have been too large, unwieldy and fragile for use. In this regard, the high level of craftsmanship exhibited by such BRI jugs may have given these vessels significant value in their own right, making them ideal candidates for the display of wealth and its subsequent destruction via tomb deposition. This function, however, seems less likely for the smaller BRI and II jugs with more practical proportions and whose manufacture does not appear to have been invested with as much effort. Regardless of this, without residue evidence, even these 'standard' sized BR jugs are only considered in this thesis as tentative evidence for the consumption of opium and the induction of ASCs.

Another BR vessel shape that suggests a symbolic connection with the opium poppy is the small 'piriform' pithoid jar with a globular body on a high narrow stem that occurs in BR II ware (**Fig.3.50**). While only two examples of this vessel shape are currently known,<sup>681</sup> the modification of the standard piriform jar shape through the addition of a high narrow stem gives the vessel a distinctive shape that again appears to mimic the opium poppy capsule. On the body, white painted bands of two lines flanking a row of dots may again depict opium latex oozing from the incised capsule. As this vessel appears to depict a poppy capsule right-way-up, the likeness is even stronger than that exhibited by the BR bilbil juglet, suggesting they also contained some form of opium mixture. The wider neck and mouth of these vessels, though, suggest they contained a more viscous material than the juglets, perhaps opium dissolved in honey. Without residue evidence from these vessels though, this suggested association with opium remains unconfirmed.

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<sup>680</sup> South (2010, pers.comm.).

<sup>681</sup> Åström (1972a:180), listed as Pithoid Jar, type V.d. A comparable poppy-shaped 'kernoi' was discovered in an EMI tomb at Koumasa, Zervos (1954:Fig.3.121).

Other vessel shapes in BR ware (primarily including bowls, craters, tankards, flasks and bull-shaped rhyta) do not exhibit any clear morphological resemblance to the opium poppy, although they are commonly decorated with plastic or painted decoration akin to that found on the jugs and juglets. As this decoration on the BR jugs and bilbil juglets appears to depict opium latex, this may again suggest an association with opium consumption. If so, it is possible that these other vessels were made as components of a ceramic set for the mixing and consumption of the contents of the bilbils. Solely on the basis of these similarities in decoration, however, it is very difficult to reconcile an association with opium consumption for an entire ware type. If opium alkaloid residues were discovered within these other vessels, then further consideration of this possibility would be warranted. As a result, these other BR vessels are not considered in this thesis to constitute evidence for opium consumption. The possibility of an association with alcohol consumption, on the other hand, is discussed further below.

### **Bucchero Ware Vessels**

Based on its apparent evolution from the Base Ring juglet, the Bucchero jug has been suggested as another possible opium container.<sup>682</sup> Early Bucchero ware (LCII-LCIIIA) was either hand-made or turned on the slow wheel and has the same fabric and finish as BR II ware, resulting in it often being characterised as this ware.<sup>683</sup> The later variety (LCIII only) was wheel-made and is only classified as the same ware on the basis of shape and decoration as it is made from a different clay (hard fired, light yellow or greenish white with grit) and covered with a thick, slightly lustrous black or dark grey slip.<sup>684</sup>

With only a handful of exceptions, the jug is the shape in which the vast majority of Late Cypriote Bucchero ware is found. The early hand-made jugs (**Fig.3.51**, normally 12–15 cm high) generally consist of a piriform or globular body with a ring base, a short and wide neck and a handle from the shoulder to the rim. Except for the surface decoration (see below) this shape is almost identical to the BR II squat, wide-necked juglet, reinforcing connections with this ware. The LCIII wheel-made Bucchero jugs (**Fig.3.53**, usually 13-17 cm high, but larger and smaller varieties were also common) generally consist of an oval, piriform or globular body

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<sup>682</sup> Kritikos & Papadaki (1967:33); Merrillees (1979:169; 1989:150-151).

<sup>683</sup> Åström (1972:425), Sjöqvist (140:50).

<sup>684</sup> Åström (1972:425); Sjöqvist (140:50).

with a ring base, a long and narrow neck (cylindrical or tapering) and a handle from the shoulder to the rim or occasionally just beneath the rim. This narrow-necked shape does, however, also occur in the earlier hand-made fabric (**Fig.3.52**) although with less frequency than the squat, wide-necked variety. For all Bucchero shapes, the body is covered with vertical or slightly diagonal ribs or grooves moulded or cut into the surface, giving the vessels their characteristic fluted appearance.

Although it is commonly argued that Bucchero jugs imitate metal prototypes,<sup>685</sup> known examples of Late Cypriote metal vessels<sup>686</sup> are actually wider necked, open shapes, probably tankards rather than jugs. Indeed, it appears that only open shapes are manufactured in metal,<sup>687</sup> probably as the storage function of closed shapes requires a more practical material. As such, the close affinity with BR jugs/juglets, for which there are no known metal prototypes,<sup>688</sup> suggests that this earlier ware was a more likely influence. While the connection between BR and Bucchero ware jugs/juglets is strongest during the LCII between the squat, wide-mouthed varieties of both wares, the occurrence of hand-made narrow-necked jugs and subsequent attempts to replicate these in a different, wheel-made fabric, also suggests a link between this later variety and BR ware. This change in fabric and manufacturing technique during the LCIII period most probably relates to the trend towards ceramic vessels that could be rapidly mass-produced.<sup>689</sup> Instead of privileging metal vessels as likely models for ceramic copies, it should also be considered that certain ceramic shapes may have been symbolically important enough to provide the inspiration for metal vessels.

In this regard, it may be pertinent that the narrow-necked Bucchero jugs, particularly of the hand-made variety, appear to continue mimicking the opium capsule in a manner similar to the BR bilbil juglet. Although the fluted decoration on the body of all Bucchero vessels is not really suggestive of opium latex oozing from incisions in an opium capsule, it is worth noting that the capsules of certain varieties of *Papaver somniferum* L. do have a similarly fluted appearance. As such, it is certainly possible that in the LCIII period, the narrow necked wheel-made Bucchero jug was a functional antecedent of the BR bilbil, replacing it in the Cypriote ceramic

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<sup>685</sup> Åström (1972:430); Karageorghis (1974:90).

<sup>686</sup> For examples of possible metal prototypes, see Åström et.al. (1983:Fig.3.490); Karageorghis (1974:Pl.LXXXV).

<sup>687</sup> Merrillees (1982).

<sup>688</sup> Merrillees (1982:244).

<sup>689</sup> Vaughan (1994:92).

repertoire as a container for a liquid solution of opium. Again, however, as no opium alkaloid residues have been identified from within such vessels,<sup>690</sup> this hypothesis must be considered tentative. Throughout this thesis the narrow-necked Bucchero jug is, therefore, only provisionally considered as possible evidence for the consumption of opium and the induction of ASCs.

In relation to the squat, wide-mouthed Bucchero jugs, although this earlier shape also has a fluted body, the wider neck and mouth suggest that these vessels contained a different, more viscous liquid than the narrow-necked jugs. Furthermore, in comparison to contemporary BR II bilbil juglets and hand-made narrow-necked Bucchero jugs, the resemblance to an opium poppy capsule is debatable. As such, in the absence of any organic residue evidence there is little other than ware type to suggest an association between these vessels and opium consumption. The same can also be said for the relatively rare Bucchero ware amphora and amphoriskoi, which appears in both hand-made and wheel-made varieties (**Fig.3.54-55**),<sup>691</sup> although the scarcity of these shapes does suggest that they may have been made to be used alongside the Bucchero jug, possibly as part of a set.

### **Possible Base Ring Ware Precursors**

Another ceramic vessel that shares striking morphological similarities with the BR bilbil, and may therefore, be a functional precedent, is the hand-made Black Slip (BS) III/V juglet,<sup>692</sup> found predominantly in the Northern regions of Cyprus. Although hand-made BS ware is one of the characteristic ware types of the MCA,<sup>693</sup> this particular vessel appears to continue well into the LCI period and certain PBR vessels are described by Åström as being of BS (or Red Slip) fabric.<sup>694</sup>

The juglet in question features the globular or piriform body, narrow neck, funnel-shaped mouth and strap handle from neck to shoulder common to the BR bilbil

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<sup>690</sup> Evans (1989:154). A bucchero jug from Kouklia Kaminia Tomb IX no. 7 was reported to have contained traces of olive oil, although this vessel had unique feature of being stoppered with whitish material of geological origin (Merrillees 1989:151), suggesting the possibility of a reuse.

<sup>691</sup> Cf. Åström (1972:429).

<sup>692</sup> Often described as BSIII, Hennessey (1964); Vermeule & Wolsky (1990), or BSV, Åström (1972); Pecorella (1997). This distinction is purely based on whether the vessel in question occurs in an MCA (BSIII) or an LCA (BSV) context.

<sup>693</sup> Characterised by a well mixed clay with fine inclusions fired to light-dark buff fabric, with a thin, burnished black slip toning to red, brown or red-brown, Åström (1972:79-80); Vermeule & Wolsky (1990:359-360). The predominance of either red or black slip is the only criteria upon which Late Cypriote Red and Black Slip ware is distinguished, Åström (1972:133).

<sup>694</sup> Åström (1972:130-137). See also Hennessey (1964:48).

juglet (**Fig.3.56**).<sup>695</sup> It usually lacks, however, the distinctive ring-base of these later vessels and instead has a flat base.<sup>696</sup> Decoration generally consists of incised patterns of lattices, chevrons and zigzags on the body,<sup>697</sup> although relief decoration typical of BRI juglets also occurs, occasionally leading to characterisation as PBR or even BS/PBR.<sup>698</sup> As there are also examples of what appear to be BRI juglets with incised decoration similar to that of the BS juglet,<sup>699</sup> it seems that there is a phase of experimentation during the LCI demonstrating the fluid and rapid transformation of the BS juglet into the PBR and BRI bilbil juglet.<sup>700</sup> A similar trend can be observed in relation to the apparent evolution of the PBR/BR jug from certain BSIII jugs. As mentioned above, this phenomenon appears to be restricted to the north of Cyprus, with Drab Polished ware apparently providing a precursor for BR ware in the south and west, particularly with regard to fabric.<sup>701</sup>

As an apparent precursor of the BR bilbil, particularly in terms of its distinctive shape, it is therefore likely that the BS juglet was also a container for a liquid form of opium. In this regard, the incised decoration on the body of these vessels may have again been meant to depict opium oozing from an incised opium poppy capsule, albeit in a far more schematic format than represented by the decoration of the BRI juglet. Once again, however, the lack of residue evidence supporting this hypothesis means that the BS juglet can only provisionally be considered as possible evidence for the consumption of opium and the induction of ASCs.

In relation to the BS III/V juglet, it has also been noted that the inspiration for the development of these vessels may have come from the equally distinctive Tell el-Yahudiyeh (TEY) juglet (**Fig.3.57**), imported to Cyprus from the Levant and Egypt.<sup>702</sup> Examples of these vessels from Cypriote contexts usually have a piriform or biconical body, narrow tapering neck and everted rim, handle from just below the rim

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<sup>695</sup> Åström (1972:81-82).

<sup>696</sup> See, however, 8 examples of BS juglets with conical ring-bases from Tomb I at *Morphou-Toumba tou Skourou*, Vermeule & Wolsky (1990:184). BS imitations of TEY juglets (see below) always have button or conical bases.

<sup>697</sup> Åström (1972:84-87); Vermeule & Wolsky (1990:362).

<sup>698</sup> Eg. Pecorella (1997:206, S.26-28); Vermeule & Wolsky (1990:181, TL.145, TL.606).

<sup>699</sup> Johnson (1980:Pl.VI.2); Merillees (1989); Nicolaou & Nicolaou (1989:Pl.XXVIII); Pecorella (1997:Fig.49).

<sup>700</sup> Vermeule & Wolsky (1990:362). Cf. Hennessey (1964:Pl.LXII).

<sup>701</sup> Herscher (1998).

<sup>702</sup> Negbi (1978). Cf. Kaplan (1980;1984).

to the shoulder and a narrow, 'button' base.<sup>703</sup> They are generally without slip, but burnished to a dark colour (brownish-black, grey or yellow-brown) and are decorated on the body with incised geometric patterns (lines, zigzags, triangles, squares etc.).<sup>704</sup> As many early BS III/V juglets appear to be imitations of these imports (**Fig.3.58**),<sup>705</sup> the close association between the two vessels seems clear. Given these links, it is therefore possible that the TEY juglet was another ceramic container for opium or comparable psychoactive,<sup>706</sup> perhaps the first in a series of distinctive vessels used for this purpose. Again, though, without any residue evidence, these vessels can not be considered anything more than tentative possible evidence for opium consumption.

### Other Wares

Turning from possible antecedents and precedents of the BR bilbil juglet to consider contemporary vessels, it is notable that a number of juglets that appear to mimic the distinctive bilbil shape have been discovered in other Late Cypriote wares and in materials other than pottery. This includes juglets in the LCA's other characteristic fine ware, WS ware (**Fig.3.59**),<sup>707</sup> and imitations in alabaster (**Fig.3.60**)<sup>708</sup> and glass (**Fig.3.61**).<sup>709</sup> An imitation of a BRI jug has also been recorded in Cypro-Geometric I White Painted I ware,<sup>710</sup> which must have been made long after the BRI prototypes ceased to be produced (ca.200-400 years). The repetition of the distinctive shape of the BR bilbil juglet and, in the rare case of the painted WS imitations, the mimicking of the decoration, strongly supports the notion that this shape was of significant symbolic importance. As with the previously discussed cases where relevant residue analysis is lacking, however, such vessels can only tentatively be argued to have contained opium and, thereby associated with its consumption.

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<sup>703</sup> For specific examples see Courtois (1981:45-47, Fig 18); Crewe (2009:36, Nos.39-41); Schaeffer (1936:140, Fig 30); Vermeule & Wolsky (1990:386-387; Fig.3.181);

<sup>704</sup> Kaplan (1980:1-15). Cf. Åström (1972b:130-132).

<sup>705</sup> Negbi (1978). Cf. Courtois (1981:44, Fig.3.36.6); Hennessey (1964:T.10.6); Karageorghis (1965:T1.7,60&69); Nicolou & Nicolou (1989:T.2A.415); Vermeule & Wolsky (1990:386-387; Fig.3.181).

<sup>706</sup> If the depiction of water lilies on a Lisht/TEY juglet from Morphou-*Toumba tou Skourou* [Vermeule & Wolsky (1990:T.V.24, Pls.182-183), see also Kaplan (1980:Figs.3.126-127)], relates to the containers contents, then a psychoactive preparation derived from the Egyptian Blue Water Lily is certainly a possibility. Cf. Emboden (1978; 1981; 1989).

<sup>707</sup> Åström (1972:Fig.3.LXXXII/2); Dikaios (1969:T.14.2, Pl.215/1); Johnson (1980:LXI/7); Karageorghis (2002:Figs.3.37); Merrillees (1985:Pl.VI.13; 2007); Nicolou & Nicolou (1989:T.2A.42, 271, T.2B.228,423); Vermeule & Wolsky (1990:230, TL315). These are often undecorated.

<sup>708</sup> Jacobsson (1989); Karageorghis & Merrillees (2007:Fig.3.6); Nicolou & Nicolou (1989:T.2A.24, 180).

<sup>709</sup> Gjerstad (1934:358, No.32, Pl.LXVI); Jacobsson (1989); Karageorghis & Merrillees (2007:Figs.3.1, 3&4).

<sup>710</sup> Karageorghis (1976d:78-79, Fig.3.2).

### **Poppy-shaped Bird Rhyta**

The final Late Cypriote ceramic vessel type requiring discussion here is the relatively rare bird rhyta in Myc.IIIA/B ware, found within two separate tombs at Enkomi.<sup>711</sup> These vessels consist of a globular or piriform body, a wide mouth with everted rim, an elongated, tapering funnel at the bottom and a loop handle attached to the body (**Fig.3.62**). Also attached to the body are a bird head protome and curved projections to depict wings. Painted decoration consists of series of concentric bands, with a panel centred on the body containing a wavy line motif or what appear to be birds in flight. A direct parallel for these vessels is known from Prosymna in the Greek Argolid.<sup>712</sup>

The form of these vessels again suggests the depiction of the opium poppy capsule, with the body and wide, everted mouth reminiscent of the capsule and stigmatic disc respectively and the elongated funnel suggesting its long stem. In this regard, it is interesting to note that the previously mentioned rhyta from Mochlos<sup>713</sup> demonstrate another variation of the Aegean-style rhyta apparently shaped to represent the opium poppy (**Fig.1.18**). While these two ‘octopi’ rhyta from Crete bear designs that appear to represent incisions on the capsule oozing opium latex, comparable designs are not obvious on the two Cypriote bird rhyta, although it is possible that the wavy line motifs on the bodies may be a rather schematic depiction of this. As such, the resemblance to an opium poppy is not as strong for the Cypriote cases and any link to with opium and its consumption must be considered purely hypothetical. If these objects are representations of the opium poppy, however, it is also possible that the bird aspect of their decoration is a reference to the experience of ‘flight’ often described for opium induced ASCs (see below).

### **Non-ceramic Objects**

As mentioned in section 1.6.2, two non-ceramic artefacts uncovered from the Temple Precinct at Kition (see Section 6.1.2 for discussion of the precise depositional context) have also been associated with opium consumption. Rather than being containers for consumption via ingestion, however, these objects have been suggested

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<sup>711</sup> Courtois (1981:T.PT110.284, Fig 150); b: Dikaios (1969-71:T.10.103, Pl.210/47).

<sup>712</sup> From Cist V, Tomb XXXIV, Blegen (1937:Fig 261).

<sup>713</sup> Nicgorski (1999).

to have been used to inhale the fumes produced by burning the opium latex,<sup>714</sup> a popular method of consuming this psychoactive substance in recent history.<sup>715</sup>

The first object in question is an ivory tube (13.75cm long, 2.1-2.6cm diam.) decorated with incised and drilled patterns and hollowed from one end for a length of ca.46mm where an intersecting opening was drilled in from one side (**Fig.3.63**).<sup>716</sup> As this side opening had “distinct traces of burning around it”, Karageorghis interpreted the object as a smoking pipe.<sup>717</sup> The precise nature of these “traces of burning”, however, are questionable as published images of the object show dark areas which may be traces of burning all along the object, not just around the side hole.<sup>718</sup> Nor have any scientific analyses been conducted in order to assess the nature of such marks. Furthermore, as Smith points out, a bowl would need to be attached to the side hole in order to smoke opium, reducing the likelihood of burning around this hole, while the dimensions of the hollowed out section of the pipe are also unsuited to such a function.<sup>719</sup> Indeed, the size and form of this object suggest instead that it may have been handle (perhaps for a bronze mirror) rather than a smoking pipe.<sup>720</sup> The number of similar ivory tubes recovered from Late Cypriote contexts<sup>721</sup> further suggests this interpretation.

The second object from Kition associated with opium smoking is a tapering terracotta cylinder (23cm high, 26cm base diam., 19cm rim diam.) with a rounded base rim, pierced by a pair of circular holes and marked with a pair of identical Cypro Minoan signs, all immediately above the base (**Fig.3.64**).<sup>722</sup> The rim is broken and uneven. Karageorghis suggests that this object was used to inhale opium fumes,<sup>723</sup> following a similar interpretation for another clay cylinder from the shrine of the ‘Poppy Goddess’ at Gazi.<sup>724</sup> A number of factors, however, argue against this interpretation. Firstly, there is no evidence that associates the cylinder in any way with fire, such as traces of burning.<sup>725</sup> Secondly, as the cylinder was apparently a

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<sup>714</sup> Karageorghis (1976a).

<sup>715</sup> Hodgson (1999); Lee (2006).

<sup>716</sup> Karageorghis & Demas (1985:117; Object No. 4267, Pl.CXXIII).

<sup>717</sup> Karageorghis (1976a:127).

<sup>718</sup> Karageorghis (1985: Object No. 4267, Pl.CXXIII).

<sup>719</sup> Smith (2009:61).

<sup>720</sup> See also Smith (2009:61).

<sup>721</sup> Vermeule & Wolsky (1990:221).

<sup>722</sup> Karageorghis (1985:104, #4219, Pls.CXI, CXCII); Karageorghis & Demas (1985: 76).

<sup>723</sup> Karageorghis (1976a:127). See also Smith (2009:65).

<sup>724</sup> Kritikos & Papadaki (1967:24).

<sup>725</sup> Karageorghis (1976:128).

fixture of at least two subsequent floors of Temple 5 at Kition (see Section 6.1.2),<sup>726</sup> its base would have been buried around 15cm beneath the surface of the later floor,<sup>727</sup> covering the two holes near the base. As the use of the device for inhalation would require these holes to be clear to facilitate the flow of air, the partial burial of the object would have precluded this function in these later phases. Finally, the broken rim of the cylinder strongly suggests that it was the lower portion of a larger object. If so, both its form and discovery as a fixture within a temple suggest that it may have actually been the base of a terracotta offering stand, similar to those found at Myrtou-Pighades.<sup>728</sup>

Given these arguments, it therefore seems highly unlikely that either of these two objects from Kition were actually used to inhale opium fumes. As there does not appear to be any clear evidence linking these objects with opium consumption, such an association must for now be considered purely speculative.

In concluding this discussion of Late Cypriote artefacts that might be directly associated with the consumption of opium, it is necessary to point out that it is virtually impossible to concretely establish the dosage at which this psychoactive was consumed. Even in the cases where opium alkaloid residues have been discovered within a particular vessel, it is not possible to establish the concentration of opium latex that was originally dissolved within the solution contained within. As these vessels held psychoactive contents, however, it is safe to assume that these were intended to be consumed in sufficient quantity for its psychoactive properties to be noticeable. Particularly in the case of opium, however, this would have only required relatively small doses.<sup>729</sup> As the particular psychoactive effects experienced upon consuming this substance are highly relevant to developing an interpretation of the meaning of this consumption, these effects are discussed in detail below.

### 3.3.2 Evidence for Alcohol Consumption

The second psychoactive substance that appears to have been consumed in significant quantities within Late Cypriote society is alcohol. This is unsurprising

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<sup>726</sup> Karageorghis & Demas (1985:76, Pl.XCIII:4).

<sup>727</sup> The section of this relevant area shows that Floor III was ca.15cm above Floor IIIA, Karageorghis & Demas (1985:Pl.47/2).

<sup>728</sup> Åström (1972:259, Fig.3.LXXI/5); Taylor (1957:Fig.3.23/329,330).

<sup>729</sup> Räscher (2005:405).

given the abundant textual, iconographic and artefactual evidence from throughout the East Mediterranean region suggesting the production, trade and consumption of alcoholic beverages on a relatively large scale during the Bronze Age. Economic texts from the region commonly list beer and wine as commodities that was stored and distributed in large quantities<sup>730</sup> and vessels labelled with details regarding the vintage of wine contained within are also known.<sup>731</sup> Mythological texts also contain numerous references to the consumption, and occasionally production, of these beverages, often in large quantities (for example, as discussed above for Ugartic, Hittite and Egyptian rituals).<sup>732</sup> Iconographic evidence includes the abundant Near Eastern banquet scenes discussed above that appear to depict people consuming beer from pots via straws and possibly from bowls/cups.<sup>733</sup> The production of wine has also been depicted in Egyptian paintings.<sup>734</sup> As a result, numerous ceramic forms from across the region have been associated with the storage, transport and consumption of alcohol.<sup>735</sup> Recently, organic residue analysis techniques have recovered traces of wine, beer and possibly other fermented drinks from many of these ceramic vessels.<sup>736</sup> This has allowed for the more specific identification of those vessel types that can be associated with alcohol consumption.

It is interesting to note that in the East Mediterranean Bronze Age, wine appears to have been more valued than beer and was the beverage of choice for the upper strata of various societies.<sup>737</sup> Hamilakis suggests that this was probably related to the fact that the raw ingredients for the former (primarily grain) were more plentiful and accessible than those for the latter (grapes), which required more labour to produce and were a riskier crop.<sup>738</sup> Sherratt also argues that finely crafted drinking vessels in silver and gold were also likely to have been used for the consumption of

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<sup>730</sup> Joffe (1998:305). Cf. Milano (1989); Ventris & Chadwick (1973).

<sup>731</sup> Guasach-Jané (2008:22); McGovern (1997); Murray (2000:596-599).

<sup>732</sup> Bryce (2002:190); Haas (1994:669-673); Civil (1964); Depauw & Smith (2004); Darnell (1995); McLaughlin (2001); Michalowski (1994).

<sup>733</sup> Evans (1935:379-396, Pl.XXXI); Joffe (1998:304-305, Fig.3.5); Katz & Voigt (1986:Figs.3. 7, 10); Murray (2000:Fig.3. 23.19); Ozguc (1988 Fig.3.64); Teissier (1984: 10-11, 64, Cat.Nos.63, 203-208, 350, 361-364, 366); Weisgerber (2005); Wright (2004:35-49, Figs.3. 15-17); Yasur-Landau (2008:Pl.LXVII); (1984:10-11, 63-64, Cat.Nos.63, 88, 89, 209, 352-360).

<sup>734</sup> Guasach-Jané (2008:11-24); Murray (2000); Weisgerber (2005:Abb.7).

<sup>735</sup> Hamilakis (1999:49); Helwing (2003); Joffe (1998:305); Schoop (2011); Wright (2004).

<sup>736</sup> Beck et.al. (2008); Guasach-Jané (2008); Guasach-Jané et.al (2004; 2006); Hamilakis (1999a; 1999b); Katz & Voigt (1986); McGovern (2003); McGovern et.al. (2008; 2009); Tzedakis & Martlew (2001); Wright (2004).

<sup>737</sup> Hamilakis (1999:44); Murray (2000:577-578); Poo (1995:28).

<sup>738</sup> Hamilakis (1999:44).

wine with considerable ostentation,<sup>739</sup> although there is little reason to think that they were not also used to consume other alcoholic beverages.

In the case of Late Cypriote evidence for alcohol consumption, the lack of textual references and the limited range and nature of iconographic references means that contextualised evidence for such consumption consists almost entirely of ceramic vessels that can be convincingly associated with alcohol. Such vessels can be divided between closed shapes that were likely containers for the transport of alcoholic beverages and open shapes that were probably used for the mixing, serving and drinking of these liquids. At present, however, only a handful of the vessel types found in Late Cypriote deposits have been analysed for organic residues, meaning that more traditional avenues of archaeological reasoning are often required to evaluate those types that might constitute reliable evidence for alcohol consumption.

### **Closed Shapes**

Closed shapes from the Late Cypriote ceramic repertoire that may have contained alcoholic beverages include jugs, juglets, bottles, flasks and the more sealable jars and amphorae. While jugs occur in almost all Late Cypriote wares, they are most common in Plain White Wheel-made ware (PWW), BR and Bucchero (in the LCIII),<sup>740</sup> with the latter two possibly associated with opium dissolved in wine. Distinction should be made, however, between those jugs that appear to have been sealable for storage and transport and those that were not, and were therefore probably used as serving vessels, perhaps to transport liquids from a larger storage vessel such as a pithos. In this regard, as noted above, the relatively wide neck and mouth of the BR jug (**Fig.3.48-49**) would have made it difficult to seal, suggesting that it was a serving vessel, rather than a container in which liquids were stored or transported. This may also be the case for most BS, Bichrome Wheel-made and PWW jugs. Many of the jugs in other wares, however, do appear to have been sealable, suggesting that they were more suited for transport or storage of liquids, perhaps wine.<sup>741</sup> Of particular note, jugs with strainer spouts were probably associated with alcoholic beverages as the most likely liquids to have required straining include wine and beer,

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<sup>739</sup> Sherratt (1995:19-20, 26)

<sup>740</sup> Åström (1972).

<sup>741</sup> Of relevance here, an LMIIIA2 jug from the Cemetery of Armenoi, Crete contained traces of resinated wine and/or other fermented beverages McGovern et.al (2008:194, Table 2); Tzedakis & Martlew (2001:Cat.No.168). Merrillees also had the LMIB Abydos Jug and Marseille Ewer analysed and both indicated wine, although details of the analysis are not published, Merrillees (1982: 250).

to filter out any pomace<sup>742</sup> or grain husks respectively. Strainer jugs occasionally occur in BR and WPW wares (**Fig.3.65-66**).<sup>743</sup>

Juglets, bottles and flasks in Late Cypriote wares also appear to have been sealable containers. Juglets occur predominantly in BR, BS (both already discussed in detail), White Shaved ware (hereafter WSh, **Fig.3.67**) and also in glass. Bottles occur almost exclusively in the form of spindle bottles of BR (**Fig.3.45**) or Red Lustrous Wheel-made ware (hereafter RLWM, **Fig.3.68**).<sup>744</sup> In the case of all but the RLWM bottle, the small size of these juglets and bottles argues against them containing alcoholic beverages. Instead they are likely to have contained liquids of high value even in small quantities such as psychoactives and perhaps perfumed oils. Although the RLWM spindle bottles have a slightly larger capacity, which would make them somewhat more suitable as containers for alcoholic beverages, organic residue analysis of these vessels suggests that they instead contained fat or oil and compounds suggestive of beeswax, the latter possibly used as a waterproofing agent.<sup>745</sup> Arm-shaped vessels of RLWM ware (**Fig.3.69**) were found to contain comparable organic residues, suggesting that these distinctive vessels also held fat or oil.<sup>746</sup> As both RLWM shapes have both been found in association with ‘bathtubs’,<sup>747</sup> perfumed oil seems to be the most likely contents. The BR spindle bottle may have been an imitation of the more frequently occurring RLWM spindle bottle and, therefore, held similar contents.

Flasks are generally lentoid in shape and almost exclusively occur in BR and RLWM wares (**Figs.3.70-71**), although the BR variety tends to be small and without lugs.<sup>748</sup> The RLWM vessels have the far larger volume, while the lugs occasionally found either side of the neck suggest that they were designed to be opened and sealed repeatedly, making them ideal for frequent personal use, hence the common labelling of this shape as a pilgrim flask.<sup>749</sup> Organic residue analysis of RLWM pilgrim flask sherds from Kazaphani (Cyprus) found traces of bitumen, probably used to

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<sup>742</sup> Grape skins etc. left in the wine to aid fermentation.

<sup>743</sup> Cf. Hadjisavvas (1991); Dikaios (1969-71:Pl.76/21).

<sup>744</sup> Åström (1972).

<sup>745</sup> Steel et.al. (2007). See also Åström (1969:19).

<sup>746</sup> Steel et.al. (2007).

<sup>747</sup> At Ayios Iakovos-Dhima in Cyprus and Kuşaklı in Anatolia, Gjerstad et al. (1934: 356-361); Schoop (2011:249-250).

<sup>748</sup> Åström (1972).

<sup>749</sup> Åström (1972); Eriksson (1993:25, Fig.3.5b).

waterproof the vessel.<sup>750</sup> Although it is possible that lentoid flasks in either ware once held alcoholic beverages, there is currently a lack of residue evidence to support this possibility.

With regard to smaller Aegean-style vessels commonly found in Late Cypriote contexts, organic residue analysis suggests that the smaller Aegean stirrup jars contained olive oil.<sup>751</sup> Perfumed oil again seems a likely substance to have been contained within these vessels. The wide mouths of Aegean piriform jars and alabastra, however, suggest that they contained either dry goods or viscous liquids such as honey or most likely perfumed unguents (in the case of the alabastra).

Concerning sealable jars, it is unlikely that storage jars such as pithoi or large Plain White Hand-made (PWH) jars were used to store alcoholic beverages for long periods as their size would make sealing them to be airtight difficult.<sup>752</sup> Indeed, such vessels were probably used to store a range of goods, making it difficult to associate such vessels with alcohol in the absence of residue or other corroborating evidence. Somewhat smaller, sealable storage jars, however, are ideal candidates for the long distance trade of wine, as appears to be the case for the Canaanite jar (**Fig.3.72**), which organic residue analysis suggests held resinated wine.<sup>753</sup> These vessels have long been associated with the LBA trade of wine throughout the East Mediterranean, primarily as their form is reminiscent of Classical Period wine amphorae. Their pointed bases were probably designed to strengthen them for long distance transport and perhaps also the internal stresses introduced by continued fermentation of wine held within.<sup>754</sup> Furthermore, contemporary Egyptian amphorae with an almost identical form were often found bearing labels confirming their contents as a particular vintage of wine.<sup>755</sup> A range of other commodities have also been found within Canaanite Jars, however, suggesting that they were in fact multi-purpose

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<sup>750</sup> Steel et.al (2007:194-195). In a vaguely comparable LMIII globular flask traces of animal fat were found, perhaps suggesting the use of such vessels for storing milk, Beck et.al. (2008:32, Table 5); Tzedakis & Martlew (2001:Cat.No.30).

<sup>751</sup> Beck et.al. (2008:23, Table 3); Tzedakis & Martlew (2001:Cat.No.6).

<sup>752</sup> Analysis by McGovern, however, suggests the storage of resinated wine in series of EM-MM pithoi from Crete, McGovern et.al (2008:180-181, Table 3.1); Tzedakis & Martlew (2001:Cat.Nos.124-127, 129, 143-144).

<sup>753</sup> Canaanite jars from the Cult Centre in the Citadel of Mycenae, the palace of Amenhotep III at Thebes and the Ulu Burun shipwreck contained traces of tree resin (terebinth or myrrh), tartaric acid and tartrate, strongly suggesting that they contained resinated wine, McGovern (1997); McGovern et.al (2008:194-195, Table 3.1); Tzedakis & Martlew (2001:Cat.No.140). Contra. Stern et.al. (2008) concerning the Ulu Burun samples.

<sup>754</sup> Leonard Jr. (1995).

<sup>755</sup> Guasch Jané (2008:25-28).

transport vessels.<sup>756</sup> Despite this, it may still be possible to infer that a particular, complete example of this vessel type contained an alcoholic beverage if it was found in close association with other vessels linked to alcohol consumption.

Other sealable vessels of foreign origin may also have contained wine. Indeed, organic residue analyses also suggest that larger varieties of the stirrup jars in Aegean wares also contained wine or a mixed fermented beverage.<sup>757</sup> As with the Canaanite jar, however, the association of such vessels with alcohol should be evaluated against the presence or absence of other evidence for alcohol consumption.

There is currently no residue evidence from Late Cypriote contexts to associate any vessels with the storage or transport of beer.

### **Open Shapes**

Open shapes from the Late Cypriote ceramic repertoire include cups, kylikes, tankards, craters and bowls. Of these, cups, tankards and craters clearly appear to be designed for the presentation or consumption of liquids.

The designation of a particular vessel as a cup is generally reserved for Aegean-style wares (**Fig.3.73**) as the smaller open vessels with single handles in local wares are all wide enough at the rim to be described as bowls. Although it is possible that these cups were used for the consumption of liquids other than alcohol, the discovery of this shape in imported ware fits into the trend of ostentatious consumption of symbolically valuable alcoholic beverages.<sup>758</sup> Furthermore, organic residue analysis of such vessels from Aegean contexts recovered traces of resinated wine and possibly other fermented beverages.<sup>759</sup> Similar residues have also been found in Aegean occurrences of other Aegean-style drinking vessels, also found in

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<sup>756</sup> Leonard Jr. (2005:250-252. Cf. Stern et.al. (2008).

<sup>757</sup> McGovern et.al (2008:194, Table 2); Tzedakis & Martlew (2001:Cat.Nos.165-166). Evans reported the discovery of wine residues from a number of LHIIIB stirrup jars from the Cult Centre in the Citadel of Mycenae, although the details of the analysis are unpublished, Tzedakis & Martlew (2001:Cat.Nos.134-135, 180). Olive oil was also detected, which is suggested to have been used to seal the wine.

<sup>758</sup> Cf. Sherratt (1995:19-20, 26)

<sup>759</sup> An LHIIIA2 'mug' from Mycenae contained traces of a compound suggestive of unresinated wine Beck et.al. (2008:43-44, Table 8); Tzedakis & Martlew (2001:Cat.No.157). A LMIIIA2 cup from the Cemetery of Armenoi contained traces of resinated wine and possibly other fermented beverages, McGovern et.al (2008:194, Table 2); Tzedakis & Martlew (2001:Cat.No.169).

Late Cypriote contexts, such as the kylix (**Fig.3.74**)<sup>760</sup> and skyphos (deep bowl, **Fig.3.75**).<sup>761</sup>

The tankard is a shape that occurs in a number of Late Cypriote wares, including White Painted ware (WP),<sup>762</sup> WS, Black Lustrous Wheel-made ware (BLWM), Bichrome Wheel-made ware (**Fig.3.76**, often called jugs) and WPW ware, although it is most commonly found in BR ware (**Fig.3.77**). Although organic residue analysis is yet to be conducted on this vessel shape, it occurs only in fine wares, usually with a significant investment in decoration. Like the Aegean-style cups, these vessels appear to have been used for the ostentatious consumption of alcohol. Indeed, the decline in the tankard shape in the LCII period is most likely associated with the widespread adoption of Aegean-style drinking vessels such as this, the kylix and skyphos.<sup>763</sup>

Craters are predominantly found in PWW and Aegean-style ware (**Figs.3.78-79**), with the latter (both imported and locally produced) gradually replacing the former by the LCIII period. Classical textual sources abound for the use of these vessels for mixing (usually with water) and serving wine,<sup>764</sup> and the same function is generally assumed for Bronze Age examples. Although organic residues of such vessels are lacking, the common discovery in LC tomb deposits of bowls inside craters<sup>765</sup> suggests that they were the centrepiece of a ceramic set that was probably used for mixing and serving wine.<sup>766</sup> Steel further argues that the prevalence of such drinking sets in Late Cypriote tombs provides evidence for the consumption of alcohol during mortuary ritual akin to that suggested for the *marzēah*.<sup>767</sup>

Given these observations, cups, kylikes, skyphoi, tankards and craters from Late Cypriote contexts were all likely to be associated with alcohol consumption. This is taken to include metal examples in addition to ceramic varieties. Although some of these vessels may have been unused in the context in which they were found

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<sup>760</sup> McGovern et.al (2008:194, Table 2); Tzedakis & Martlew (2001:Cat.No.167). Evans reported the discovery of wine residues from a LHIIIB kylix from the Cult Centre in the Citadel of Mycenae, although the details of the analysis are unpublished, Tzedakis & Martlew (2001:Cat.No.136).

<sup>761</sup> Analysis of an LHIII B/C skyphos from Thebes reportedly detected tartaric acid and barley, suggesting wine or perhaps a mixed fermented drink, although the details of the analysis are unpublished, Tzedakis & Martlew (2001:Cat.No.174).

<sup>762</sup> LCA varieties of this MCA ware type.

<sup>763</sup> Steel (1998:290-292; 2002:109-110);

<sup>764</sup> Odyssey 4:244, Fagles (1996:131); Sherratt (2004:205-206).

<sup>765</sup> South (2008, 313); Steel (2004b:174). See Chapter 5 for specific examples.

<sup>766</sup> Steel (1998: 290; 2002:109)

<sup>767</sup> Steel (1998: 290; 2002:109)

(particularly within tombs), such functional variation should be observable from a detailed contextual analysis.

The Plain and Coarse ware bowls found in Late Cypriote contexts, on the other hand, were likely to have been used for a range of purposes. In particular the common PWW bowl (**Fig.3.80**) is such a flat shape that it is occasionally referred to as a plate, making it an ideal candidate for serving food, rather than liquid. Bowls in fine wares such as the BRI/II (and Monochrome) hemispherical bowl, BRII Y-shaped bowl or carinated cup (**Fig.3.81**), WS ‘milkbowl’ (**Fig.3.82**) and Aegean-style skyphoi (see above), however, are more likely to have been used for consuming liquids. The BRII y-shaped bowl, in particular, with its narrow bottom half, appears to be much more suited to holding liquids, and is even referred to as a carinated cup.<sup>768</sup> While organic residue analysis of WS bowl sherds from Cyprus suggests that these vessels were used to consume cooked meals containing meat and animal fat, vegetable oil, leafy vegetables and pot herbs, the discovery of compounds from pine resin also suggest they were used to consume resinated wine.<sup>769</sup> The discovery in Late Cypriote tombs of BR, WS and even shallow PWW bowls within craters,<sup>770</sup> further suggests the regular use of these vessels for drinking wine. As such, while it appears that Late Cypriote fine ware bowls were used to consume a variety of foods and drinks, alcohol consumption seems to have been amongst the more common uses, particularly in the case of the BRII y-shaped bowl. As with other open shapes, a detailed contextual analysis should help to clarify such patterns of use.

### 3.3.3 Evidence for Other Psychoactives

At present, there is little evidence that can be linked with the Late Cypriote consumption of other psychoactives beyond opium and alcohol. The identification of juglets in a range of wares that may have been containers for opium, however, does reinforce the idea that such small, closed shapes were associated with the transport of high value commodities such as psychoactives and perfumed oils. If the distinctive nature of some of these vessels was used to advertise their contents, as appears to be the case for the BR juglet, then it may be that other distinctive juglets may have done

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<sup>768</sup> Steel (2010:112).

<sup>769</sup> Beck et.al (2004).

<sup>770</sup> Examples include Ayios Iakovos-Melia Tomb 13; Enkomi, Cypriote Tombs 10 & 19; Enkomi French Tombs 49/2 & 49/11; Enkomi Swedish Tombs 6, 11, 13, 17, 18, 19 & 22; Kalavassos-Ayios Dhimitrios Tombs 6 & 11. See Chapter 5.

likewise. In this regard, the particularly distinctive White Shaved juglet may also have been designed to advertise its contents as a form of commodity branding. If so, one hypothetical inspiration for the form and decoration of these vessels could be the mandrake root (*Mandragora Officinarum*), which could be taken to tentatively suggest that they contained a psychoactive extraction of mandrake root. Without any supporting residue evidence, however, this must remain a purely speculative hypothesis.

The varied artefactual evidence discussed above is summarised in **Table 3.3**. This clearly sets out the likelihood that a particular vessel type can be associated with either opium or alcohol in order to effectively assess such evidence within a contextual analysis to investigate the possible contexts in which opium and alcohol were consumed. As suggested previously, however, this does not mean that an individual example of a particular vessel type should be considered definite evidence for the consumption of such substances in an isolated context. Rather, patterns in the distribution of a particular vessel type should be seen as a possible pattern of consumption for either opium or alcohol, with the likelihood as suggested in this table.

**Table 3.3 - Summary of the confidence with which various Late Cypriote vessels can be associated with particular contents.**

<b>Vessel Type</b>	<b>Suggested Contents</b>	<b>Confidence</b>
BRI-II 'bilbil' juglets	Opium solution	Very high. Shaped and decorated to depict an incised opium poppy as a form of commodity branding. Contents confirmed via organic residue analysis.
PBR juglets	Opium solution	High. Clear precursor to the BR 'bilbil' juglet. No residue evidence.
BRI-II jug	Opium solution or alcoholic beverage	Low-Medium. Shape and decoration reminiscent of an incised opium poppy, but lacks residue evidence. May have been an associated serving vessel.

<b>Vessel Type</b>	<b>Suggested Contents</b>	<b>Confidence</b>
BRII squat, wide-mouthed jugs	Viscous opium solution or other	Low. Shape not reminiscent of an opium poppy. No residue evidence.
BRI-II spindle bottle	Perfumed oil	Low-Medium. Shape possibly mimicking RLWM spindle bottle. No residue evidence.
Bucchero narrow-necked jug	Opium solution or alcoholic beverage	Low-Medium. Shape and decoration reminiscent of an opium poppy. No residue evidence.
Bucchero squat, wide-mouthed jugs	Viscous opium solution or other	Low. Shape not reminiscent of an opium poppy. No residue evidence.
Bucchero Amphora	Opium solution or alcoholic beverage	Low. Only on basis of ware. No residue evidence.
BS III/V bilbil juglet	Opium solution	High. Apparent precursor to the BR 'bilbil' juglet. No residue evidence.
TEY juglet	Opium solution	Medium. Possible inspiration for the BS 'bilbil' juglet. No residue evidence.
Bilbil-shaped juglets in other wares/materials	Opium solution	Medium. Shape mimicking BR 'bilbil'. No residue evidence.
Poppy-shaped bird rhyta	Opium solution	Low-Medium. Shape mimicking opium capsule. Possibly for libation. No residue evidence.
Jugs in other wares	Alcoholic beverage	Low-Medium. Probably used for a range of liquids. Contents possibly suggested by associated evidence. No residue evidence.

<b>Vessel Type</b>	<b>Suggested Contents</b>	<b>Confidence</b>
Strainer jugs	Alcoholic beverage	Medium-High. Strainers probably required to filter out pomace or grain husks. No residue evidence.
WSh juglets	Mandrake root extract or other psychoactive	Very low. Based only upon distinctive shape, possibly mimicking a mandrake root. No residue evidence.
RLWM spindle and arm-shaped bottles	Perfumed oil	Medium-High. Residue evidence for fat or oil. Occasionally associated with 'bathtubs'.
Flasks (RLWM & BR)	Alcoholic beverage or water	Low. No residue evidence other than bitumen as a sealant.
Small stirrup jars	Perfumed oil	Medium-High. Residue evidence for olive oil.
Pithoi	Various	N/A
Canaanite Jars	Wine or other commodities	Medium-High. Contents possibly suggested by associated evidence. Residue evidence for wine and other commodities.
Large stirrup jars	Wine or other commodities	Medium-High. Contents possibly suggested by associated evidence. Residue evidence for wine.
Aegean-style cups, kylikes and skyphoi	Alcoholic beverage	Medium-High. Associated with ostentatious alcohol consumption. Residue evidence for wine and possibly other fermented drinks.
Tankards	Alcoholic beverage	Medium. Associated with ostentatious alcohol consumption. No residue evidence.
Craters	Mixing and serving wine	High. Commonly associated with wine consumption in texts and iconography. Often found containing a drinking vessel. No residue evidence.

Vessel Type	Suggested Contents	Confidence
BRII Y-shaped bowls	Alcohol consumption	Medium-High. Base suited for trapping sediments. Contents possibly suggested by associated evidence. No residue evidence.
WS bowls	Alcohol consumption	Medium. Residue evidence suggests a range of uses, including wine consumption. Contents possibly suggested by associated evidence.
Bowls in other wares	Alcohol consumption	Low-Medium. Contents possibly suggested by associated evidence. No residue evidence.

### 3.4 The Psychoactives

As both opium and alcohol have been identified in association with a range of Late Cypriote ceramic evidence, a consideration of the production of these substances and the experiential characteristics of the ASCs induced by their consumption is of relevance to this thesis. It is important to note, however, that the experiential characteristics of these ASCs are heavily dependent upon the dose at which these substances are consumed.<sup>771</sup> Furthermore, the individual and cultural context of the consumer may also significantly influence the interpretation and subjective description of the ASC induced (see section 1.3).<sup>772</sup>

#### 3.4.1 Opium

Opium is the name given to the psychoactive milky sap (latex) of the opium poppy (*Papaver somniferum* Linnaeus), an annual flowering plant that is now found throughout the world, but thrives best in warmer, and particularly lime-rich soils.<sup>773</sup> It consists of a perpendicular single stem which typically grows to a height of three to four feet and bears white or purple flowers with four large concave petals which grow around an oval or globe-shaped seed capsule filled with up to two thousand tiny seeds

<sup>771</sup> Rättsch (2005:13-14).

<sup>772</sup> Bourguignon (1973a:14); Rättsch (2005:13-14); van der Walde (1968:58)

<sup>773</sup> Rättsch (2005:401-403).

**(Fig.3.83)**<sup>774</sup> The psychoactive latex is retrieved by incising the seed capsule (poppy head) at the end of the flowering phase while the fruit is still ripening, allowing the latex to coagulate on the exterior before being collected.<sup>775</sup>

The opium latex contains a number of psychoactive alkaloids (at least 36) collectively known as opium alkaloids.<sup>776</sup> These include morphine (2-23%), codeine (0.1-4%), papaverine (0.1-2%), narcotine (1-11%) and thebaine (0.1-4%), with the other alkaloids present in trace amounts.<sup>777</sup> The psychoactive effects of opium consumption are the result of a synergy between these primary alkaloids, with differing proportions of these producing noticeable variation in the psychophysical effects produced.<sup>778</sup> The effects manifest quickly and persist for six to eight hours and are said to be stronger when the opium is ingested than when it is smoked.<sup>779</sup>

The primary psychophysical effects of morphine are to eliminate sensations of pain (analgesic) and to induce a sense of euphoria.<sup>780</sup> In addition, morphine also induces sleep, causes visual hallucinations, suppresses appetite, impedes digestive function, reduces sexual desire, decreases body temperature, inhibits perspiration and suppresses coughing. Morphine consumption can also produce constipation. Codeine is a weaker analgesic and an antitussive and mild sedative that induces sleep.<sup>781</sup> Papaverine is a muscle relaxant and also increases blood flow throughout the body, thereby producing a physically energising effect.<sup>782</sup> This increase in blood flow also affects the genitals,<sup>783</sup> which has been interpreted as an aphrodisiac effect (see below). Narcotine is another cough suppressant,<sup>784</sup> while thebaine is a cerebral stimulant which counters the sedative and soporific effects of morphine and codeine.<sup>785</sup> According to Lee, the stimulation caused by papaverine and thebaine occurs in the initial stages after opium consumption and is subsequently replaced by the more sedative effects of morphine, codeine and narcotine.<sup>786</sup>

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<sup>774</sup> Hodgson (1999:11-13); Rättsch (2005:401-403).

<sup>775</sup> Merlin (1984:93); Rättsch (2005:404-405); Rudgley (1998:181).

<sup>776</sup> Lee (2006:46); Rättsch (2005:410).

<sup>777</sup> Rättsch (2005:410).

<sup>778</sup> Lee (2006:46); Rättsch (2005:410).

<sup>779</sup> Rättsch (2005:410).

<sup>780</sup> Lee (2006:48); Rättsch (2005:410); Roberts & Wink (1998:35-36).

<sup>781</sup> Lee (2006:49); Rättsch (2005:410); Samuelsson, G. (1999:456).

<sup>782</sup> Lee (2006:61).

<sup>783</sup> Lee (2006:46); Rättsch (2005:410); Roberts & Wink (1998:448).

<sup>784</sup> Samuelsson, G. (1999:457).

<sup>785</sup> Lee (2006:49).

<sup>786</sup> Lee (2006:60-62).

The possible aphrodisiac effects of opium consumption are still a matter of dispute. On one hand, the stimulation of the imagination caused by thebaine may include reveries of a sexual nature, while papaverine increases blood flow to the genitals.<sup>787</sup> On the other hand, it has also been claimed that the libido is simultaneously reduced.<sup>788</sup> Lee, therefore, argues that opium is not an aphrodisiac and suggests that such associations probably originated from the link between opium smoking and prostitution in China during the 18<sup>th</sup> and 19<sup>th</sup> centuries CE.<sup>789</sup> Although the suppression of sexual desire does suggest that opium can not technically be described as an aphrodisiac, the effects of thebaine and papaverine easily explain any sexual connotations associated with opium consumption.

Accounts of the experiential characteristics of the ASCs induced through opium consumption commonly describe feelings of an overwhelming sense of joy, blissfulness or euphoria and the relaxation of any tension and anxiety.<sup>790</sup> In addition, the sensation of flying or floating is also frequent,<sup>791</sup> with the combination of the two commonly interpreted as an ‘admission to paradise’.<sup>792</sup> Visual hallucinations experienced by opium consumers can exaggerate, multiply, colour or give fantastic shapes to observed objects.<sup>793</sup> Rättsch suggests that visions of a beautiful woman or goddess are also common, as are visions of a vegetative nature, which have been interpreted as encounters with the soul of the plant.<sup>794</sup> The visions described by Walter Colton, a Christian priest writing in the 19<sup>th</sup> century CE, include flying high in the heavens, listening to celestial music, being flung down onto a thunder cloud, into a roaring gulf and across a sea, encountering serpents and being plunged into depths of the sea where a mermaid lit a fire to warm him.<sup>795</sup> Telepathic and clairvoyant states are also described.<sup>796</sup>

Of particular interest to this study, these experiential descriptions of opium induced ASCs appear to correspond closely to a number of the previously discussed characteristics of such states argued to contribute to religious explanations of such

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<sup>787</sup> Lee (2006:46); Rättsch (2005:410); Roberts & Wink (1998:448).

<sup>788</sup> Lee (2006:65-66).

<sup>789</sup> Lee (2006:65).

<sup>790</sup> Hayter (1968:42); Lee (2006:62); Rättsch (2005:410).

<sup>791</sup> Hayter (1968:42, 48).

<sup>792</sup> Hayter (1968:42). As many of these accounts come from the experiences of European writers during the 19<sup>th</sup> century C.E., the interpretation of these experiences commonly feature Christian themes.

<sup>793</sup> Hayter (1968:44).

<sup>794</sup> Rättsch (2005:410).

<sup>795</sup> Colton (1836) cited in Hayter (1968:47-48).

<sup>796</sup> Rättsch (2005:410).

phenomena. This suggests that it is similarly possible for opium induced ASCs to be interpreted as encounters with the supernatural.

### 3.4.2 Alcohol

Alcohol is a term generally used for any beverage containing ethyl alcohol (ethanol), a compound produced via the process of fermentation, in which yeast cells convert sugar molecules into ethanol and carbon dioxide.<sup>797</sup> This process occurs naturally whenever microscopic yeast cells fall onto a sugar containing product,<sup>798</sup> but appears to have been intentionally utilised in human societies from at least the Neolithic to produce highly valued alcoholic beverages.<sup>799</sup> The sugar containing products most commonly used to produce alcohol include: grains to make beer; fruits, particularly grapes, to make wine; and honey to make mead. If the sugar content is sufficiently high, fermentation proceeds until the concentration of alcohol is around 15%, at which point the yeasts are killed.<sup>800</sup> Distillation can be used to increase this concentration, although there is little evidence to suggest that this technology was available during the Bronze Age.

Alcohol is generally consumed orally and absorbed into the bloodstream from the stomach and upper intestine.<sup>801</sup> As with most psychoactive substances, the psychophysical effects of alcohol consumption vary with the dose at which it is consumed, although relatively large quantities of low concentration alcoholic beverages (up to 15%) are required for high doses. Low to moderate doses generally produce feelings of relaxation and cheerfulness, reduce inhibitions and slightly impair judgement and motor skills.<sup>802</sup> At higher doses alcohol can induce lethargy, confusion and reduce memory, severely impair motor skills and heighten a range of emotions including affection and aggression.<sup>803</sup> Extreme doses can cause a loss of bodily functions, unconsciousness and even death.<sup>804</sup>

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<sup>797</sup> Meyer & Quenzer (2005:217).

<sup>798</sup> Meyer & Quenzer (2005:217).

<sup>799</sup> Katz & Voigt (1986); McGovern (2004).

<sup>800</sup> Meyer & Quenzer (2005:217). The relatively low alcohol concentration of beers results from the low percentage of sugars in the grain-based products (wort) used to produce it.

<sup>801</sup> Julien (2008:96); Meyer & Quenzer (2005:218).

<sup>802</sup> Meyer & Quenzer (2005:244).

<sup>803</sup> Julien (2008:107-109); Meyer & Quenzer (2005:244).

<sup>804</sup> Meyer & Quenzer (2005:246).

### **3.5 Organic Residue Analysis**

As mentioned above, a small program of organic residue analysis was conducted as a component of this thesis. This was designed to increase the body of direct LCA evidence for ASCs through the detection of residues diagnostic of particular psychoactive substances (primarily opium residues) within the various forms of pottery discussed in Section 3.3. Although this program of residue analysis was unable to detect such evidence, a brief summary of the methods used and their strengths and limitations are presented here in the hope that this information may prove fruitful for future research.

#### **Extraction of Archaeological Residues**

Organic residue analysis of an archaeological sample involves two distinct steps. First, the residues to be analysed must be extracted from the sample, usually a pottery vessel or fragment thereof, using an organic solvent. This generally involves pulverizing a sherd and extracting the residues using one or more solvents,<sup>805</sup> with the inner and outer surfaces of a pot sherd often first removed in an attempt to eliminate any contaminants.<sup>806</sup> This selection of material from the interior of the sherd also reflects the belief that residues absorbed within the pottery fabric are subject to less environmental degradation than surface residues.<sup>807</sup> This procedure, however, was considered unsuited to the program of residue analysis conducted for this thesis. As a destructive technique, such extraction methods can make permits for analysis more difficult to obtain and preclude the analysis of museum quality vessels. Furthermore, with the identification of opium alkaloids the primary analytical goal, the possibility that contaminants could influence the results was negligible.

Given that the non-destructive extraction of organic archaeological residues has previously been demonstrated as an effective extraction technique for subsequent Gas Chromatography-Mass Spectrometry analysis (GC-MS),<sup>808</sup> this extraction technique was therefore chosen. Samples were extracted using hot ethanol as a

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<sup>805</sup>Beck et al. (2004:14); Beeston et al. (2008b:87); Evans & Garner (2008:126,128); Evershed et.al. (1999:40); Garner (2008:144); Gerhardt et al. (1990:42); Tzedakis & Martlew (2001:27,28).

<sup>806</sup>Craig (2008:121); Evershed et.al. (1999:40).

<sup>807</sup>Beeston et al. (2008b:106); Evans & Garner (2008:126); McGovern (2003:53); Rottländer (1990:39).

<sup>808</sup>Garner (2008:144); Gerhardt et.al. (1990:46); Tzedakis & Martlew (2008:XIX-XX).

solvent as opium alkaloids are generally soluble within it.<sup>809</sup> Furthermore, ethanol is easily available, relatively cheap and relatively safe to use.

### **Analysis of Extracted Residues**

The extraction solvent containing the residue samples is subsequently analysed to identify their contents. While there are a range of techniques available for such analysis, GC-MS is now viewed as the most appropriate analytical technique for identifying archaeological organic residues.<sup>810</sup> Analysis via GC-MS involves the separation of the archaeological residue, which is usually a complex mixture of original molecules, degradation products and contaminants,<sup>811</sup> into its constituent compounds via Gas Chromatography and the subsequent identification of each compound using Mass Spectrometry.<sup>812</sup> GC-MS is well suited to detecting psychoactive compounds which are ‘diagnostic’ of a particular psychoactive substance. The vast majority of naturally occurring psychoactive substances are secondary products of plants, such as alkaloids and terpenoids, which not only exhibit good preservation, but are also relatively easy to separate and identify using GC-MS.<sup>813</sup> In addition, in cases where the biosynthesis of a particular compound is restricted to only a few, or even a unique plant, as is the case for most psychoactive compounds, these compounds are effective ‘biomarkers’ (diagnostic compounds) for the GC-MS technique.<sup>814</sup> Indeed, of relevance to the present study, GC-MS had already been successfully used in archaeological residue analyses aimed at searching for opium alkaloids<sup>815</sup> and other psychoactive alkaloids.<sup>816</sup> GC-MS equipment was kindly made available through collaboration with Dr Peter Licence and Mick Copper in the School of Chemical and Environmental Engineering at the University of Nottingham.

### **Sample Selection and Results**

Pottery samples for analysis were primarily selected from current and recently concluded excavations on Cyprus to reduce the possibility of post-excavation degradation of archaeological residues. This included material from tombs at

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<sup>809</sup> Moffat et al. (2004).

<sup>810</sup> Garner (2008:144); Koh (2006:2); Pollard et al. (2007:148).

<sup>811</sup> Pollard et al. (2007:137).

<sup>812</sup> For a more detailed discussion of these techniques, see Pollard et al. (2007:137-194).

<sup>813</sup> Oxenham et al. (2002); Pollard et al. (2007:153); Rafferty (2002:455).

<sup>814</sup> Pollard et al. (2007:153).

<sup>815</sup> Evans (1989); Koschel (1996); Stacey (2008: pers. comm.).

<sup>816</sup> Oxenham et al. (2002); Rafferty (2002; 2006).

Episkopi-*Bamboula*, Kalavassos-*Ayios Dhimitrios* and Kissonerga-*Ammoudhia* and from the settlement at Kissonerga-*Skalia*. The vast majority of vessels selected were BR shapes previously associated with opium (bilbil juglets and jugs) although a handful of BR bowls and small closed vessels in other wares (Bucchero, WSh, Drab-polished/PBR ware) also analysed. Two unprovenanced BR bilbil juglets from the Nottingham City Museum were also analysed.

As mentioned above, the analysis of these samples was largely unsuccessful. No opium alkaloids or compounds associated with other psychoactive substances were detected on any of the samples. Indeed, the lack of any compounds not clearly associated with modern contaminants suggests that the preservation of archaeological organic residues was particularly poor. As Cyprus experiences relatively wet winters, the seasonal flooding of sites may increase the degradation of organic residues on the island. Furthermore, the prevalence of limestone across the island is likely to result in high lime content of the water flooding such sites. Degradation of organic residues is more likely where vessels are subjected to lime-enriched water, with material from chamber tombs which are cut into this rock particularly affected.

Given these observations, it can be concluded that non-destructive extraction techniques are ill-suited to the extraction of archaeological organic residues from Cypriote samples, at least in the majority of cases where visible, surviving residues are lacking. For future programs of organic residue analysis on Cypriote material, the use of destructive extraction techniques may prove to be more effective.



## Chapter 4. Cypriote Mortuary Ritual

This chapter discusses material that provides a critical background for the detailed contextual analysis of evidence for Late Cypriote mortuary ritual presented in Chapter 5. It begins with a brief discussion of the significant limitations imposed on a study of Bronze Age mortuary ritual by the varied state of preservation of Cypriote tombs. Theoretical concerns which should also be taken into account when considering material from tomb contexts are then discussed. This is followed by a detailed review of Early and Middle Cypriote mortuary ritual, primarily based on previous studies of this material. This provides a vital contextual background for Late Cypriote mortuary rituals, which appear to continue these earlier practices with only a few changes (see section 5.0.1). The chapter concludes with a reconsideration of previous interpretations of Early and Middle Cypriote mortuary ritual, particularly with regard to the possible use of ASCs.

Unfortunately, for reasons of space a detailed re-evaluation of evidence from individual ECA and MCA tombs, similar to that conducted in Chapter 5 for LCA tombs, is not feasible. Previous studies of Bronze Age Cypriote mortuary ritual are, however, numerous<sup>817</sup> and already provide a detailed picture of the diversity of tomb assemblages and a range of interpretations for the ritual practices that created them.<sup>818</sup> In particular, Priscilla Keswani's detailed study of Bronze Age Cypriote mortuary evidence provides a number of valuable observations regarding such practices.<sup>819</sup> Remarkably, however, for such a detailed study, Keswani largely ignores the pottery assemblages found in the tombs, focusing primarily upon tomb architecture, the treatment of human remains and the deposition of metal artefacts as a proxy for wealth. As pottery makes up the vast majority of artefacts found in Cypriote Bronze Age tombs, this is a striking omission, which has limited discussion concerning possible components of mortuary rituals beyond the treatment of bodies. In categorising the artefacts found buried with the dead as 'grave goods', either the

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<sup>817</sup> Works which deal specifically with Bronze Age Cypriote mortuary ritual include Bright (1995); Crewe (2009); Davies (1997); Goring (1989); Herscher (1997); Keswani (1989; 2004; 2005); Manning (1998); Niklasson- Sönnerby (1987); Steel (1998; 2002; 2004b; 2008); Washbourne (2000); Webb (1992); Webb & Frankel (2008).

<sup>818</sup> Due to the lack of excavated Early and Middle Cypriote settlements, research concerning these periods has tended to focus upon mortuary evidence, resulting in a relatively detailed understanding of numerous aspects of mortuary ritual from this period.

<sup>819</sup> Keswani (1989a; 1989b; 2004; 2005).

personal belongings of the deceased or grave gifts offered by the living, Keswani assigns these artefacts a relatively minor, passive role in the enactment of Cypriote mortuary ritual. Conversely, while other scholars have considered certain categories of ‘grave goods’ in more detail (particularly certain pottery types),<sup>820</sup> these studies often focus upon a restricted number of tombs or artefact types and often consider the material without regard for its depositional context and possible role in mortuary practices. This and the subsequent chapter, therefore, seek to significantly advance the understanding of Cypriote mortuary ritual (particularly during the LCA) by emphasising the active role of pottery within such practices, with a specific focus on the possible use of ASCs.

#### **4.0.1 Tomb Assemblage Preservation**

Before considering evidence from Bronze Age Cypriote tomb assemblages it is first necessary to point out the limitations affecting their interpretation presented by wide variations in preservation. Unfortunately, Bronze Age Cypriote tombs are commonly found disturbed by ancient and modern looting, including poorly recorded ‘excavation’, and construction activity.<sup>821</sup> The distinctive and collectable nature of Bronze Age Cypriote pottery types such as Red Polished (RP), WS and BR wares has stimulated a market from museums and private collectors that has led to the looting and poorly recorded excavation of hundreds of Bronze Age tombs from the 19<sup>th</sup> Century onwards.<sup>822</sup> Moreover, a number of tombs appear to have been looted in antiquity,<sup>823</sup> presumably for the metalwork and other valuables commonly deposited within. Understandably, the amount of information relevant to mortuary practices that can be gleaned from such disturbed tombs is limited.

Even in cases where an ‘intact’ (unlooted) tomb is found, until quite recently the analysis or even recording of skeletal remains was rarely undertaken, with the occasional exception of the Swedish Cyprus Expedition excavation.<sup>824</sup> Additionally, the repeated flooding of Cypriote tombs has also proven to be particularly detrimental

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<sup>820</sup> Bright (1995); Crewe (2009); Goring (1989); Herscher (1997); Manning (1998); Niklasson-Sönnerby (1987); Steel (1998; 2002; 2004b; 2008); Washbourne (2000); Webb (1992); Webb & Frankel (2008).

<sup>821</sup> Hadjisavvas (2001c); Keswani (2004:34; 2005:343-344); Webb & Frankel (2009). See also Davies (1997); Defteros (2007).

<sup>822</sup> Hadjisavvas (2001c); Keswani (2005:344); Pilides (2008:6-7); Webb & Frankel (2009:55).

<sup>823</sup> Bright (1995:62); Keswani (2005:343).

<sup>824</sup> Harper (2008:2); Keswani (2004:34; 2005:344).

to skeletal material,<sup>825</sup> further reducing the amount of available information concerning those interred. Furthermore, as Keswani points out, the apparent Bronze Age practice of collective burial, and perhaps also the complex multi-stage treatment of remains and grave goods (discussed in section 4.2.2), can further confuse the interpretation of Cypriote mortuary ritual.<sup>826</sup>

The practice of repeatedly reusing tombs, via either sequential or simultaneous interments, became common on Cyprus at the start of the Bronze Age<sup>827</sup> and often resulted in the disturbance or destruction of earlier burials, mixing of individual complements of grave goods and the removal of earlier objects of value, such as metalwork.<sup>828</sup> During this process, earlier burials appear to have often been swept aside to make room for subsequent interments,<sup>829</sup> or perhaps even deliberately rearranged or removed as a secondary phase of burial.<sup>830</sup> This means that even intact tomb assemblages can contain heavily confused evidence that may be difficult to interpret due to the interference introduced by each subsequent burial.<sup>831</sup> Identifying patterns, such as the relationship between the age and sex of interred individuals with grave good types, has, therefore, proven quite difficult to establish in the Cypriote context.<sup>832</sup> As a result, Keswani suggests that any consideration of tombs containing collective burials must focus on the differences exhibited between larger burial groups, rather than on a comparison of the assemblages associated with a particular individual.<sup>833</sup>

A final complication to interpreting Bronze Age Cypriote mortuary ritual worthy of mention is the regional sampling bias that exists in the data set of published Bronze Age tombs. In particular, the Early to Middle Bronze Age data is dominated by tombs from Bellapais-*Vounous* and Lapithos-*Vrysi tou Barba* in the north of the

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<sup>825</sup> Harper (2008:2); Keswani (2004:24).

<sup>826</sup> Keswani (1989:52; 2005:344). See also Goring (1989:96).

<sup>827</sup> Keswani (2004:51).

<sup>828</sup> Keswani (1989:52; 2004:24; 2005:344).

<sup>829</sup> Webb (1992:88).

<sup>830</sup> Keswani (2004:24; 2005:344).

<sup>831</sup> Goring (1989:96); Keswani (2005:343-344).

<sup>832</sup> Keswani (2004:34).

<sup>833</sup> Keswani (2004:24; 2005:344).

island,<sup>834</sup> while the Late Bronze Age assemblage is dominated by tombs from Enkomi on the east coast.<sup>835</sup>

## **4.1 Theoretical Considerations**

In addition to recognising the problems specific to interpreting Bronze Age Cypriote mortuary assemblages, it is also necessary to recognise theoretical issues relating to the interpretation of mortuary evidence in general. A discussion of current ideas concerning the role that mortuary ritual commonly plays in human society, particularly in terms of belief, symbolism and the perpetuation of social life, is therefore presented here. This is followed by a brief review of prominent archaeological approaches to the study of mortuary remains and a focus upon the ways in which certain material remains of Late Cypriote mortuary ritual might be interpreted.

### **4.1.1 Ethnographic Studies**

Studies of human death and mortuary rites, based primarily upon ethnographic evidence,<sup>836</sup> have built up a detailed picture of the way in which human societies often view the death of a member of their society and subsequently deal with it. As to be expected, there are huge variations in the specific way different cultures react to death and conduct mortuary rites, but it is always a meaningful, rather than a random, reaction.<sup>837</sup>

In a review of much of this ethnographic research, Davies emphasises that practically all human societies possess formalised death rites, alongside the otherwise practical task of disposing of a body, suggesting that they must, therefore, perform a positive function within human society.<sup>838</sup> This function, or socio-political meaning,

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<sup>834</sup> Keswani (2004:27; 2005:346). For primary excavation reports of Vounous, see Dikaios (1940); Dunn-Vaturi (2003); Schaffer (1936); Stewart & Stewart (1950). For primary excavation reports of Lapithos, see Gjerstad et al (1934:33-162); Herscher (1978); Myers (1940-1945).

<sup>835</sup> Keswani (2004:28). For primary excavation reports, see Courtois (1971); Dikaios (1969-1971); Gjerstad et al (1934:467-575); Largarce & Largarce (1985); Murray, Smith & Walters (1900); Schaeffer (1936:67-143).

<sup>836</sup> Prominent examples include Bloch (1971); Goody (1962); Hertz (1960); Parker Pearson (1999). More general syntheses include Bloch & Parry (1982); Chidester (1990); Davies (2002); Metcalf & Huntington (1991).

<sup>837</sup> Metcalf & Huntington (1991:24). Robb also points out that within a single culture there can be variant burial treatments to cope with how people died in relation to central moral values. For instance, abbreviated burial programs for those of lesser social centrality (often children), elaborated programs for those of greater social standing (royal burials) or ostentatiously denying the usual mortuary treatment for people excised from moral communities (witches, heretics, suicides etc.), Robb (2007).

<sup>838</sup> Davies (2002:6).

is commonly interpreted in relation to maintaining the social order, which is usually presented ideologically as eternal and unchanging, whereby mortuary ritual is seen as an effective way of combating the challenge presented to a society and its social order by the death of one of its members.<sup>839</sup> From this functionalist perspective, mortuary ritual addresses the paradox between social eternity and physical mortality.<sup>840</sup>

Beliefs associated with death help address this paradox. Human cultures universally consider some part of an individual to continue on after the death of the physical body, a dynamic element which may variously be called the soul, life-force, social status or some other vital phenomenon.<sup>841</sup> Mortuary rituals, therefore, affect the transformation from the mortal state of the living to the immortal state of the dead.<sup>842</sup> This role of mortuary ritual was initially identified by Hertz and van Gennep, both of whom considered mortuary ceremonies as life-cycle rituals in which the deceased is first removed from the social group of the living and ‘reborn’ into the supernatural realm of the ancestors.<sup>843</sup> This ‘rebirth’ is not only a denial of individual extinction, but also a reassertion of society and a renewal of life in the afterlife.<sup>844</sup> “Almost everywhere, religious thought consistently denies the irreversible and terminal nature of death by proclaiming it as a new beginning.”<sup>845</sup>

This association between death and the renewal of life is commonly exhibited in mortuary ritual through the use of symbolism relating to fertility.<sup>846</sup> In addition to occasional references to human procreation, this link is commonly concerned with those aspects of fertility most important to the economic base of a society (i.e. the bounty of agricultural, foraging or hunting resources).<sup>847</sup> Tied in with this aspect of

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<sup>839</sup> Bloch & Parry (1982:15); Davies (2002:7). Bloch and Parry further argue that individuality and unrepeatable time are problems which must be overcome if the social order is to be represented as eternal, with both characteristically denied by the mortuary rituals which represent death as part of a cyclical process of renewal, Bloch & Parry (1982:15). See Parker-Pearson (1999:22-23) for a more detailed discussion of these functionalist interpretations.

<sup>840</sup> Davies (2002:7).

<sup>841</sup> Davies (2002:6); Goody (1962:361-362). These beliefs seemingly derive from the difficulties involved in a self-conscious being imagining the cessation of their own existence, Davies (2002:5).

<sup>842</sup> Davies (2002:3).

<sup>843</sup> Hertz (1960); van Gennep (1960:146-165). While Hertz saw this as a two stage process, van Gennep identifies all life-cycle ritual (rites of passage) as a three stage process involving separation, transition and then reincorporation.

<sup>844</sup> Hertz (1960:81).

<sup>845</sup> Bloch & Parry (1982:9).

<sup>846</sup> Bloch & Parry (1982).

<sup>847</sup> Bloch & Parry (1982:7).

mortuary ritual is the common belief that the spirits of deceased ancestors can influence such fertility.<sup>848</sup>

Also related to the link between death and the renewal of life is the common occurrence during mortuary ritual of festivities involving the consumption of food and alcohol, and occasionally performance involving music and dancing.<sup>849</sup> Davies considers that such activities introduce a necessary shift to a more positive mood, which combined with the link with fertility, emphasise that despite death, life goes on.<sup>850</sup> The adaptive advantage of such mortuary rituals, then, may be that they express victory over death and encourage a commitment to life despite the fact of death.<sup>851</sup> The convivial aspects of mortuary ritual, however, have also been emphasised in relation to the maintenance of social order and the renegotiation of social roles following the death of a social member.<sup>852</sup>

Another belief commonly reflected in mortuary ritual is the association of the corpse with impurity, which can be transferred to those who touch it.<sup>853</sup> Hertz argued that this belief stems from a consideration of the body of the recently deceased and its decay as representative of the transitional or liminal stage between life and death, which presents potential danger for the living.<sup>854</sup> Many cultures therefore employ rites of purification for mourners or for ritual specialists dealing with death, often involving water, fire or time.<sup>855</sup>

The possible use of ASCs during mortuary ritual is, unfortunately, a topic that has received little explicit consideration, despite the apparent frequency of the use of such phenomena in ritual practice in general. Metcalf and Huntington, however, provide a number of observations suggesting a possible role for ASCs in mortuary ritual, including the frequent use of percussion instruments and the consumption of large quantities of alcohol,<sup>856</sup> both of which are often used to induce ASCs. The

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<sup>848</sup> Dietler (2007:310); Metcalf & Huntington (1991:96); Parker-Pearson (1999:26).

<sup>849</sup> Davies (2002:40-41); Metcalf & Huntington (1991:53-68, 112-119). See also, Bloch (1971:138-171).

<sup>850</sup> Davies (2002:40-41).

<sup>851</sup> Davies (2002:6, 16). See also Bloch (1992).

<sup>852</sup> Clarke (2001). Such functionalist interpretations of mortuary feasting appear to be particularly common in archaeology.

<sup>853</sup> Davies (2002:39); Metcalf & Huntington (1991:80-82).

<sup>854</sup> Hertz (1960:46).

<sup>855</sup> Davies (2002:39).

<sup>856</sup> Metcalf & Huntington (1991:64-66,112,119). See also Bloch (1971:155); Davies (2002:41).

shamanic use of ASCs in order to guide the souls of the dead to the spirit realm<sup>857</sup> provides a clear example of the mortuary use of such phenomena.

Little has been said so far about the importance of emotion in mortuary ritual. Clearly, one of the most prominent reactions to death is intense emotion on the part of the survivors, primarily grief, but occasionally also fear and anger.<sup>858</sup> Metcalf and Huntington, however, point out that the psychological process of grieving should be considered to only partially intersect with the performance of death rites.<sup>859</sup> As such, they claim that although usually intense, emotional reactions to death are too varied and shifting to provide the foundation for a theory of mortuary ritual.<sup>860</sup> In terms of the advantages of conducting mortuary rites, however, Davies does point out that mortuary ritual often provides an important psychological benefit to mourners by providing a context for communal support to help individuals cope with their own grief and sense of hopelessness.<sup>861</sup>

A final point worthy of discussion here is the audience towards which the performance of mortuary ritual is directed. While most considerations of mortuary ritual stress the manner in which it can influence or control a range of relationships between the living, Dietler points out that mortuary rites can also be directed towards the dead.<sup>862</sup> As discussed above, many cultures believe that the spirits of the dead can have very real effects on the world, either benevolent or malevolent. As such, many funerary and post-funerary rituals are designed to pacify the dead and/or harness their power for the benefit of the living.<sup>863</sup>

#### 4.1.2 Archaeological Studies

The multitude of archaeological approaches to the study of mortuary remains has produced a number of further observations relevant to the interpretation of the material culture remains of any burial.<sup>864</sup> First and foremost, it is important to recognise that the final interment of a body often represents only one component (the

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<sup>857</sup> Eliade (1964:205-258).

<sup>858</sup> Metcalf & Huntington (1991:43-61).

<sup>859</sup> Metcalf & Huntington (1991:2-5). Contra. Bloch and Parry who suggest that the prescribed setting of rituals shape the emotion of the participants, Bloch & Parry (1982:5).

<sup>860</sup> Metcalf & Huntington (1991:62)

<sup>861</sup> Davies (2002:16).

<sup>862</sup> Dietler (2007:310).

<sup>863</sup> Dietler (2007:310). See further, Metcalf & Huntington (1991:96); Steadman et.al. (1996).

<sup>864</sup> Prominent examples include, Binford (1972b); Saxe (1970); Parker Pearson (1999).

interment ritual) of a series of mortuary rites.<sup>865</sup> Indeed, a large number of the activities that constitute funerary observances may not be materialised in an archaeologically visible fashion, including such activities as feasting, dancing, procession, singing and a range of other performances and ceremonies designed to honour the deceased.<sup>866</sup> This further emphasises the importance of considering the evidence from tombs alongside that of the wider archaeological context.

A second important consideration for interpreting mortuary assemblages concerns the role of any artefacts deposited with the deceased. While ‘grave goods’ are commonly interpreted as the personal possessions of those interred, this may not be true for every context.<sup>867</sup> Other reasons for depositing artefacts within a tomb could include: the provision of food, drink or other ‘necessities’ for the afterlife; offerings to supernatural beings residing in the ‘otherworld’, perhaps to promote acceptance of the deceased; personal belongings believed to be tainted by death or for which the deceased may return; mementos or expressions of social personality during life; or the remains of a feast or last meal shared with the deceased.<sup>868</sup> Where possible, comparing mortuary assemblages with material found within neighbouring settlements could reveal patterning helpful for interpreting the mortuary deposits, although the higher degree of preservation found in structured mortuary deposits needs to be taken into account. The comparison of use-wear patterns on pottery from both tombs and settlements, such as that undertaken by Dugay on Bronze Age Cypriote vessels,<sup>869</sup> may also allow for the observation of varying ceramic functionality, for instance, the possible production of pottery specifically for tomb deposition.

As a key concern of this thesis is the identification of ceramic evidence for the consumption of psychoactive substances in order to induce ASC, a possible method of distinguishing such vessels from other grave goods would be of significant benefit. In this regard, it may be possible to distinguish artefacts that can be considered ‘personal possessions’ by noting that such objects invariably relate somehow to the construction

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<sup>865</sup> Pader (1982:42).

<sup>866</sup> Keswani (2004:22; 2005:343).

<sup>867</sup> Keswani (2004:75); Pader (1982:57).

<sup>868</sup> Morris (1985:114).

<sup>869</sup> Dugay (1996).

of the social identity<sup>870</sup> of the deceased. The material culture expressions of identity that are associated with a particular individual will generally be durable and could include objects such as items of adornment (clothing and jewellery), tools, weapons and personalised drinking and eating vessels. In the case of such material being buried with the deceased, however, the living would have had the final say on which objects were appropriate to be interred with the body. With the exception of certain high quality or imported eating and drinking vessels, the majority of ceramic vessels found in burial contexts are unlikely to fit into this category.

If most ceramic vessel types found with burials should not be considered as personal possessions, then their inclusion in the assemblage is likely to relate to their consumable contents. As such, the most likely explanation for their deposit within a tomb is that their contents were meant to be a provision or offering for the deceased, presumably to be consumed in the afterlife, or that their contents were actually consumed during the mortuary ritual. For the latter possibility, it is pertinent to note Webb's suggestion that the utensils and foodstuffs used during funerary feasts, held at or near the burial, may have then be deposited to prevent the efficacy of the mortuary ritual from being spoilt by subsequent, profane use.<sup>871</sup> Alternatively, Last has suggested that the interment of pottery might have represented its return to the earth from which it came, possibly as a metaphor for human death.<sup>872</sup> Differentiating between vessels associated with provisions for the afterlife and those used for mortuary feasting,<sup>873</sup> however, is not a simple matter. Approaching such a distinction must be based on a detailed consideration of context, focusing on such details as: the specific placement of vessels within a tomb, particularly in relation to skeletal remains;<sup>874</sup> vessel fragmentation, including signs of deliberate breakage;<sup>875</sup> the number of vessels per burial (specifically seeking apparent redundancy in a particular vessel type) and the likely nature of the consumable associated with a particular

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<sup>870</sup> Defined as the way in which a person perceives themselves and is perceived by others in relation to belonging to certain groups and not to others, Díaz-Andreu & Lucy (2005:1). Dimensions of identity most commonly considered include gender, age, status, ethnicity and religion. See also Insoll (2007).

<sup>871</sup> Webb (1992a:88).

<sup>872</sup> Last (2006:127-128).

<sup>873</sup> Including the possible sharing of a final meal with the deceased.

<sup>874</sup> Wright (1995:300) for example, suggests that vessels set apart from the deceased may have been used during mortuary ritual.

<sup>875</sup> Assuming that vessels in which provisions for the afterlife are held were not treated in such a manner. For an example of such behaviour, Cavanagh (1998, 106) suggests that the apparently intentional breaking of drinking vessels in the entrance of Mycenaean tombs indicates a rite of separation as a component of mortuary ritual.

vessel. Pader also suggests that provisions or offerings for the deceased will also tend to be highly formalised.<sup>876</sup> The Late Cypriote mortuary evidence discussed in Chapter 5 will be considered with these observations in mind.

## **4.2 Early & Middle Cypriote Mortuary Ritual**

As discussed in the Introduction, the start of the Bronze Age in Cyprus (c.2500 BCE) is considered to constitute a significant cultural break from the preceding period, characterised by changes in settlement, architecture, technology, economy and mortuary practice.<sup>877</sup> Questions regarding the true extent of these changes, however, are also relevant to certain aspects of Bronze Age mortuary practice that appear to have Chalcolithic antecedents, particularly in the Middle Chalcolithic cemeteries at *Kissonerga-Mosphilia*, *Souskiou-Vathyrkakas* and *Souskiou-Laona*.<sup>878</sup> At these sites there is early evidence for practices that become common in the Bronze Age, particularly the use of chamber tombs, collective extramural burial and the complex treatment of skeletal remains.

### **4.2.1 Tombs and Cemeteries**

Throughout most of the Bronze Age, Cypriote communities generally buried their dead in rock-cut chamber tombs located within formally organised cemeteries located on low ridges or plateaus usually within sight of the settlement (ca.500-1000m away).<sup>879</sup> These chamber tombs consisted of one or more irregular chambers cut into the bedrock, opening off a vertical, shaft-like entrance passage (*dromos*) and accessed via a narrow doorway (*stomion*) often closed with a stone slab or rubble (**Fig.4.1**).<sup>880</sup> Chambers could be round, elliptical, rectangular or even kidney-shaped in plan and the common addition of benches or niches cut into the sides, presumably for the placement of bodies, often made the chambers somewhat irregular or lobed.<sup>881</sup> In chambers with such benches, a central depression or pit was commonly found immediately inside the *stomion*.

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<sup>876</sup> Pader (1982:58).

<sup>877</sup> Keswani (2004:37-82; 2005:342, 346); Steel (2004a:119).

<sup>878</sup> Bolger (2002:72, 81). Cf. Christou (1989); Crewe et.al. (2002; 2005); Niklasson (1991:143-150); Peltenburg (ed.) (1998a; 1998b; 2006).

<sup>879</sup> Keswani (2004:39); Steel (2004a:139); Webb (1992:88).

<sup>880</sup> Keswani (2004:55-61); Steel (2004a:139)

<sup>881</sup> Keswani (2004:55-61); Webb (1992:88).

The dromos was usually trapezoidal in plan, with one side often stepped to allow easier access to the chamber/s. Where there were multiple chambers, each would open off a different side of the dromos, usually on opposite sides in the case of two chambers. Small shelves or ‘cupboards’ were occasionally cut into the sides of the dromos and while these are thought to have been for the burial of children/infants, skeletal remains are only found in a handful of cases.<sup>882</sup> Steel argues that the dromos was probably the focus of any ceremonial activity associated with the tomb.<sup>883</sup>

While most Bronze Age chamber tombs were relatively simple in form, architectural elaboration, such as carved entrance facades, is exhibited at a number of sites.<sup>884</sup> Keswani compares such decoration to the architectural details depicted on the Kotchati and Kalopsidha shrine models (**Fig 4.9**),<sup>885</sup> suggesting that some tombs may have been designed as places where offerings, such as grave goods and animal sacrifices, were made.<sup>886</sup> As such, these tombs may have been considered as shrines for the ancestors, rather than just repositories for the dead.<sup>887</sup>

#### 4.2.2 Collective and Multi-Stage Burial

Many of these chamber tombs appear to have been used for extended periods of time, with most tombs containing multiple burials, often within clearly defined burial strata. In some cases, the arrangement of the bodies suggests that a number of individuals were interred together concurrently. Significantly, however, it appears that infants and children were generally not interred within burial chambers used for adults.<sup>888</sup> Indeed, infants and young children appear to be significantly underrepresented in mortuary populations for the entire Bronze Age,<sup>889</sup> although the extent to which this phenomenon is related to issues of preservation remains uncertain.

Concerning the possibility that those buried together in a particular tomb shared a kin relationship, Webb and Frankel suggest that, while probable, such

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<sup>882</sup> Keswani (2004:44). Webb, however, argues that these installations were definitely for infant burials, Webb (1992:91).

<sup>883</sup> Steel (2004a:139)

<sup>884</sup> Keswani (2005:349).

<sup>885</sup> Åström (1988); Frankel & Tamvaki (1973); Karageorghis (1970).

<sup>886</sup> Keswani (2005:349).

<sup>887</sup> Keswani (2005:349-350).

<sup>888</sup> While Keswani suggests that this constitutes a significant departure from earlier traditions (2004:52), the previously discussed Middle Chalcolithic cemetery burials suggest otherwise.

<sup>889</sup> Keswani (2004:30; 2005:344).

connections are yet to be demonstrated.<sup>890</sup> On the basis of ethnographic analogy, Keswani also suggests that those buried together in a particular tomb probably were linked by kinship ties rather than being random collections of individuals who died concurrently.<sup>891</sup>

Traditionally, the disturbed state of skeletal remains found in many Bronze Age Cypriote chamber tombs has been explained as the result of a series of successive burials during which a tomb was reopened and earlier skeletal material was unceremoniously pushed aside.<sup>892</sup> Keswani, however, has recently argued that there is also widespread evidence for the multi-stage treatment of remains that includes the exhumation of primary burials, handling or rearranging of bones and subsequent reburial.<sup>893</sup> While admitting that there are numerous instances where the recovered skeletal remains suggest primary inhumation, Keswani argues that there are also numerous aspects of Cypriote mortuary evidence suggestive of a more complex ritual treatment of the remains.<sup>894</sup> These include the discovery of emptied mortuary features that could have served as temporary interment facilities, the disarticulate or incomplete condition of skeletal remains not attributable to post-depositional processes alone, the occurrence of multiple simultaneous burials and the stratigraphical relationships of certain burial deposits.<sup>895</sup>

At the extensive cemeteries of *Bellapais-Vounous* (ECI-MCII),<sup>896</sup> for instance, there is evidence for a program of multi-stage treatment with particular emphasis on curation of the skull.<sup>897</sup> Evidence suggestive of such practices includes tombs in which certain individuals were represented only by skulls, tombs containing what appear to have been simultaneous burials, intact tombs containing only disarticulated burials and tombs in which body parts seem to have been deliberately rearranged after

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<sup>890</sup> Webb & Frankel (2009:64). In contrast, Webb previously argued that contemporaneity of death was the more decisive factor deciding who was interred in a particular tomb, Webb (1992:88).

<sup>891</sup> Keswani (2004:54; 2005:361).

<sup>892</sup> Webb (1992:88). For example, see Gjerstad et al (1934:467-575). Webb argues that this suggests that once flesh had decomposed and the body was no longer recognisable, no further care was considered necessary, Webb (1992:88).

<sup>893</sup> Keswani (2004:41-51; 2005:351-359).

<sup>894</sup> Keswani (2005:351).

<sup>895</sup> Keswani (2004:33,42; 2005:346).

<sup>896</sup> Vounous A contains tombs dated to ECI-II, while Vounous B tombs date to ECII-MCII, Keswani (2004:Tables 4.7a-c).

<sup>897</sup> Keswani (2004:42; 2005:352, 359). Skull curation appears to have been a common tradition throughout the East Mediterranean from at least the Neolithic Period, well exemplified by the plastered skulls from Jericho, Kenyon (1955:60-66); Strouhal (1973). A more contemporary example of skull curation has been recorded from the Minoan site of Mochlos (LMIA), Soles (2008, pers.comm.).

decomposition.<sup>898</sup> At the roughly contemporary cemetery of Lapithos-*Vrysi tou Barba* (ECIC-MCIII),<sup>899</sup> the variable condition of skeletal remains, diversity of mortuary features and depositional history of tombs also suggest to Keswani that the multi-stage treatment of the dead was common here.<sup>900</sup> Collective multi-stage interment at *Ayios Iakovos-Mellia* is also suggested for the MCIII tomb 6,<sup>901</sup> which contained eleven skeletons, probably originally in seated position, arranged around the walls of the tomb chamber, with four more located in the centre of the chamber.<sup>902</sup> These skeletal arrangements, however, seem more likely to represent collective primary inhumation, rather than a multi-stage collective inhumation. More convincing evidence for complex treatment of remains comes from the Korovia-Palaeoskoutella,<sup>903</sup> where Tomb 5 (MCIII/LCI) had been completely emptied of bones and artefacts and then sealed while the cemetery was still in use, suggesting it had been deliberately emptied as a ritual act.<sup>904</sup> Collective multi-stage burial is also suggested for Dhenia-Kafkalla, Politiko-Lambertis, Nicosia-Ayia Paraskevi and Kalopsidha.

In the multi-stage burial scenario suggested by Keswani, certain individuals would not have been interred within a chamber tomb immediately upon death, but were instead placed in a temporary facility, such as a pithos, dromos cupboard or pit grave.<sup>905</sup> This would have allowed those conducting the mortuary rituals more time to accumulate the resources required to stage a proper funeral celebration and to construct a new chamber tomb if required.

Although there now appears to be general acceptance for the idea that Bronze Age Cypriote mortuary ritual often involved multi-stage treatment of remains as part of an elaborate multi-phase funerary ritual,<sup>906</sup> Webb has previously argued that there is still no definitive evidence for multi-stage burial or the removal of earlier remains from tombs.<sup>907</sup> In support of this argument, Webb cites a detailed study of skeletal material that did not reveal an over-representation of smaller bones which may have

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<sup>898</sup> Keswani (2004:42; 2005:352). For primary references see Keswani (2004:Table 4.1).

<sup>899</sup> Keswani (2004:Tables 4.11a-c).

<sup>900</sup> Keswani (2004:46; 2005:355). For primary references see Keswani (2004:Table 4.1).

<sup>901</sup> Keswani (2004:46; 2005:356-357).

<sup>902</sup> Gjerstad (1934:314-322).

<sup>903</sup> Keswani (2005:357).

<sup>904</sup> Keswani (2004:47; 2005:358-359).

<sup>905</sup> Keswani (2004:46).

<sup>906</sup> Crewe (2007:25-26); Knapp (2008:86, 192), Steel (2004a:139)

<sup>907</sup> Webb (1992:88, Footnote 2).

been left behind when decomposing bodies were removed.<sup>908</sup> As the osteological analysis cited by Webb only included material from a single tomb, however, this argument against possible multi-stage skeletal treatment should be considered invalid, at least until it becomes supported through more widespread analysis. The apparent primary inhumation of eleven individuals in Tomb 6 at *Ayios Iakovos-Mellia*,<sup>909</sup> however, provides an example of a departure from such tradition, perhaps in response to mass death caused by some catastrophe, such as disease or warfare. In such situations, the time required for the standard, protracted mortuary rituals may not have been available. Without sufficiently detailed studies of skeletal material from Cypriote tombs, though, the debate over the possible use of multi-stage burial programs will remain unresolved.

### 4.2.3 Grave Goods

The clearest departure from earlier mortuary traditions seen in Bronze Age tombs is the significant increase in diversity and quantity of grave goods left within them.<sup>910</sup> This mortuary expenditure is particularly evident in the deposition of pottery and metalwork and continues to rise, alongside other aspects of mortuary expenditure, throughout the course of the Early and Middle Cypriote Periods.<sup>911</sup>

From the start of the Bronze Age, metal objects became a significant grave good. In particular, copper and bronze weapons such as spearheads, axes, and daggers (**Fig.4.2**) were widespread, although the clustering of these objects in wealthier tombs in some areas suggests a degree of control over such resources.<sup>912</sup> In contrast to the situation observed with pottery (see below), the diversity of metalwork found in mortuary contexts significantly exceeds that from contemporary settlement strata in both quantity and diversity.<sup>913</sup> Furthermore, the metal artefacts found in contemporary settlements are commonly more utilitarian in nature and include pins, needles or fragments of tools such as knives, scrapers, axes, chisels and awls.<sup>914</sup> Keswani also points out that a number of the weapons placed in Early to Middle Cypriote tombs were too large or unwieldy to haft or use, suggesting that their primary function was

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<sup>908</sup> Webb (1992:88, Footnote 2).

<sup>909</sup> Gjerstad (1934:314-322).

<sup>910</sup> Keswani (2004:82); Steel (2004a:139).

<sup>911</sup> Keswani (2004:82).

<sup>912</sup> Steel (2004a:142).

<sup>913</sup> Keswani (2004:75).

<sup>914</sup> Keswani (2005:384-391).

to display wealth. Such items, she argues, were probably wielded and worn during ceremonial occasions and subsequently disposed of in the mortuary context. Keswani further suggests that these copper or bronze weapons were deliberately accumulated for conspicuous mortuary consumption, increasing their value and stimulating their production.<sup>915</sup>

With regard to the pottery vessels found in these tombs, the vast majority were bowls, jugs or juglets in the standard wares of the period (RP and WP wares for the Early and Middle Cypriote Periods, **Figs.4.3-4**) accounting for around 85% of all tomb vessels.<sup>916</sup> In the rare cases where settlement pottery is available for comparison, the mortuary assemblage is compatible in shape, fabric and decoration, although in the tombs there tend to be more decorated wares, vessels associated with liquid mixing and pouring and fewer storage and food processing vessels.<sup>917</sup> Furthermore, a comparison of abrasion patterns on Early and Middle Cypriote tomb and settlement pottery found that the pottery from both types of site exhibited extensive similarities in use-wear.<sup>918</sup> This argues against earlier suggestions that much of the pottery found in tombs of these periods was specifically produced for mortuary deposit.<sup>919</sup> Dugay's study also noted that while medium and large jugs and amphorae consistently displayed evidence of use-wear, juglets and small to medium sized bowls do so less frequently.<sup>920</sup> This suggests somewhat different, perhaps even specialized, functions for these vessels, possibly relating to mortuary drinking and/or feasting (discussed below).

While the majority of the pottery found in Early-Middle Cypriote tombs parallels that found in domestic contexts, there are also occasional vessels whose lack of apparent practical functionality has led to suggestions that they were specially designed for ritual purposes.<sup>921</sup> This includes composite vessels, often consisting of multiple bowls fixed together, ring vases, jugs with double or triple necks, askoi (usually bird shaped in the ECA-MCA) and pots bearing coroplastic images (**Figs.4.5**).<sup>922</sup> Additional items of clay which appear to have held some symbolic value

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<sup>915</sup> Keswani (2004:75).

<sup>916</sup> Webb (1992:97).

<sup>917</sup> Keswani (2004:75); Webb (1992:89); Webb & Frankel (2008:289-291).

<sup>918</sup> Dugay (1996:186).

<sup>919</sup> Herscher (1976:12); Morris (1985:16); Weinberg (1965:188). Contra Webb (1992:89).

<sup>920</sup> Dugay (1996:180).

<sup>921</sup> Dugay (1996:186).

<sup>922</sup> Keswani (2005:363); Morris (1985:78-112); Webb (1992:89).

include models of bull horns, daggers and sheaths, plank idols and the occasional coroplastic genre scenes.<sup>923</sup> In discussing the function of these ‘ceremonial’ objects, Webb suggests that the bird shaped askoi may have been used to pour libations in honour of the deceased, while the composite vessels, although ritual in character (and not recorded from settlements), are relatively rare and, therefore, do not provide evidence for regular funerary ritual.<sup>924</sup> At Vounous, however, these non-utilitarian objects were commonly found grouped together, often alongside evidence for funerary feasting, such as animal bones.<sup>925</sup> The heavily stylised and sexually ambiguous plank figurines (**Fig.4.6**) have also been suggested to have been generic ancestor images.<sup>926</sup>

#### 4.2.4 Feasting

A number of recent considerations of the pottery assemblages from in Bronze Age Cypriote tombs have interpreted this material as the residues of feasting as a component of mortuary ritual.<sup>927</sup> This contrasts with traditional views of the ceramic material as grave offerings or personal possessions of the deceased.<sup>928</sup> While most of this recent research focuses on Late Cypriote material, Webb and Frankel specifically discuss material from the Early Cypriote period.<sup>929</sup> They argue that decorated fine ware mixing and pouring vessels from the formative Philia phase of the ECA<sup>930</sup> were markedly more common in burial assemblages than in settlement contexts, suggesting that these vessels had an important role in mortuary ritual.<sup>931</sup> As these and later ECA deposits can be associated with the consumption of alcoholic beverages<sup>932</sup> and, as Philia burial assemblages lack evidence for food consumption, this activity seems to have been the principal form of commensality practised in association with burial during this period.<sup>933</sup> Webb and Frankel further argue that the apparent existence of a common set of drinking vessels across the island during the Philia phase suggests that

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<sup>923</sup> Keswani (2005:363).

<sup>924</sup> Dugay (1996:186); Webb (1992:89).

<sup>925</sup> Herscher (1997:31).

<sup>926</sup> Keswani (2005:349).

<sup>927</sup> Herscher (1997:31-35); Manning (1998:47); Steel (1998: 290; 2002:109-110; 2004b:168); Webb & Frankel (2008:288).

<sup>928</sup> Karageorghis (1960a:293); Niklasson (1987:222-223); Schaeffer (1952); Swiney (1989:24).

<sup>929</sup> Webb & Frankel (2008).

<sup>930</sup> For further discussion of debates concerning the characteristics of the Philia phase, see Knapp (2008:71-130); Steel (2004a:121-125); Webb & Frankel (1999).

<sup>931</sup> Webb & Frankel (2008:289).

<sup>932</sup> Manning (1993:45); Peltenburg (1996:23); Webb & Frankel (2008:289).

<sup>933</sup> Webb & Frankel (2008:289).

such shared consumption of alcohol served as a mechanism to promote alliance and solidarity among communities with relatively permeable boundaries and low levels of social competition.<sup>934</sup>

In the periods immediately following the Philia phase (ECI-II) Webb and Frankel suggest that the tulip bowls, jugs and spouted deep bowls commonly found within tombs can be associated with the consumption of beer as a component of funerary feasting.<sup>935</sup> Furthermore, an increasing emphasis on individually distinct vessels may represent restricted access to esoteric knowledge; a ‘symbolic style’ linked to the dynamics of identity negotiation.<sup>936</sup>

In the ECIII-MCI periods, the introduction of larger bowls, possibly for mixing, and a reduction in jug size may indicate a shift in the beverage consumed from beer to wine.<sup>937</sup> Although this hypothesis is yet to be confirmed via organic residue analysis, iconographic evidence such as the winemaking scene on an Early Bronze Age Red Polished jug from Pyrgos (**Fig.4.7**)<sup>938</sup> certainly suggest that wine and its production were becoming increasingly important. This period also saw the introduction of complex vessels comprised of multiple bowls, which Webb and Frankel argue reflects more formalised ritual practices, perhaps involving libation or offerings rather than shared consumption.<sup>939</sup> The occasional cup or bowl found upside down near the feet or head of a burial has also been suggested as evidence for the offering of libations to the deceased.<sup>940</sup> This evidence, however, could alternatively be interpreted as the sharing of a final drink with the deceased.

Significant amounts of cattle and caprine bone also found in ECA and MCA tombs suggest that the sacrifice and consumption of such animals may have been a another common component of mortuary ritual.<sup>941</sup> Indeed, the vast majority of tombs from these periods were found to contain animal bones, usually from joints

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<sup>934</sup> Webb & Frankel (2008:290).

<sup>935</sup> Webb & Frankel (2008:290-291).

<sup>936</sup> Webb & Frankel (2008:291).

<sup>937</sup> Herscher (1997:34); Steel (2002:109); Webb & Frankel (2008:292-293). Herscher compares the large mixing bowls with kraters, Herscher (1997:34).

<sup>938</sup> Flourentzos (1999). The activity portrayed in the choroplastic genre scenes that decorate a number of MCA RP vessels may also be winemaking, Herscher (1997:29); Webb & Frankel (2008:292).

<sup>939</sup> Webb & Frankel (2008:293).

<sup>940</sup> Åström (1987).

<sup>941</sup> Herscher (1997:31); Keswani (2004:67-68); Steel (2004:167); Webb (1992:91); Webb & Frankel (2008:291).

representing the best cuts of meat.<sup>942</sup> Herscher, however, also points out that the occasional discovery of bones placed in pottery in tombs at Vounous suggests the provision of a final meal for the deceased.<sup>943</sup> Such a practice may also explain instances where skeletons are found lying in situ holding bowls to their face (in Vounous Tombs 303A and 828B for example).<sup>944</sup> In the context of mortuary feasting, this may have symbolized the participation of the deceased in sharing a final meal with the living. Keswani further suggests that the best cuts may have been given to the deceased, while the remainder of the animal was consumed by the living.<sup>945</sup>

Webb and Frankel argue that the intentional disposal of high utility cuts of meat, alongside the destruction of unique items such as cult vessels, by permanent burial strongly suggests competitive feasting.<sup>946</sup> Interestingly, even though the sacrifice and consumption of cattle and caprines constitutes a significant destruction of wealth, this practice does not appear to have been limited only to wealthier tombs, at least at Vounous.<sup>947</sup> According to Webb and Frankel, this suggests that promotional feasting and the creation of social debt were widespread in mortuary rituals at Vounous.<sup>948</sup>

As mentioned above, Steel suggests that the dromos was likely to be the focus of any ceremonial activity associated with Bronze Age Cypriote tombs, including mortuary feasting.<sup>949</sup> Herscher further suggests that such aspects of the mortuary ritual could have been conducted once the tomb had been closed.<sup>950</sup> Given that the area of Cypriote Bronze Age dromoi rarely exceeds 2m<sup>2</sup>, though, it seems unlikely that activities such as feasting were actually conducted within them. It is possible, however, that any mortuary rites involving multiple participants were conducted on the ground surface above, with the dromos as a focal point.

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<sup>942</sup> Webb (1992:91); Webb & Frankel (2008:291). Contra Keswani (2004:64), but see Keswani (2004: Table 4.7).

<sup>943</sup> Herscher (1997:31-32).

<sup>944</sup> Herscher (1997:32).

<sup>945</sup> Keswani (2004:67).

<sup>946</sup> Webb & Frankel (2008:291).

<sup>947</sup> Herscher (1997:33); Webb & Frankel (2008:291).

<sup>948</sup> Webb & Frankel (2008:291).

<sup>949</sup> Steel (2004a:139). This is supported by the discovery of both vessels and plaster-lined bothroi within the dromoi of certain tombs, Herscher (1997:31); Webb (1992:91).

<sup>950</sup> Herscher (1997:31).

#### 4.2.5 Wider Social Implications

The socio-political meaning of this mortuary feasting is commonly discussed in relation to the way in which mortuary ritual related to the wider social context of Bronze Age Cyprus. As discussed above, Webb and Frankel argue that in the Philia period, mortuary feasting was a means of promoting social stability and a shared identity.<sup>951</sup> They also argue that the increase in the number of small bowls found in later tombs, coupled with decreasing variation in their decoration suggests a change in the focus of identity negotiation away from the individual towards group or corporate entities.<sup>952</sup> The association of such behaviour with death and burial further suggests that ancestral relationships were of particular importance in the formation and legitimisation of individual and sub-group identity.<sup>953</sup> Steel similarly argues that the consumption of alcohol was associated with mortuary practice in the ECA and MCA, as a means for group legitimization via exclusive ritual centred on membership of ancestral groups.<sup>954</sup> Indeed, due to a lack of evidence for such practices in non-mortuary contexts, Steel even argues that ceremonial feasting was specifically associated with funerary ritual in these periods, before being adopted into other contexts during the Late Cypriote Period.<sup>955</sup>

Despite largely ignoring the evidence for mortuary feasting, Keswani similarly concludes that the Bronze Age mortuary evidence suggests that ancestral relationships increased in importance, relating the new aspects of mortuary ritual exhibited around the start of the Bronze Age to socio-economic and associated socio-political changes introduced by the widespread adoption of plough agriculture.<sup>956</sup> This new way of life gave increased significance to the hereditary transmission of economic and social capital (farmland, draft animals and other forms of property) resulting in a corresponding increase in the ideological importance of the ancestors.<sup>957</sup> Kinship ties would have been celebrated during mortuary ritual, reinforcing the recognition of

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<sup>951</sup> Webb & Frankel (2008:293).

<sup>952</sup> Webb & Frankel (2008:293).

<sup>953</sup> Webb & Frankel (2008:292). See also Keswani (2005:349-350).

<sup>954</sup> Steel (2002:113).

<sup>955</sup> Steel (2002:109; 2004b:168). The lack of excavated EC-MC non-mortuary contexts does, however, significantly bias the evidence upon which this interpretation is based.

<sup>956</sup> Keswani (2004:81, 151; 2005:349).

<sup>957</sup> Keswani (2004:41; 2005:349).

lineage or descent group identity through the commemoration of common ancestors.<sup>958</sup>

Changes to social organization have also been inferred from the mortuary evidence, with the establishment of discrete cemeteries in particular suggesting the emergence of social groups with more sharply defined communal interests and an increasing capacity for centralised control.<sup>959</sup> Keswani argues that ECA and MCA mortuary evidence suggests a status system based on seniority within the local kin group structure enhanced by individual wealth and accomplishments.<sup>960</sup> The wide distribution of certain prestige goods (pottery and metalwork) and diachronic increase in mortuary expenditure are further suggested to represent a highly competitive social system in which rank and prestige were dynamically created and revised.<sup>961</sup> This rise in Cypriote mortuary expenditure throughout the ECA and MCA is reflected in increases in the size and elaboration of tombs and the amounts of metal and pottery deposited, with the latter suggesting the involvement of large and increasing numbers of participants in the mortuary rites.<sup>962</sup>

### **4.3 ASCs in Early and Middle Cypriote Mortuary Ritual**

Despite the apparent prevalence of evidence for the consumption of alcohol during Bronze Age Cypriote mortuary ritual, the significance of this behaviour in relation to the generation of ASCs has received little attention to date. Steel and Herscher, however, do provide a minor exception to this trend by suggesting an association between Cypriote mortuary feasting and the Near Eastern *marzēah*.<sup>963</sup> Herscher, in particular, compares evidence from Cypriote tombs to the consumption of cattle and caprine meat, olives and large quantities of wine described in the *marzēah* in *Rapa'ūma* text KTU 1.20-1.22 from Ugarit (discussed in Section 3.1.1).<sup>964</sup> Herscher points out that this text describes the spirits of heroic ancestors (*Rapa'ūma*) summoned to dine with the *marzēah* participants.<sup>965</sup> They share in the feast (particularly in consuming wine), with their presence believed to ensure health and

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<sup>958</sup> Keswani (2004:55). On the new importance of lineage, also see Bolger (2002:78).

<sup>959</sup> Bolger (2002:81); Steel (2004a:139)

<sup>960</sup> Keswani (2004:4; 2005:366-369, 384).

<sup>961</sup> Keswani (2004:4).

<sup>962</sup> Keswani (2004:81, 153); Webb & Frankel (2008:293).

<sup>963</sup> Herscher (1997:32); Steel (2002:109). For more detailed discussion of the *marzēah*, see Armstrong (1998:93); Pope (1972:190-193).

<sup>964</sup> Herscher (1997:32). Cf. Parker (19997:196-205); Wyatt (2002:314-323).

<sup>965</sup> Herscher (1997:32).

peace for the host, his family and the community.<sup>966</sup> Herscher goes on to suggest that an antecedent of such a ritual may be reflected in Cypriote mortuary ritual, at least as early as the MCA.<sup>967</sup>

Unfortunately, neither Herscher nor Steel elaborate any further on how textual references to the *marzēah* might be used to interpret evidence for Bronze Age Cypriote mortuary ritual. Although Herscher points out that one of the central components of the *marzēah* ritual was the consumption of large quantities of alcohol,<sup>968</sup> the potential significance of this in the context of mortuary ritual seems to have been missed. In light of the widespread use of ASCs in ritual, as discussed in Chapter 1, it is likely that the important role of alcohol in both the *marzēah* and Cypriote mortuary feasting relates partly to its ability to induce ASCs, in this case, drunkenness. As large quantities of alcohol appear to have been consumed in both contexts, the alteration of consciousness appears to be of particular relevance.

As demonstrated in Section 4.2.5, past considerations of the role played by the consumption of alcohol during ECA and MCA mortuary ritual have instead focused upon its role in promoting social interaction. Webb and Frankel, for instance, stress the convivial aspects of mortuary feasting in promoting interaction and providing a forum for the negotiation of identity and authority.<sup>969</sup> Similarly, Steel argues that the consumption of both food and alcohol during Cypriote funerary rites would have been symbolically charged and enhanced the sensory participation of the mourners, promoting the creation of social memory and enabling the renegotiation of individual and group identities.<sup>970</sup> Both of these interpretations compare closely with the earlier work of Hamilakis which considers the role of comparable mortuary feasting in the Bronze Age Aegean in relation to the destruction and creation of social memory to enable the renegotiation of social relationships amongst the living.<sup>971</sup> Using an anthropologically informed approach, Hamilakis argues that the emotions and senses stimulated by the consumption of food and drink in a mortuary context combine with those generated by the embodied experience of death to produce a powerful

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<sup>966</sup> Although Herscher actually states that the *Rapa'ūma* are described to, “flutter” down to the wine jar’, [Herscher (1997:32)], the source of this translation is not provided. This description is certainly not found in more recent translations of KTU 1.20-1.22, Cf. Parker (19997:196-205); Wyatt (2002:314-323).

<sup>967</sup> Herscher (1997:32).

<sup>968</sup> Herscher (1997:32).

<sup>969</sup> Webb & Frankel (2008:294).

<sup>970</sup> Steel (2004b:168; 2008:156).

<sup>971</sup> Hamilakis (1998).

mnemonic device.<sup>972</sup> The destruction and creation of memory is seen as integral to mortuary ritual as the separation of the deceased from the world of the living involves erasing memory of them as a social player, thereby creating space for the renegotiation of social relationships amongst the living. Once again, the role of alcohol consumption in enhancing the intense emotional experience of the participants is stressed.<sup>973</sup>

While these scholars all refer to certain experiential aspects of the consumption of alcohol, particularly the effects of low doses in promoting social interaction and the construction of new social memory, the effects of larger doses of alcohol are not taken into account. Given that extreme drunkenness may have been one of the primary goals of alcohol consumption during Bronze Age Cypriote mortuary ritual, as suggested by both LBA *marzēah* texts and the sheer volume of liquid consumption vessels commonly found, the effects of large doses should also be considered. Furthermore, the focus on aspects of social interaction somewhat ignores the important fact that we are dealing with religious rituals in which activities such as alcohol consumption would have been understood in relation to the participants' metaphysical beliefs. As discussed in Section 2.2, within such a context, individual spiritual experience may have been as, if not more, important than any social interaction. To develop a more nuanced understanding of the role of alcohol consumption in this mortuary context, therefore, the experiential characteristics of larger doses of alcohol should be considered, along with the possible metaphysical beliefs that may have motivated and directed such consumption. As discussed in Section 3.4.2, large doses of alcohol can induce lethargy and confusion, reduce memory, severely impair motor skills and heighten a range of emotions including affection and aggression.<sup>974</sup> Extreme doses can cause a loss of bodily functions, unconsciousness and even death.<sup>975</sup>

With regard to metaphysical beliefs, it has previously been discussed how entering an ASC in a ritual context is commonly understood by the practitioner as a means to enter or interact with the supernatural world and its inhabitants.<sup>976</sup> Furthermore, as emphasised at the start of this Chapter, the beliefs specifically

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<sup>972</sup> Hamilakis (1998:117).

<sup>973</sup> Hamilakis (1998:126).

<sup>974</sup> Julien (2008:107-109); Meyer & Quenzer (2005:244).

<sup>975</sup> Meyer & Quenzer (2005: 246).

<sup>976</sup> Bourguignon (1973:3).

associated with the mortuary practices of almost all cultures centre around the soul and its journey to the world where ancestral spirits are thought to reside.<sup>977</sup> The suitability of applying such cross-cultural generalisations to the Cypriote Bronze Age context, however, requires further consideration of evidence relevant to the beliefs held by Bronze Age Cypriotes.

Most scholars considering Bronze Age Cypriote mortuary ritual appear to hold the opinion that the beliefs surrounding these rituals involved the spirits of the deceased, ancestors and their journey to or place in the underworld.<sup>978</sup> With the exception of Keswani, however, few venture further, explicit opinions on the matter.

Keswani argues that an ideology emphasising the veneration of communal and kin group ancestors lay at the heart of ECA and MCA mortuary ritual.<sup>979</sup> She further argues that adult ancestors were considered the principle intermediaries between the human community and the supernatural worlds during these periods:<sup>980</sup>

“This was reflected in use of permanent, spatially reserved extramural cemeteries; in the use and reuse of pit and rock-cut chamber tombs for multiple burials; in the emergence of ritual programs involving secondary treatment and collective reburial; and in the disposal of sizable quantities of material wealth in both the actual tombs and in the ceremonial commemorations of the dead. By ensuring the deceased were accorded the appropriate ritual observances and equipped with all the goods required in the afterlife, funeral sponsors courted the intervention and support of the ancestors in sustaining the ongoing fertility and prosperity of the living.”<sup>981</sup>

Further evidence for such beliefs may include ceramic models and pottery with genre scenes depicting agriculture, food processing and human reproduction deposited within tombs.<sup>982</sup> Bronze Age references to ceremonies such as the *marzēah*, *kispum* and Beautiful Festival of the Valley (discussed in Section 3.1) also suggest that the interests of ancestral spirits were important in nearby areas.<sup>983</sup>

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<sup>977</sup> Davies (2002:3); Parker-Pearson (1999: 31).

<sup>978</sup> Webb (1992:87). Goring (1989:97-98) warns against assuming such beliefs a priori and consequently refrains from committing to an opinion for the Cypriote context.

<sup>979</sup> Keswani (2004:51; 2005:393).

<sup>980</sup> Keswani (2004:51).

<sup>981</sup> Keswani (2005:393-394).

<sup>982</sup> Keswani (2004:51,151; 2005:350).

<sup>983</sup> Armstrong (1998); McLaughlin (2001); Manniche (1997); Pope (1972; 1981); Schott (1953); Taylor (2001:42). Taylor (2001:42); Tsukimoto (1985).

With regard to the possible beliefs relating to multi-stage treatment of the deceased, Keswani suggests that such behaviour may have been associated with a transformation process from decaying corpse to purified ancestor.<sup>984</sup> Such ideas recall Van Gennep's assertion that mortuary rituals can generally be considered as three stage rites of passage, with an initial stage involving separation from the world of the living, an intermediate liminal stage and a final stage involving post-liminal rites designed to ensure the incorporation of the deceased into the world of the dead.<sup>985</sup> Following Hertz,<sup>986</sup> Keswani also suggests an ideological link between multi-stage treatment and collective burial, where the transfer of bones from an isolated primary grave to a communal tomb could be considered the 'logical' finale of the deceased's passage from society of living to society of ancestors.<sup>987</sup>

In relation to the possible metaphysical beliefs associated with the apparent consumption of alcohol, the lethargy, confusion, impaired motor skills and unconsciousness experienced during states of extreme drunkenness are experiences well suited to interpretation as some form of interaction with or incorporation into the world of the dead (notwithstanding death itself!).<sup>988</sup> As such, it is possible that alcohol-induced ASCs in Bronze Age mortuary contexts may have been interpreted as encounters with the world of the dead. Indeed, the Ugaritic and Egyptian texts discussed in Section 3.1 associating drunkenness with interaction with this realm<sup>989</sup> suggest that just such a belief existed in Bronze Age societies in nearby regions. While recognizing that it is not possible to automatically assume the same ritual structure and underlying beliefs were also observed by the Bronze Age Cypriotes, Keswani has pointed out that Cypriote mortuary ritual at this time appears to be a fusion of mainland and local practices.<sup>990</sup> As such, some degree of similarity could be expected in the beliefs corresponding with these rituals.

As the attempt to contact the underworld suggested in the consumption of alcohol appears to coincide with the final interment of the body, it is possible that the Bronze Age Cypriotes considered direct contact with the world of the dead to be a

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<sup>984</sup> Keswani (2004:81).

<sup>985</sup> Van Gennep (1960:146-165).

<sup>986</sup> Hertz (1960).

<sup>987</sup> Keswani (2004:16; 2005:360).

<sup>988</sup> Winkelman (1997:410-412) has argued that ASCs that feature sleep states and unconsciousness are generally interpreted as 'soul flight', rather than possession.

<sup>989</sup> Armstrong (1998:104,110); Bryan (n.d.); Wyatt (2002:404; 412, Note 43). Cf. Boyle (2005).

<sup>990</sup> Keswani (2004:81). Elaborated by indigenous and immigrant communities in the context of ongoing social competition and gradual cultural assimilation.

necessary part of their mortuary rites in order to ensure that the spirit of the deceased was finally accepted into this realm. In this regard, it is the ability of alcohol to provide an individual with access to the underworld that is important, rather than its role in stimulating social interaction as has previously been stressed.

One further experiential characteristic of large doses of alcohol consumption is also relevant here: the suppression of an individual's memory. While the disinhibiting properties of lower doses of alcohol no doubt contributed to its important role in social interaction and the creation of social memory, it may also have been the ability to suppress individual memory that gave alcohol consumption such an important role in Cypriote mortuary ritual. Clearly, considerable emotional pain would have been associated with memories of the deceased for many of those involved in a mortuary ritual and the final interment is a context in which such raw emotion might have been felt keenly. As such, suppressing memory, even if only temporarily, may have resulted in lessening the grief of the mourners, suggesting an important psychological benefit for the consumption of this particular psychoactive.

In light of these arguments, the apparent popularity of the consumption of alcohol during Bronze Age Cypriote mortuary ritual may relate to its ability to simultaneously reduce an individual's grief and erase their memories of the deceased, allowing the living to focus upon resuming social life without them. Consuming such substances, therefore, appears to have had significant individual meaning (symbolic and psychological), in addition to the socio-political meaning commonly emphasised.

At present it appears that the primary expression of ritual behaviour on Cyprus during the Early and Middle Bronze Ages was mortuary ritual. While clay models such as those from Vounous (**Fig.4.8**)<sup>991</sup> and Kotchati (**Fig.4.9**)<sup>992</sup> may indeed depict ritual architecture unrelated to mortuary practice, such sites have yet to be clearly identified.<sup>993</sup> Furthermore, dramatic increases in mortuary expenditure, the establishment of formal burial grounds, the reuse of particular tombs and the elaboration of mortuary ritual practices in general suggest that mortuary observance

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<sup>991</sup> Bolger (1996); Dikaios (1938:51, 118-125); Frankel & Tamvaki (1973); Karageorghis (1991); Peltenburg (1994).

<sup>992</sup> Åström (1988); Frankel & Tamvaki (1973); Karageorghis (1970)]

<sup>993</sup> A possible MCA cult structure was uncovered Sotira-*Kaminoudhia* [Swiney (2008)], although there is little to suggest the supernatural aspects that may have been the focus of ritual. The cult interpretation of an MCA structure recently excavated at Pyrgos-Mavroraki [Belgiorno (2009)] is, at best, unfounded.

was vital to the social life of ECA and MCA communities.<sup>994</sup> As the primary recipient of ritual observance, ancestral spirits were, therefore, probably the most important supernatural forces recognised by the Cypriotes at this time. This is further suggested by the complex treatment of skeletal remains, tomb deposition of valuables such as jewellery and bronze weapons and apparent attempts to interact with the world of the dead via alcohol consumption. Bronze Age Cypriote mortuary rituals can thus be viewed as ceremonies designed to turn the dead into ancestors, beings who guarded and legitimised the contemporary social order and ensured fertility and agricultural productivity. The consumption of large quantities of alcohol in association with such ceremonies appears to have been an intentional act designed to induce ASCs that were believed to signify the drunken individual's interaction with these ancestors and their world. The apparent prevalence of this practice suggests that such interaction was considered a fundamental component of mortuary practice (particularly for the final interment) during the ECA and MCA. The consumption of large quantities of alcohol had the added advantage of lessening the grief of a mourner by temporarily dulling memories of the deceased during a time of extreme emotional stress. The next chapter will analyse evidence from Late Cypriote tombs in detail to interpret whether or not similar mortuary practices can be observed in this later period.

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<sup>994</sup> Keswani (2004:81).

## Chapter 5. Late Cypriote Mortuary Ritual – A Contextual Analysis

This chapter consists of a detailed contextual analysis of the artefactual evidence for ASCs from Late Cypriote mortuary contexts, established in Chapter 3. This analysis will concentrate on two contextual levels; the context of material within specific tombs where the evidence is particularly rich and potentially informative (case studies) and the broader context of Late Cypriote mortuary ritual based on evidence from the entire corpus of tombs. The aim of this analysis is to identify any patterns in the distribution of vessels associated with psychoactive substances that can assist in developing an understanding of the way ASCs may have been associated with Late Cypriote mortuary ritual. As mentioned previously, although Keswani has reviewed the corpus of Bronze Age Cypriote tombs,<sup>995</sup> her study failed to consider the pottery assemblages of such tombs in any detail. As the vast majority of direct evidence for ASCs from LBA Cyprus consists of ceramic vessels, a comprehensive consideration of this evidence is essential.

This chapter begins with brief discussion of the major changes to mortuary ritual observed during the LCA in relation to the earlier practices discussed in Chapter 4. This is followed by a detailed evaluation of six well preserved and recorded tombs, attempting to interpret certain aspects of the mortuary rituals conducted in association with them. The full corpus of published Late Cypriote tombs, presented in tabulated form in the electronic appendices (**Tables EA5.1-EA5.3**), will then be considered, with a focus on identifying any patterns in the evidence relevant to the topic of this thesis. This discussion will focus on the ceramic material identified in Chapter 3 as providing possible evidence for the consumption of alcohol and opium. The specific tomb context of material exhibiting any of the iconographic representations discussed in Chapter 3 will also be considered. The Chapter will conclude with a discussion of the possible use of ASCs during Late Cypriote mortuary ritual, as suggested by this evidence.

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<sup>995</sup> Keswani (1989; 2004; 2005).

### 5.0.1 Late Cypriote Variation

As mentioned previously, many of the aspects of mortuary ritual discussed in relation to Early and Middle Cypriote tombs appear to continue into the LCA and can be considered to also apply to much Late Cypriote mortuary ritual. Before considering the evidence from Late Cypriote tombs in detail, however, it is important to point out some of the more significant changes observed in Cypriote mortuary ritual from the beginning of the LCA.

While earlier forms of chamber tomb generally continued to be used during the LCA, at a number of sites these tombs were incorporated into the settlement, often beneath open spaces adjacent to buildings, such as streets or squares, instead of collectively located within the extramural communal spaces favoured in the ECA-MCA.<sup>996</sup> This was particularly the case within the coastal settlements established around the beginning of the LCA, suggesting that those moving from their ancestral villages into these new localities chose to bury their dead in a new setting. Within communities comprised of disparate kin-groups, Keswani suggests that closely related individuals and/or descent groups would have maintained their own burials near their houses and workshops, separated from those of more distant or unrelated groups within the community.<sup>997</sup> This change may have reflected the renegotiation of social status following such population movement, with smaller competing groups trying to assert their position and economic rights through highly visible funerary ritual within the limits of new settlements.<sup>998</sup> The proximity of one's ancestors and continued use of these tombs would have helped to affirm kin group identity, whilst also providing an important symbolic validation of rights of ownership or control over surrounding residential and productive complexes.<sup>999</sup>

The other significant change observable in Late Cypriote mortuary ritual was the abandonment during the LCIII period of these large collective chamber tombs in favour of individual burial within shaft graves, seen primarily at Enkomi.<sup>1000</sup> This change appears to have reflected the decreasing importance of mortuary ritual in this final stage of the Bronze Age.<sup>1001</sup> During the LCI-II periods, built ashlar and tholos

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<sup>996</sup> Keswani (1989:51); Manning (1998:47); Steel (2004a:171).

<sup>997</sup> Keswani (2004:87).

<sup>998</sup> Steel (2004a:172).

<sup>999</sup> Keswani (2004:88, 107); Manning (1998:47).

<sup>1000</sup> Niklasson-Sönnerby (1987).

<sup>1001</sup> Keswani (2004:97).

tombs<sup>1002</sup> also occurred, again primarily at Enkomi.<sup>1003</sup> These, however, appear to reflect the adoption of architectural styles from nearby regions (such as Ugarit in the case of the ashlar tombs), rather than any wholesale change in mortuary ritual itself. The average size of the traditional chamber tomb also decreased, suggesting a decline in the energy expended in tomb construction.<sup>1004</sup> At the same time, however, there was a considerable increase in the number of individuals buried within a single tomb (from an average of around four per tomb in the MC to almost 11 per tomb in the LC)<sup>1005</sup> and many appear to have been used over several generations.<sup>1006</sup>

With these changes in Cypriote mortuary ritual noted, we can now turn to consider the evidence from Late Cypriote tombs in more detail.

### **5.1 Tomb Case Studies**

This section contains a detailed evaluation of six well preserved and recorded tombs, with the aim of interpreting certain aspects of the mortuary rituals conducted in association with them. For each tomb particular attention is given to the ceramic artefacts and their depositional context, including spatial relationships with architectural features, other artefacts and skeletal remains, in an effort to interpret the role that particular vessels may have had within the interment rituals conducted at that tomb. Where components of these ceramic assemblages have been associated with psychoactive substances, their possible consumption will be discussed in relation to inducing ASCs and how such phenomena may have been viewed in relation to mortuary practices. The tombs are presented roughly in chronological order based on their first use, although multiple tombs from a single site are presented together.

As discussed in Section 2.1.1, a detailed and nuanced contextual analysis should consider the relevant evidence at both a specific and a general level, aiming for a hermeneutic balance between the two. These case studies are, therefore, designed to provide interpretations of specific contexts that can be evaluated against those provided by a consideration of the complete corpus of LCA tombs. Where contextual similarities exist an attempt will be made to mediate between an understanding of

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<sup>1002</sup> The tholos tombs from Enkomi are significantly distinct in construction and form to Mycenaean tholoi, so there is little reason to associate these with an intrusive Aegean population, Steel (2004a:174).

<sup>1003</sup> Steel (2004a:172).

<sup>1004</sup> Keswani (2004:118).

<sup>1005</sup> Keswani (2004:107).

<sup>1006</sup> Steel (2004a:174).

meaning in each specific context, rather than using these similarities to suggest identical interpretations. The goal in such mediation is to gain a nuanced understanding of the meaning that ceramic vessels associated with psychoactive substances, and the ASCs these substances can induce, may have had in LCA mortuary ritual.

The tombs chosen were selected primarily on the basis that the depositional context of the ceramic vessels within them may help to develop an understanding of this role. In most cases, there appears to have been a very small number of interments made in each tomb, of which all are largely intact. As such, the assemblages of these tombs represent depositional contexts much less disturbed than is the norm for LCA tombs, in which re-use and looting have heavily confused the contents. Such examples should, therefore, be able to provide much more detailed contextual information than is usual.

### 5.1.1 Kazaphani-Ayios Andronikos Tomb 2

MCIII/LCIA-LCIIC/IIIA

(c.1700-1200 BCE)

The site of *Kazaphani-Ayios Andronikos* is located approximately 400m northwest of the modern village of Kazaphani, on the northern slopes of the Kyrenia Mountains descending towards the coast in central northern Cyprus (**Map 2**). The site consists only of a cemetery at which three Late Cypriote tombs (Tombs 2, 5 and 6) have been uncovered.<sup>1007</sup> To date, no Late Cypriote settlement that can be associated with these tombs has been found. The Early Cypriote cemetery of *Kazaphani-Keranienkomi*, however, is located only c.2.4km east of the modern village<sup>1008</sup> and probably formed part of the large *Bellapais-Vounous* cemetery,<sup>1009</sup> suggesting a significant settlement once existed in the immediate area. Tomb 2 was excavated by the Department of Antiquities in 1963 when it was uncovered by workers of the Electricity Authority digging to install an electricity pole.<sup>1010</sup> As this tomb contained hundreds of BR juglets, it is worth discussing in detail.

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<sup>1007</sup> Keswani (2004:122); Nicolaou & Nicolaou (1989). Tomb 1 dates to the Hellenistic period, Nicolaou & Nicolaou (1989:6).

<sup>1008</sup> Dikaios (1938:1).

<sup>1009</sup> Catling (1962:151).

<sup>1010</sup> Nicolaou & Nicolaou (1989:3).

The tomb consisted of two chambers opening off a rectangular dromos, with Chamber A directly off the southern end and Chamber B off the middle of the western side. Chamber A (**Fig.5.1**) was roughly circular in plan (c.3.6m diam.) with a collapsed roof and appeared to the excavators to have been looted in antiquity as the tomb artefacts were found disturbed and dispersed all over the floor. Chamber B (**Fig.5.2**) was roughly elliptical in plan (c.3.6x3.9m) with a trapezoidal niche or stomion (it is unclear which from the plans, c.1.2x2.4m) located to the west. This chamber also appears to have been looted as the stomion was found open and a robber's pit was found in the northeast corner of the chamber, although the finds were less disturbed than those in Chamber A, with much of the pottery found in situ and unbroken.<sup>1011</sup> Unfortunately, any stratigraphy that may have once existed within the Chamber A deposit was destroyed when it was disturbed.<sup>1012</sup> It is uncertain whether a similar situation occurred in Chamber B, although two distinct burial strata appear to be depicted in the published section (**Fig.5.2**).<sup>1013</sup> The entire burial deposit in both chambers was around 45-50cm deep.<sup>1014</sup> Unfortunately, no information regarding the human remains found in either chamber has been published.

In both tomb chambers a large number of artefacts were recovered, with 559 inventoried objects from Chamber A and 557 from Chamber B.<sup>1015</sup> The vast majority of these were ceramic vessels.

In Chamber A there were 516 inventoried pots, including 165 juglets, 101 jugs, 169 bowls, 25 tankards and a range of other shapes. Of particular note, the juglets included 98 of BRI, three of which were twin juglets; one of BR II; seven of WSI (BR form) and eight of BS III/V (TEY imitation or BR form, without flaring base). There were also two alabaster vessels that appear to imitate the BR juglet form (**Fig.3.60**). BR jugs were also present, with 31 of BRI and three of BR II and there was a single Bucchero jug. Also of note is a ceramic 'bathtub'; a figurine of a ram in WP ware; an ostrich egg and finely crafted objects of bronze, silver and bone.

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<sup>1011</sup> Nicolaou & Nicolaou (1989:6).

<sup>1012</sup> Nicolaou & Nicolaou (1989:36).

<sup>1013</sup> Nicolaou & Nicolaou (1989:Fig.3).

<sup>1014</sup> Nicolaou & Nicolaou (1989:Figs.1&3).

<sup>1015</sup> These figures vary from the total number of catalogued objects listed in the excavation report as fragments of multiple pots were often included under one catalogue number. Where fragments were counted as individual vessels, a conservative approach was used (for example, only counting large neck fragments for jugs/juglets).

A comparable ceramic assemblage was found in Chamber B, which contained 525 inventoried pots in total including 137 juglets, 76 jugs, 171 bowls, 42 bottles and 26 flasks. The juglets found included two of PBR, 95 of BRI, four of which were twin juglets; 22 of BR II ware; four of WSI (BR form) and three of Bucchero ware. The bottom half of a glass vessel may also have belonged to a glass imitation of a BR juglet. Other vessels in BR ware include 37 BRI and 11 BR II jugs; three BRI and 16 BR II flasks; 18 BR II Bull Rhyta (**Fig.5.3**); a BR I bull-headed flask; a BR II bull-headed jug and a BR II bird rhyton. Also of note are four Bucchero jugs; 28 RLWM spindle bottles; a boat model in PWH ware; two ‘rattles’ of WP and finely crafted objects in silver, bronze and ivory.

### **Chronology**

In Chamber A, the presence of MCIII wares alongside early forms of LC wares such as PBR, suggested to the excavators an original, transitional date of MCIII/LCIA.<sup>1016</sup> A high percentage of LCI wares suggest that this was the period of the tomb chamber’s most frequent use.<sup>1017</sup> The latest wares found in this chamber include WPVIII and Bucchero, dating the final use of the tomb to the LCIIC period.<sup>1018</sup> Chamber A, therefore, seems to have been continuously used from MCIII/LCIA-LCIIC<sup>1019</sup> (ca.1700-1200 BCE).

In Chamber B the MCIII wares seen in Chamber A are absent, suggesting that it was first used in the LCIA period.<sup>1020</sup> Large amounts of BRI, BR II, WSII and RLWM wares suggest that this chamber was in frequent use for most of the LCI-LCII periods.<sup>1021</sup> As with Chamber A, the latest wares include WPW III and Bucchero, dating the final use of the tomb to the LCIIC or perhaps even early LCIIIA.<sup>1022</sup> As such, Chamber B appears to have been used from LCIA-LCIIC/LCIIIA<sup>1023</sup> (c.1600-1200 BCE).

### **Discussion**

As both tomb chambers appear to have been subject to both looting and numerous episodes of reuse over hundreds of years, possibilities for interpreting many

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<sup>1016</sup> Nicolaou & Nicolaou (1989:36).

<sup>1017</sup> Nicolaou & Nicolaou (1989:36).

<sup>1018</sup> Nicolaou & Nicolaou (1989:36).

<sup>1019</sup> Nicolaou & Nicolaou (1989:36).

<sup>1020</sup> Nicolaou & Nicolaou (1989:78).

<sup>1021</sup> Nicolaou & Nicolaou (1989:78).

<sup>1022</sup> Nicolaou & Nicolaou (1989:78).

<sup>1023</sup> Nicolaou & Nicolaou (1989:36).

aspects of the mortuary rituals conducted in association with this tomb are limited. In particular, the disturbed nature of the burial deposits and the complete lack of published details regarding any skeletal remains that may have been found make it impossible to establish any relationship between certain tomb artefacts and a specific burial. Given the number and diversity of artefacts found within the tomb, however, it remains possible to make a number of observations pertinent to the interpretation of the mortuary rituals conducted in association with this tomb.

The most striking feature of this tomb is the sheer number of artefacts found within the two chambers with over 500 ceramic vessels in each. While the number of burials in each chamber is unknown, comparisons with similar tombs containing around 40-60 burials,<sup>1024</sup> in terms of the size of the tomb chamber, the depth of burial deposit and duration of use, suggest a similar number of burials for each of these two chambers.<sup>1025</sup> If so, an average of around 10 ceramic vessels per burial can be argued to have been deposited in both chambers, slightly more than the number estimated for intact LCA burials overall (see Section 5.2.1).

The volume of pottery and the predominance of certain shapes suggest that much of this pottery was used during ceremonies conducted in association with the interment of the deceased. Furthermore approximately 93% and 87% of the pottery assemblages of chambers A and B respectively can be associated with the mixing, pouring and consumption of liquids, including jugs, juglets, bowls, tankards, bottles, craters, cups and flasks. While it is possible that some of these vessels were possessions of those buried within the tomb or were deposited there as gifts or provisions for the afterlife, the sheer volume of juglets, jugs and bowls (165, 101 and 169 respectively for Chamber A, 137, 76 and 171 respectively for Chamber B) argues against most of these vessels being included in this category. The preponderance of jugs and juglets in particular suggests that large quantities of certain liquids were brought to the tomb, while the large number of vessels associated with consuming liquids (a total of 372 bowls, cups and tankards) further suggests much of it was actually consumed by ritual participants. As such, this assemblage certainly appears to

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<sup>1024</sup> Ayia Irini-Paleokastro Isolated tomb; Ayios Iakovos-*Melia* Tombs 8 & 14; Enkomi French Tomb 49/5 & Kition-Chrysopolitissa Tomb 9. See Table A1.1.

<sup>1025</sup> The most burials recorded from a single Late Cypriote tomb chamber is 63, from Ayios Iakovos-*Melia* Tomb 8, Gjerstad et.al. (1934:337-340).

reinforce the notion that the consumption of liquids was an important component of Cypriote mortuary ritual throughout the majority of the Bronze Age.<sup>1026</sup>

Concerning the types of liquid consumed, a large proportion of the vessels from this tomb can be associated with specific contents, as discussed in Chapter 3. Most strikingly, the tomb contained massive numbers of small containers which can be associated with opium. This primarily comprises of a total of 218 poppy-shaped BR juglets (mostly BRI, although some were PBR and BRII), but may also include the eight Bucchero jugs, 22 juglets of BR bilbil shape in BSIII/V, WSI, alabaster and glass and perhaps also the 82 BR jugs. Notably, the number of BR bilbil juglets deposited far exceeds the estimated number of burials for each chamber (40-60), arguing against the inclusion of these vessels purely as a provision of opium for use by the deceased in the afterlife, either as a medicine or to enable access to the underworld via ASCs.<sup>1027</sup> Given these observations, the most likely explanation for the large number of BR juglets in both chambers of this tomb is that significant quantities of opium had been consumed during the activities conducted in and around the tomb.

In addition to opium consumption, the numerous other relatively small closed vessels (primarily juglets, spindle bottles, smaller flasks and stirrup jars) suggest the consumption of additional precious liquids during mortuary rituals at Kazaphani. In particular, the 37 RLWM spindle bottles (and perhaps those in WLWM and BR wares) suggest the consumption of not insignificant quantities of oil-based liquids,<sup>1028</sup> perhaps perfumed oil. The larger closed vessels (predominantly consisting of jugs in WP and BR wares, but also including larger stirrup jars) also suggest the consumption of either an alcoholic beverage such as wine or perhaps simply water. The occasional cooking pot may indicate the preparation and consumption of food by ritual participants, or may also have been deposited as a provision or possession for/of the deceased.

The final element of note in the ceramic assemblage of this tomb is the presence of a total of 27 animal shaped rhyta (primarily bull rhyta, usually in BR

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<sup>1026</sup> Herscher (1997:31-35); Manning (1998:47); Steel (1998:290, 2002:109-110, 2004b:168); Webb & Frankel (2008:288).

<sup>1027</sup> Although it is possible that multiple BR vessels were provided for each individual interred, the much lower numbers of such vessels in other LC tombs argues against such a practice. Instead, the large number of BR juglets may represent varying levels of opium consumption by mortuary ritual participants.

<sup>1028</sup> As discussed in Chapter 3 on the basis of organic residue analysis by Steel (2007).

ware). Interestingly, Webb points out that BR bull rhyta seem largely restricted to LCI-II tomb contexts, suggesting a role exclusively in mortuary ritual.<sup>1029</sup> In the few instances where the precise function of these rhyta within ritual practice is considered, a role as libation vessels is usually suggested.<sup>1030</sup> As discussed in Chapter 3, however, the apparent use of the Aegean-style conical rhyta with the measuring, filtering and pouring of alcoholic liquids may also suggest the possibility that these animal shaped rhyta performed a similar role in LCI-II mortuary ritual, particularly as conical rhyta only occur from the LCIIC.<sup>1031</sup> Conversely, the adherence to an animal form (particularly the bull) suggests that the function of these objects was as much symbolic as functional. In this regard, it is relevant to note Rehak's suggestion that bull-headed stone Rhyta from the Aegean acted as a symbolic proxy for the real animal, with the intentional destruction of these vessels meant to represent the sacrificial offering of the animal.<sup>1032</sup> As such, the passing of liquid through a bull-shaped rhyton may have similarly been considered to imbue this liquid with the 'essence' of the bull, transforming the liquid into an acceptable ritual proxy for the blood and/or meat of a sacrificed animal. In the absence of any organic residue evidence, however, the exact nature of this liquid remains unknown, making it difficult to ascertain what its use may have been. Whatever the precise function of these rhyta, it is perhaps significant that Cypriote Bronze Age bull representations are commonly considered fertility symbols,<sup>1033</sup> suggesting a possible association between Cypriote mortuary ritual and fertility. As noted in the previous chapter, this symbolic association is extremely common in ethnographic examples of mortuary rites and has been linked with the portrayal of death as a 'rebirth' for the deceased that promotes the renewal of life.<sup>1034</sup> The bull rhyta, therefore, may indicate similar beliefs regarding the rebirth of the deceased into the world of the dead and the influence of such spirits over aspects of fertility important to the Late Cypriote economy.

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<sup>1029</sup> Webb (1999:200). As Late Cypriote cult sites predominantly date to the LCIIC-LCIII periods, however, the restricted time-span for the use of these bull rhyta may also explain their absence from such contexts.

<sup>1030</sup> Webb (1999:201); Yon (1986:269-270).

<sup>1031</sup> Webb (1999:200).

<sup>1032</sup> Rehak (1995).

<sup>1033</sup> Åström (1987:8-10); Karageorghis (1971:261); Loulloupis (1979). Although often not elaborated on, the aspects of fertility emphasized here can be understood to relate to the importance of cattle to the Cypriote economy. For further discussion of the association of the bull with fertility throughout the East Mediterranean during the Bronze Age, see Conrad (1959).

<sup>1034</sup> Bloch & Parry (1982).

Given these observations, it appears that the mortuary rituals conducted in association with this feature involved the consumption of opium in relatively large quantities, alcohol, perfumed oils and perhaps water and food. As the ceramic evidence for this consumption was deposited within the tomb, it seems that these activities occurred as components of the final stages of mortuary ritual, the interment ritual. As the volume of pottery deposited suggests a large number of participants, this stage of the mortuary ritual appears to have been a social event of some importance. The use of fine local and imported pottery and consumption of their high value contents further emphasises the significance of such occasions.

The consumption of food and alcohol appears to represent a continuation of the ECA-MCA practice of mortuary feasting.<sup>1035</sup> This sharing of a final feast with the deceased is likely to have continued to be a social occasion in which kin-group identity, membership to ancestral lineage groups and related social status and rights were established and renegotiated after the death of certain family members.<sup>1036</sup> Such activity can again be considered to enhance the intense emotional experience of the participants, assisting the renegotiation of social relationships amongst the living.<sup>1037</sup>

The apparent consumption of large quantities of opium, however, suggests that psychoactives could have been consumed for other reasons, particularly given that its strong psychoactive effects are less suited to promoting social interaction and enhancing emotion. Indeed, as even small doses of opium can produce powerful psychoactive effects, it is more likely that it was used during the final stages of the Kazaphani mortuary ritual for its ability to induce ASCs. Furthermore, as opium consumption generally produces experiences readily interpreted as an encounter with other-worlds (euphoria and the sensation of flying or floating),<sup>1038</sup> it appears likely that it was used here in order to establish such supernatural interactions. In the context of the final stage of a mortuary ritual, the supernatural aspects most likely to be sought in such a manner are the world of the dead, spirits of the dead (most likely those of deceased ancestors) and perhaps also the spirit/s of those being interred.

As discussed in section 4.1.1 the final stages of mortuary ritual often involved rites designed to ensure the incorporation of the deceased into the world of the

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<sup>1035</sup> Herscher (1997:31-35); Manning (1998:47); Steel (1998: 290; 2002:109-110; 2004b:168); Webb & Frankel (2008:288).

<sup>1036</sup> As argued for this activity in earlier periods, Keswani (2005:349-350); Steel (2002:113); Webb & Frankel (2008:292-293).

<sup>1037</sup> Hamilakis (1998:117, 126).

<sup>1038</sup> Hayter (1968:42,48); Rättsch (2005:410).

dead.<sup>1039</sup> As such, inducing ASCs via the consumption of opium (and perhaps alcohol) may have been designed to initiate direct contact with the world of the dead in order to ensure that the spirit/soul of the deceased was finally accepted into this realm. While it is impossible to establish exactly how those at Kazaphani understood such interaction, a number of possible scenarios can be hypothesised. Perhaps the deceased needed to be guided to the underworld by the living, perhaps the ancestors needed to be present at the mortuary feast or perhaps the living needed access to the underworld in order to pay appropriate homage to the deceased as a newly established ancestor.

Another point worth noting with regard to the consumption of opium and alcohol at Kazaphani concerns the fact that the amount of evidence associated with opium far exceeds that linked with alcohol. This appears to represent somewhat idiosyncratic mortuary practices at Kazaphani as the assemblage of almost all other Late Cypriote tombs consists of significantly more evidence for the consumption of alcohol than for opium. This irregularity is exhibited by the fact that Kazaphani Tomb 2 contains by far the largest number of BR juglets found in a single tomb,<sup>1040</sup> while also containing significantly more juglets than jugs and a very small proportion of mixing and serving vessels for alcoholic beverages, particularly craters. One possible explanation for this may be that the Kazaphani region, and perhaps even the group that used Tomb 2, was involved in the production of opium. If so, opium may have been a more accessible and economically viable psychoactive commodity for consumption during mortuary ritual than alcohol. In this regard, it is relevant to note ethnographic evidence that suggests relatively high incidents of opium use (and dependence) amongst communities that produce it.<sup>1041</sup> Without further botanical, residue and petrographic evidence to suggest opium production in the region, however, such a hypothesis must be considered purely speculative.

Perfumed oils are the final substances to consider in relation to their apparent consumption during mortuary ritual at Kazaphani. Throughout the East Mediterranean during the LBA, the use of perfumed oils appears to have been common in ritual contexts and was probably used to anoint participants.<sup>1042</sup> In ritual contexts, the use of

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<sup>1039</sup> Hertz (1960); Van Genep (1960:146-165),

<sup>1040</sup> The next highest number in a single assemblage is 36 from Angastina-Vounos Tomb 1, Nicolaou (1972).

<sup>1041</sup> Geddes (1976:216-222); Powell (2007).

<sup>1042</sup> Fappas (2010).

perfumed oils is most likely to have been associated with purity, whereby the pleasant odour of the perfume would indicate that a participant was sufficiently clean to engage in the ritual. As cleansing or purification is often considered an appropriate preparation for religious activity,<sup>1043</sup> purification is likely to have been an important component of many ceremonies. In the case of mortuary ritual, the use of perfumed oils on the bodies of the recently deceased may have been particularly important to avoid or lessen the impurity often associated with them, perhaps by masking any odours derived from the decomposition of the body. In relation to the purification of the deceased body, it is also interesting to note that the tomb contained fragments of a clay 'bathtub'. I have previously argued that these large, elliptical clay vessels, often found in Late Cypriote ritual contexts can also be associated with a purification component of Late Cypriote ritual.<sup>1044</sup>

In concluding, it is important to point out that, given the restricted dimensions of the tomb chambers and the need to avoid disturbing previous burials, much of the social and ritual activity described above is likely to have been conducted outside the tomb chambers, probably on the surface nearby. If so, placing the material remains of these consumptive practices in the tomb along with the deceased may have been considered a necessary part of sharing the ritual with them. This may have been seen as ensuring the efficacy of the interment ritual and consolidating the link between the deceased, the ritual and the interactions it was designed to facilitate (between the living and the dead, but also between the recently dead and long dead).

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<sup>1043</sup> For a discussion of the ancient Greek concept of purity, see Parker (1983:18-31)

<sup>1044</sup> Collard (2008).

## Kalavassos-Ayios Dhimitrios Tombs

The site of Kalavassos-Ayios *Dhimitrios* is located in the Vasilikos River Valley, 3.5 km from the south coast of Cyprus and 8.5 km from the Kalavassos copper mines located further up the valley in the Troodos foothills.<sup>1045</sup> The site covers an area of about 11.5 ha,<sup>1046</sup> with a small excavated percentage revealing evidence for a prosperous town of well constructed stone and mudbrick buildings, predominantly domestic and highly organised along at least one major street running north-south, but lacking a defensive wall.<sup>1047</sup> The material culture is overwhelmingly local in style,<sup>1048</sup> while a range of bronze objects and metallurgical debris suggests that bronze production was an important activity at the settlement.<sup>1049</sup> Although there is evidence of an earlier settlement, the majority of extant architecture dates to the 13<sup>th</sup> century BCE and appears to have been peacefully abandoned c.1200 BCE.<sup>1050</sup> A number of intramural chamber tombs were found beneath the LCIIC architectural remains.<sup>1051</sup> Of particular note, Tombs 6 and 11 were both discovered not only intact, but also containing very few burial episodes, making them ideal for case studies aimed at establishing the relationship between certain grave goods and Late Cypriote mortuary ritual.

### 5.1.2 Tombs 11 and 9

LCIIA:2/B

(ca.1425-1375 BCE)

Tombs 9 and 11, which share a common dromos, were located in the North-east excavation area (**Fig.5.4**), beneath a street immediately west of the monumental Building X (see Section 6.2) and near the entrance to Building XI.<sup>1052</sup> The dromos entrance was covered by the final LCIIC plaster surface of the street and the last opening of the dromos cuts through a middle phase of the street that is contemporary

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<sup>1045</sup> South (1995:187, 1989:319); Todd & South (1992:195).

<sup>1046</sup> South (1984b:11, 1987:85, 1989:319); Todd & South (1992:195).

<sup>1047</sup> South (1984b:12, 1987:85, 1989:320, 1995:192, 1996:41, 2000:345).

<sup>1048</sup> South (1983:115, 1984b:16); South, A. K. et al. (1989:22); South & Todd (1985:45).

<sup>1049</sup> South (1987:85, 1992:195, 1995:192-194, 1996:41).

<sup>1050</sup> Russell (1986:337); South (1984a:24, 1987:85, 1992:195, 1995:197, 2000:345); Todd & South (1992:195).

<sup>1051</sup> South (1982; 1997; 2000); South et al. (1989).

<sup>1052</sup> South (1997:161, Fig.1).

with the construction of Building X (probably LCIIB).<sup>1053</sup> The tombs' construction appears to be contemporary with the earliest known phase of buildings in the area.<sup>1054</sup> Although it is not known whether the tombs in the area were located within a street during their first use, they certainly seem to have been by their later periods of use, with the location of the dromoi apparently marked by small upright stones in their corners.<sup>1055</sup>

The dromos of Tombs 9 and 11 was roughly rectangular (1.5m long, 1.2-1.35m wide, ca.1.5m deep), with Tomb 11 opening off the north end and Tomb 9 off the south end (**Fig.5.5**).<sup>1056</sup> The fill contained numerous sherds of partly restorable WSII, BRII and WSh vessels, possibly from a disturbed tomb nearby.<sup>1057</sup> A small niche was cut halfway up the east side of the dromos near Tomb 9 and contained the incomplete skeletal remains of a child (20-24 months) and an adult (17-25 years), plus a large bronze ring and a BRI juglet. Tomb 9 consisted only of a small oval chamber (max diam. 1.1m) and was found without the usual stone slab to seal the entrance. It contained only a nearly complete skeleton of an infant and a few ivory fragments.<sup>1058</sup>

Tomb 11 consisted of a roughly kidney shaped chamber (ca.2.6m long, 4.2m wide) divided into two lobes by a buttress projecting from the rear (north) wall (**Fig.5.6**).<sup>1059</sup> Rock cut benches ran along the full extent of both side walls. An exceptionally large stomion (ca.90cm wide, 60cm high, 10-30cm long) leading to the chamber was sealed with a large rectangular stone slab and the contents of the chamber appeared to be intact and undisturbed by winter flooding.<sup>1060</sup>

On the west bench lay the articulated skeletal remains of a female (19-20 years), lying fully extended with her head towards the entrance.<sup>1061</sup> She was apparently adorned with a considerable wealth of jewellery including six gold hoop earrings, four gold spirals (hair or earrings), numerous beads of gold and glass/faience, two gold signet rings with Cypro-Minoan signs and a pair of silver toe rings.<sup>1062</sup> On the east bench were the disturbed skeletal remains of another two

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<sup>1053</sup> South (1997:156-157,161; 2000:348).

<sup>1054</sup> South (1997:161; 2000:348).

<sup>1055</sup> South (2000:348).

<sup>1056</sup> South (1997:161, Fig.4).

<sup>1057</sup> South (1997:161).

<sup>1058</sup> South (2000:352).

<sup>1059</sup> South (1997:161; 2003:26, Fig.3).

<sup>1060</sup> South (1997:161; 2003:26).

<sup>1061</sup> South (1997:161; 2003:26).

<sup>1062</sup> South (2000:353; 2003:26, pers.comm.). See also Goring (1989: Fig.13.1).

women. For one of these (21-24 years) only the cranium and some vertebrae appeared to remain undisturbed at the north end of the bench, with any other bones found scattered along the bench or on the chamber floor nearby.<sup>1063</sup> The skull of the second (ca.17 years) lay at the south end of the bench, but her long bones had been placed in non-matching pairs along the bench, while smaller elements were found scattered across it.<sup>1064</sup> These remains had apparently been moved and rearranged after the flesh had decayed and the skeleton disarticulated.<sup>1065</sup> More gold jewellery was found on the east bench with them, including a pair of heavy bracelets, an openwork bracelet, another six hoop earrings, numerous beads and a finger ring with an Egyptian inscription, plus a pair of silver rings.<sup>1066</sup> Four conical objects of gold and a number of ivory objects were also found on this east bench.<sup>1067</sup>

On the floor of the chamber next to the east bench were the bones of a young child (ca.3 years, although three teeth probably from this individual were found on the bench) and a large cluster of grave goods.<sup>1068</sup> These artefacts included: a pair of Mycenaean craters (LHIIIA) each with a Y-shaped BR II bowl placed within; a Mycenaean kylix (LHIIIA); a pair of BR II bull figurines/rhyta; a WS II bowl; fragments of up to 14 RLWM spindle bottles; numerous ivory fragments (most apparently from cosmetic containers) and more beads of gold and glass/faience,<sup>1069</sup> probably once worn by the nearby burials.

A second large cluster of grave goods was discovered on the floor in the northwest of the chamber, near the rear wall between the buttress and west bench. These included: three identical Mycenaean piriform jars (LHIIIA); a Mycenaean lentoid flask (also LHIIIA); a graded set of pedestalled BR bowls; fragments of three RLWM spindle bottles, four RLWM lentoid flasks, two glass juglets, a WS II bowl, a faience button, numerous ivory vessel fragments (including a pair of duck shaped cosmetic palettes), a cylindrical pyxis of gold, copper, lead/silver and glass, beads of gold and glass/faience, a lump of slag and a bronze dagger.<sup>1070</sup>

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<sup>1063</sup> Goring (1989:100).

<sup>1064</sup> Goring (1989:100).

<sup>1065</sup> Goring (1989:100).

<sup>1066</sup> South (2003:26, pers.comm.). See also Goring (1989: Fig.13.1).

<sup>1067</sup> South (2003:26, pers.comm.). See also Goring (1989: Fig.13.1).

<sup>1068</sup> Goring (1989:101); South (2000:352).

<sup>1069</sup> South (2003:26, pers.comm.). See also Goring (1989: Fig.13.1).

<sup>1070</sup> South (2003:26, pers.comm.). See also Goring (1989: Fig.13.1).

Still near the western bench, but further towards the entrance were the clustered remains of three newborn infants mixed with some bird and fish bones, perhaps all originally contained within a basket or bundle.<sup>1071</sup> These were accompanied by three WSII bowls and sat on top of a layer of silt that covered all the other finds in the tomb, indicating that this was the final deposit placed within.<sup>1072</sup>

Other artefacts from the tomb whose exact find-spot is unpublished include a 3-handled piriform jar of alabaster, an amber bead, a pair of biconical stone spindle-whorls and a double sided stamp seal.<sup>1073</sup> Eggshells and bones from sheep, goat, doves and several kinds of fish were also recorded.<sup>1074</sup>

### **Chronology**

The primary use of Tomb 11 can be dated to LCIIA:2 or perhaps the transition with LCIIIB (ca.1425-1375 BCE) based on the LHIIIA pottery, the WSII ware and a cup of transitional BRI/II.<sup>1075</sup> The WSII bowls deposited with the three infant burials suggest a LCIIIB date for this final deposit in the tomb.<sup>1076</sup>

### **Discussion**

The material within Tomb 11 appears to have been found where it was left when the tomb chamber was sealed, probably when the three newborn infants were deposited. Such preservation of the immediate depositional context of this material and the wealth of grave goods presents a good opportunity for assessing certain aspects of the mortuary rituals conducted in association with this tomb. Goring has, however, previously considered the human remains within the tomb in some detail.<sup>1077</sup> As such, this material will not be discussed in detail here, although the following observations are worth noting.

Given that there is no evidence for any disturbance by looting or flooding, the scattered and mixed nature of the skeletal remains of the three individuals on or near the east bench must be attributed to some form of handling and rearrangement, perhaps even secondary burial.<sup>1078</sup> The articulated skeleton on the east bench, though, is likely to have been a primary interment. In this regard, the excavator suggests the

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<sup>1071</sup> Goring (1989:101); South (2000:352).

<sup>1072</sup> South (1997:161).

<sup>1073</sup> South (2003:27-28).

<sup>1074</sup> Goring (1989:103); South (2003:26).

<sup>1075</sup> South (1997:161).

<sup>1076</sup> South (1997:161).

<sup>1077</sup> Goring (1989).

<sup>1078</sup> Goring (1989:100).

possibility of a burial program in which the west bench was used for the most recent interment with any earlier burials first moved to the east bench.<sup>1079</sup> The lack of any bones on the west bench from the incomplete skeletons ultimately deposited on the east bench, though, argues against this possibility. The discovery of Tomb 9 almost completely empty and pottery within the dromos, perhaps from a disturbed tomb nearby, do suggest, however, other possible primary burial contexts for the two individuals deposited on the east bench.

The cluster of newborn remains placed as the final deposit within the tomb some time after the other burials judging by the layer of silt that had accumulated, certainly appear to have also been secondary burials. The excavator tentatively suggests that all the children may have been the offspring of the three adult women buried in the tomb who may have all died in childbirth.<sup>1080</sup> The excavator also argues that the incomplete nature of the skeletal remains found in the dromos niche suggests that both were almost certainly secondary burials.

Previous considerations of the artefact assemblage found within Tomb 11 have rightly emphasised the substantial wealth of gold (a total of 432g) and foreign exotica that was deposited.<sup>1081</sup> The imported Mycenaean pottery and objects of ivory, alabaster, glass and even amber all suggest that those interred within the tomb (or at least their kin) were well connected to long-distance trade routes. The presence of signet rings (two bearing Cypro-Minoan signs and a third bearing Hieroglyphs) and a stamp seal further suggest that those interred were involved with some form of administrative control, probably over tradable commodities. While the deposition of considerable wealth along with these individuals is likely to have been an attempt to provision them for a high standard of afterlife (presumably reflecting that to which they were accustomed in life), its destruction in such a visible manner would have also underlined the wealth and status of the dead and their family.<sup>1082</sup> Given the tombs' locations immediately next to Building X, these factors suggest that the family(s) to which these women belonged were somehow involved in the construction and use of this building and were likely to have held a privileged, if not supreme, position of authority at the settlement. The burial of family members in the area in

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<sup>1079</sup> South (2000:352).

<sup>1080</sup> South (2000:352).

<sup>1081</sup> Goring (1989); South (2003).

<sup>1082</sup> Goring (1989:103).

which this building was eventually constructed can, therefore, be viewed as an ultimately successful attempt to emphasise the status and rights of this group(s).

Not all of the grave goods, however, were necessarily deposited as the possessions of the deceased or provisions for their afterlife. While the jewellery and artefacts such as the ivory containers appear to belong to these categories, certain ceramic vessels may have had other roles in the mortuary rituals conducted in association with Tomb 11. In relation to these artefacts, it is interesting to note that the relatively discrete distributions of artefacts also suggest the possibility that certain clusters can be associated with certain burials and were possibly deposited at different times. In particular, the cluster along the east bench might be associated with the three burials on and next to this bench and those grouped between the buttress and the west bench might be associated with the burial on this bench. The excavators also draw attention to the placement of pottery in 'pairs' or 'sets', particularly the two crater and bowl sets and two BR bull rhyta from the eastern cluster and the three identical piriform jars and three pedestalled BR bowls in the western cluster.<sup>1083</sup>

As previously discussed the RLWM spindle bottles may have held oils,<sup>1084</sup> most likely perfumed, probably used during mortuary ritual in an attempt to maintain a certain level of purity, particularly in combating the impurity of the corpse by masking polluting odours. As such, the relatively large number of these vessels found within Tomb 11 (17 in total) may relate to the apparent need to disturb and handle the partially or fully decomposed corpses eventually deposited on the east bench. The odours associated with such activity may have required large quantities of perfumed oil. While it is also possible that all of the RLWM spindle bottles found within the tomb were deposited as provisions for the deceased (by modern standards, young women are a key demographic in the consumption of perfume), the fact that over half of these vessels were largely incomplete strongly argues against such a function.

Other ceramic vessels may have been used during some form of feasting conducted during the mortuary rituals in and around Tomb 11. The excavator in particular draws attention to the two pictorial Mycenaean craters, suggesting that they clearly played a central role in the burial ritual, perhaps used during a funerary feast.<sup>1085</sup> Their discovery with carinated BR II cups within has direct parallels in

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<sup>1083</sup> South (2003:28).

<sup>1084</sup> Steel (2007).

<sup>1085</sup> South (2003:29).

numerous Late Cypriote tombs (see Section 6.2.1) and can be associated with the mixing and serving of wine. If wine was served from these vessels during the mortuary rites, then the five lentoid flasks (one in Mycenaean ware, four in RLWM ware) appear to be the only possible candidates from the tomb assemblage that might have contained this beverage. At least one of the RLWM flasks appears to have been stoppered,<sup>1086</sup> however, suggesting that the contents of at least some of these vessels were deposited as a provision for the deceased. Furthermore, as all five flasks were found in a separate cluster of grave goods from the two craters, they may have belonged to different burial episodes. As such, the use of these flasks to provide wine consumed from the craters seems unlikely. Indeed, if the two craters were used for the mixing of wine for consumption during mortuary ritual, then any ceramic containers in which this wine was transported do not appear to have been deposited. Given the prevalence of jugs which may have been used for just such a function from other Late Cypriote tombs (see Section 6.2), the absence of such vessels in this tomb seems to be something of an anomaly. If wine was in fact consumed from the two craters during the mortuary ritual, it may be that this occurred outside the tomb chamber, with only the crater/bowl sets subsequently deposited in the tomb. The consumption of alcohol by ritual participants in the area above the tomb might also explain some of the fragmentary vessels found within the dromos fill.

The BR II bull rhyta, Mycenaean kylix and WS II bowl in the same cluster of grave goods as the crater/bowl sets might also have played some role in the activities associated with the craters. As drinking vessels, the kylix and bowl may have been used to consume wine mixed in the craters. The possible symbolic role of the rhyta in transforming the liquid passed through them has previously been discussed. This liquid may have subsequently been consumed by participants in the mortuary ritual, or poured as a libation offered to the supernatural powers associated with the tomb, such as ancestral spirits.

The two glass juglets also found in the cluster near the west bench may have contained perfumed oil, a psychoactive substance such as opium or pomegranate wine or may even have been deposited empty for their own value as exotic imports. The pedestalled BR bowls appear suited to the presentation of food, so may have been deposited with food on them either as a provision for the afterlife or to be consumed

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<sup>1086</sup> Hajisavvas (2003:Cat.27)

as part of a mortuary feast. Similar possible roles can be suggested for any organic contents held in the three Mycenaean piriform jars, which may have held either dry goods or viscous liquids such as honey or perfumed unguents. The eggshells and animal bones may all derive from other foodstuffs deposited in the tomb, once again, either as a provision for the afterlife or consumed during a mortuary feast.<sup>1087</sup>

The final artefact of note from the tomb is the BRI juglet found within the dromos niche. Although the niche also contained skeletal remains of both a young child (20-24 months) and an adult, this appears to provide an example of the occasional co-occurrence of these vessels and the remains of very young children in Late Cypriote tomb niches. This phenomenon will be discussed in more detail in Section 6.2.2.

In summary, the artefacts found within Tomb 11 provide little in the way of evidence for the consumption of psychoactive substances in order to induce ASCs as a component of associated mortuary rituals. With the exception of the BR juglet found within the dromos niche, there are certainly no artefacts that provide strong evidence for opium consumption, while the evidence for the consumption of alcohol is ambiguous. Although the crater/bowl sets and certain other vessels found within the tomb may derive from the consumption of wine during mortuary feasting, there is a distinct lack of pots that can be associated with the transport of wine to the tomb. This apparent lack of pouring vessels seemingly presents a significant variation in mortuary assemblage from the Late Cypriote norm and may reflect a similar variation in the mortuary ritual itself. Possible reasons for such a variation might relate to the apparent high status of the women buried within the tomb, the fact that all the adults interred within are relatively young women (perhaps suggesting that alcohol consumption and drunkenness were considered less appropriate for the mortuary rituals of women and children) or the position of the tomb in an important area of the settlement. In relation to the latter, the appropriate facilities for certain components of the mortuary ritual, particularly feasting and drinking shared with the spirits of the deceased (akin to the *marzēah*) may have been located nearby. As discussed in Section 6.2.1, significant evidence for feasting activities was found within Building X and similar activity might be supposed for its predecessor. Given that those interred in Tomb 11 appear to have belonged to a particularly high-status family, mortuary

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<sup>1087</sup> Goring (1989:103); South (2003:29).

feasting in their honour may have been conducted in a more formalised and grandiose setting, such as Building X, rather than in or around the nearby tomb.

### 5.1.3 Tomb 6

LCIIC

(c.1300-1200 BCE)

Tomb 6 was located in the Southeast excavation area, beneath what appears to be a walled open area or court immediately adjacent to the main north-south road (A.42, **Fig.5.7**).<sup>1088</sup> A layer of silt overlying the dromos of the tomb, but running beneath the LCIIC walls defining this area and its associated floor surfaces,<sup>1089</sup> however, suggests that the tomb had been covered over prior to the period represented by these architectural remains.<sup>1090</sup>

The tomb was cut into a havara<sup>1091</sup> surface underlying A.42 and consisted of a relatively small rectangular dromos (1.2m long, 1.12m wide, 0.7m deep) and a short stomion (48 cm wide, 52cm high, 45cm long) leading to a roughly elliptical chamber (3.0m wide, 2.8m long, 2.05m high, **Fig.5.8**).<sup>1092</sup> The stomion was sealed on the outside with a rectangular gypsum slab and the dromos was filled with a hard, sterile deposit of roof collapse,<sup>1093</sup> suggesting that the tomb was not reopened after the final (and probably first) burials were interred. The tomb contained what appears to be a single burial deposit, which was discovered intact beneath a layer of havara fragments that had fallen from the roof. There was no evidence that the tomb had been subject to flooding, although the floor of the chamber actually extended into a conglomerate layer beneath the havara, making it possible that water could have seeped in from below without leaving any trace.<sup>1094</sup>

On the floor of the chamber the extremely fragmentary remains of an adult (25-30 years) and a child (3-8 years) were found in an area adjacent to the north wall (**Fig.5.8**).<sup>1095</sup> Immediately south of this cluster of human bone (but still in the north

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<sup>1088</sup> South (1982:63, Fig.1); South et.al. (1989:54).

<sup>1089</sup> South (1982:63); South et.al. (1989:54).

<sup>1090</sup> The excavators suggests, however, that the shallow founding of these walls may indicate that they date to a relatively late phase of the LCIIC settlement, South et.al. (1989:54).

<sup>1091</sup> Havara is the local name for a surficial, soft, porous, carbonaceous, clastic rock of Quaternary age, Schirmer (1998).

<sup>1092</sup> South et.al. (1989:54).

<sup>1093</sup> South et.al. (1989:54).

<sup>1094</sup> There was no fan-shaped accumulation of silt inside the entrance that often results from the flow of water into a tomb chamber, South et.al.(1989:54).

<sup>1095</sup> South et.al. (1989:54, Fig.41).

half of the chamber) was a PWW crater with a Y-shaped BR II bowl inside it, a Monochrome jug and a pair of Myc. III B alabastra.<sup>1096</sup> Near the south wall and completely separate from the other finds was another PWW crater, again with a Y-shaped BR II bowl within it.<sup>1097</sup> From an unknown location within the tomb (found during sieving) came the bones of a game bird, a bronze finger ring and several fragments of ivory, including rod fragments and a pierced disc.<sup>1098</sup> The skeletal remains and grave goods all seem to derive from a single interment episode.<sup>1099</sup>

### **Chronology**

The ceramic material, particularly the Myc. III B vessels, suggests a date of LC IIC (c.1300-1200 BCE) for the tomb.<sup>1100</sup> The LC IIC architecture immediately above the tomb further suggests an earlier phase of this period.

### **Discussion**

The tomb material appears to have been found roughly where it was deposited when the chamber was sealed. Not only was the tomb discovered completely intact, but a layer of material fallen from the roof had apparently prevented the disturbance of the skeletal remains and artefacts.<sup>1101</sup> As there appears to have been only one interment episode, during which discrete distributions of grave goods were deposited, the placement of these artefacts may assist in determining their role in the mortuary ritual that took place in and around this tomb.

Firstly, it seems that a number of the ceramic artefacts were intentionally placed near the bodies of the two interred individuals. These include the two alabastra, the jug and one of the crater and bowl sets. This close proximity initially suggests some role as either personal possessions of the deceased, deemed appropriate to be buried with them, or provisions intended for use by the deceased in the world of the dead, or during rituals designed to help get them there. The latter case seems most likely for the alabastra in particular, which may have contained perfumed unguents that were used to 'purify' the bodies,<sup>1102</sup> ensuring that they were in a state fit for the rituals designed to incorporate their spirits into the world of the dead.

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<sup>1096</sup> South et.al. (1989:54-55, Fig.41).

<sup>1097</sup> South et.al. (1989:54-55, Fig.41).

<sup>1098</sup> South et.al. (1989:54-55).

<sup>1099</sup> South et.al. (1989:55).

<sup>1100</sup> South et.al. (1989:55).

<sup>1101</sup> Notwithstanding the unlikely possibility that a significant amount of water flooding up from the conglomerate layer disturbed these prior to the roof collapse securing it in place.

<sup>1102</sup> As discussed in Chapter 3, and similarly suggested for the use of perfumed oils in association with Kazaphani Tomb 2.

Conversely, it also appears that the second crater and bowl set was deliberately placed on the opposite side of the chamber, some 2m away from the bodies, suggesting a different role for these objects. While it is possible that these vessels were deposited as an offering or provision for one of the deceased (there are two burials after all), certain points argue against this. As discussed in Section 3.3.2, the most likely use of such vessels is for the consumption of wine, which seems to be an unsuitable offering or provision for a young child, at least by modern standards. Furthermore, as these two vessels were deposited away from the bodies, it seems that they were actually used by living participants in the mortuary ritual and subsequently deposited in the tomb. With an identical crater and bowl set found next to the bodies, these drinking vessels might represent the sharing of a final consumption event with the deceased, perhaps even a *marzēah*-like ‘feast’ with a focus on alcohol.<sup>1103</sup> In such a context, the consumption of alcohol and the ASCs it produces may have been viewed as a way to contact and interact with the world of the dead, perhaps including the deceased being interred. Contact with the world of the dead initiated in such a manner may have somehow been considered a necessary part of the mortuary ritual in order to ensure that the deceased were fully accepted into this realm.

If alcohol was consumed during the mortuary rites conducted in or around this tomb, however, the single Monochrome jug found within suggests that it was done so only in relatively small quantities.<sup>1104</sup> This further suggests that only a limited number of individuals, perhaps even just the one, actually consumed alcohol during this ritual.

Given the human remains found within the tomb, a hypothetical scenario involving a single individual burying their spouse and child, perhaps with help from a few others, might be imagined. If so, the consumption of alcohol and the mortuary ritual as a whole may not have involved the degree of social interaction and ‘conviviality’ commonly suggested for Bronze Age Cypriote mortuary ritual. Instead, the remains of this tomb suggest a more sombre affair, where perhaps only a single individual mourned the passing of their loved ones while performing the appropriate funerary rites. These rites may have included the individual entering the tomb chamber to share a final moment with the deceased, consuming alcohol in order to

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<sup>1103</sup> The bones of a game bird from an unknown location within the tomb may have also derived from this activity, although they could equally represent a food offering left for the deceased.

<sup>1104</sup> Even if the jug was left as an offering or provision for the deceased, this does not preclude much of its contents being consumed by the living when ‘sharing’ it with the deceased. Such ‘creative accounting’ of sacrificial offerings appears to be common during ritual practices throughout the ancient world.

interact with the underworld, before leaving the tomb and sealing them within this subterranean realm. As such, the possible consumption of alcohol in this instance appears to have been an individual experience, rather than a social one, where the ability of this substance to induce experiences viewed as contact with the supernatural was emphasised over its ability to promote social interaction. Furthermore, as alcohol consumption also inhibits memory,<sup>1105</sup> in a funerary context it may have been of additional benefit to a mourning individual by suppressing painful memories of the deceased and thereby providing a means to lessen their grief in such a keenly emotional moment. The evidence from Kalavassos-Ayios *Dhimitrios* Tomb 6, therefore, suggests that the consumption of alcohol during Late Cypriote mortuary ritual may have had important symbolic and psychological meaning for the individual, in addition to the socio-political meaning commonly attributed to this substance.

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<sup>1105</sup> Julien (2008:107-109); Meyer & Quenzer (2005:244).

## Enkomi-Ayios Iakovos Tombs

The site of Enkomi-Ayios *Iakovos*, located 2.5km inland from Famagusta Bay on the east coast of Cyprus, is the most extensively excavated Late Cypriote site and, therefore, probably one of the most important sites for understanding this period on the island.<sup>1106</sup> Excavations include expeditions by the British Museum (BM) in 1896,<sup>1107</sup> the Swedish in 1930,<sup>1108</sup> the French in 1934 and 1946-1973<sup>1109</sup> and the Cypriotes from 1948-1958.<sup>1110</sup> The tombs and settlement remains uncovered suggest that the site was inhabited from the MC III period till the end of the LCA. Most of the architecture revealed belongs to a large urban settlement (ca.400m N-S x 350m E-W, Figs 5.09-5.11) dating to the LCII-III periods,<sup>1111</sup> bounded on the east by a ca.10m high scarp and a fortification wall on the north, west and south. During this period the town was laid out on a grid plan, while the architecture suggests a prosperous settlement, with a number of monumental buildings located near the centre. A number of building phases were recorded, with major phases of rebuilding suggested during the 13<sup>th</sup> Century BCE when ashlar masonry was introduced to a number of structures and ca.1200 BCE when these buildings were rebuilt with altered floor plans following an apparently violent destruction.<sup>1112</sup> The site appears to have been abandoned at the end of the Bronze Age (ca.1050 BCE). A total of 185 intramural Late Cypriote tombs have also been uncovered at the site (See **Table EA5.3**),<sup>1113</sup> making Enkomi the largest known Late Cypriote necropolis, as well as the most extensively excavated settlement. While the majority of these tombs were either looted or not published in detail, three of the more intact and sufficiently published<sup>1114</sup> examples have been chosen to review here as detailed case studies.

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<sup>1106</sup> Catling (1962:143); Karaeorghis (2002:57); Lagarce (1993:97-99); Negbi (1986:101); Wright (1992:86).

<sup>1107</sup> Murray et al. (1900).

<sup>1108</sup> Gjerstad et al. (1934).

<sup>1109</sup> Courtois (1984); Courtois et al. (1986); Schaeffer (1952, 1971).

<sup>1110</sup> Dikaios (1969-1971).

<sup>1111</sup> Cypriote excavation Levels IIA-IIC, French Excavation Sols V-VII. See Ionas (1984) for a comparison of these two stratigraphies.

<sup>1112</sup> Due to the fact that the French excavations often ceased at 13<sup>th</sup> century levels and the Cypriote Excavations also left the walls from this period intact the majority of architectural information from the site dates to the 13<sup>th</sup> and 12<sup>th</sup> centuries BCE (LCIIC-LCIIIA), Crewe (2007:71).

<sup>1113</sup> Including references.

<sup>1114</sup> The examples selected come from the French excavations at Enkomi, the publication of which are generally lacking in a number of details. In the case of the examples chosen, however, sufficient detail for reconstructing the tombs as they were found can be deduced from the published information.

### 5.1.4 French Tomb 49/5

LCIB-LCIIIB

(ca.1500-1050 BCE)

This tomb was discovered in 1949 by French excavations and was located beneath the street that ran between *Quartiers* 5E and 6E, approximately 20m southeast of the Sanctuary of the Ingot God (see Section 6.1.3).<sup>1115</sup> It consisted of the standard chamber type tomb cut into *havara*, with a roughly circular dromos (ca.1.3m diam., 1.2m deep) located to the west of a bilobate chamber (2.4m long, 2.6m wide, 1.8m high).<sup>1116</sup> The roof of the chamber had collapsed in antiquity, resulting in the sealing slab falling into the chamber, but it was otherwise intact.<sup>1117</sup>

The material within the tomb was largely divided into two distinct burial layers separated by a sterile deposit of limestone chunks and dust fallen from the roof (*couche II*, **Fig.5.12**), although this diminished near the walls of the chamber, where material from both burial layers appears to have been swept.<sup>1118</sup> This has led to some mixing of material in these areas, although the ceramic material could generally be assigned to either deposit based on typological and chronological distinctions.

The lower burial deposit (*couche I*, **Fig.5.13**) rested directly on the chamber floor and consisted of material dating to the MCIII/LCI-LCIIA period. This included 214 ceramic vessels: 46 juglets, 45 jugs, 82 bowls, six tankards, three craters, a pair of RLWM spindle bottles and five small stirrup jars and five piriform jars of Aegean wares.<sup>1119</sup> Of particular note are the juglets, which included 15 of BRI, two of BSIII/V (BR form, without flaring base) and a BRII spouted strainer juglet. The jugs included one of PBR, three of BRI and two of Bucchero ware (handmade, squat, wide-mouthed). Also of note were a steatite cylinder seal, six faience/glass bottles shaped like pomegranates, a faience stirrup jar, two faience bowls, ivory pyxis fragments and numerous items of jewellery in gold, bronze and faience. The skeletal remains of

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<sup>1115</sup> Dalton (2007:Fig.1).

<sup>1116</sup> Shaeffer (1952:156).

<sup>1117</sup> Shaeffer (1952:156-157).

<sup>1118</sup> Shaeffer (1952:219).

<sup>1119</sup> Shaeffer (1952:111-135, Fig.42-51, Pl.XVII-XVIII). Somewhat confusingly, the published inventory and plans of this deposit (*couche I* on the section) are described as belonging to the *troisième* and *quatrième couche*.

this burial layer were heavily disturbed and disintegrated, although an estimated 17 skeletons have been assigned to it.<sup>1120</sup>

The upper burial deposit dates primarily to the LCIIC-III periods and consisted of two layers (*couches III & V*), separated in some areas by a thin layer of limestone chunks and dust fallen from the roof (*couche IV*), but apparently a chronologically homogenous deposit (**Fig.5.14**).<sup>1121</sup> The material assigned to these layers included 75 ceramic vessels: four juglets (all WSh), 44 jugs, 17 bowls, one tankard, a single Bucchero amphoriskos and three small stirrup jars and two piriform jars of Aegean wares.<sup>1122</sup> Of particular note, the jugs included four of BRII ware and 25 in Bucchero ware (predominantly wheel-made, all narrow-necked). Other artefacts of note included a stamp seal of faience/glass paste, 11 hemispherical bronze bowls, a bronze dagger, a fragmentary jar of alabaster, a glass juglet, an ivory cup, an ivory pyxis, and more jewellery in gold, bronze and faience. In the uppermost burial layer (*couche V*) were 10 largely articulated adult skeletons and the bones of an infant, placed between the legs of one of the adults.<sup>1123</sup> The second layer (*couche III*) contained six largely articulated skeletons, and the remains of a number more. All told, a total of 30 skeletons are estimated for the upper burial deposit, although a total of 52 skulls were recorded, many of which may derive from the lower burial deposit.<sup>1124</sup> An overall estimate of 55 individuals is made for the entire tomb.

Above the 15-20cm thick layer of limestone slabs and dust that derive from the collapse of the chamber's roof (*couche VI*), was a deposit of brownish soil (*couche VII*) apparently washed in to fill the area created by this collapse.<sup>1125</sup> Within this fill were three large Plain White Wheel-made (PWW) jugs/storage jars (52, 50 and 42 cm high) which appear to have washed in from the dromos.

### Chronology

Keswani dates the tomb to LCIB-LCIIB,<sup>1126</sup> while Åström suggests that the lower burial deposit (referred to as T.5<sup>IV</sup>), dates to LCIB-LCIA:2.<sup>1127</sup> While the

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<sup>1120</sup> Schaeffer (1952:227, 229). Although only 3 skulls were found in this burial layer, the rest were presumably swept to the edges of the chamber and mixed up with the later burial deposit.

<sup>1121</sup> Schaeffer (1952:160).

<sup>1122</sup> Schaeffer (1952:111-135, Fig.42-51, Pl.XV-XVI). Somewhat confusingly, the published inventory and plans of this deposit (*couche I* on the section) are described as belonging to the *troisième* and *quatrième couche*.

<sup>1123</sup> Schaeffer (1952:164-165).

<sup>1124</sup> Schaeffer (1952:229).

<sup>1125</sup> Schaeffer (1952:159-160).

<sup>1126</sup> Keswani (2004:Table 5.9c).

mixing of material between the two burial deposits confuses their chronology somewhat, the presence of BR II ware in the later burial deposit, alongside the more predominant wheel-made Bucchero ware, suggests that this later deposit dates primarily to LC IIC-LC IIIB.

### **Discussion**

Although the relatively confused state of deposits within this tomb makes it difficult to establish any specific ritual activities, there are some notable features of the assemblage worth considering in more detail.

Of particular relevance to this thesis is the apparent contextual association between the BR juglets found in the lower burial deposit and the narrow-necked Bucchero jugs found in the upper (**Figs 5.13-14**). In both cases these vessels were predominant amongst their type, with the BR juglets forming 34.7% (15 of 46) of the juglets found in the lower deposit and the Bucchero jugs making up 56.8% (25 of 44) of the jugs in the upper deposit. The contextual association demonstrated here between these two vessel types suggests a functional similarity that also appears to be demonstrated (albeit to a lesser extent) in the assemblages of a number of other Late Cypriote tombs (see Section 6.2.2). This apparent functional equivalence reinforces the argument previously discussed in Section 3.3.1 that these Bucchero vessels also contained an opium solution, replacing the BR juglet in the Cypriote ceramic repertoire by the LC III period.

Regardless of this, on the evidence of the BR juglets alone, it certainly appears that opium was deposited on a relatively large scale in association with this tomb, perhaps provided for the deceased or consumed as a component of mortuary ritual. With regard to the latter, it is interesting to note that the tomb's ceramic assemblage also contains a number of vessels that might be associated with the transport and consumption of alcoholic beverages such as wine. In particular, the large number of jugs found in the tomb suggests that significant amounts of liquid were brought to it, with the numerous bowls and the occasional tankard and crater possibly associated with its consumption. Given the confused nature of the deposit, though, there is little contextual evidence that can help to distinguish between possible residues of mortuary feasting/drinking and provisions left for the deceased. In the case of the three large PWW storage jars in the soil above the collapsed roof, however, the latter

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<sup>1127</sup> Åström (1972a:829).

role seems highly improbable given that they were apparently left in the dromos. It is therefore possible that their contents, most probably a liquid given their narrow necks, were consumed during the mortuary rituals conducted in association with this tomb. These vessels may, once again, constitute evidence suggesting the consumption of alcohol during the interment rituals at this tomb. Alongside the possible consumption of opium, this practice may again reflect the use of psychoactive substances in order to establish interaction with deceased and the world of the dead.

A final point of note regarding the burials in this tomb is the apparent hiatus in its use demonstrated by the sterile layer between the upper and lower burial deposits and the apparent chronological gap of around one to two centuries (LCIIA to LCIIIC). If Late Cypriote chamber tombs indeed belonged to a particular kin group (see Section 4.2.2), then this hiatus raises questions regarding the possible relationship between those responsible for each burial deposit. Are we seeing here the appropriation of an old tomb by a different family, or is a particular group returning to their ancestral tomb after burying their dead elsewhere for some reason? Without any research aimed at identifying genetic relationships between those interred, however, such questions must remain unanswered.

### 5.1.5 French Tomb 49/2

LCIIA

(ca.1450-1375 BCE)

This tomb was discovered in 1949, located near the south edge of *Quartier 5E*, approximately 20m east-southeast of the Sanctuary of the Ingot God (see Section 6.1.3) and only ca.5m north of French tomb 49/5.<sup>1128</sup> The tomb consisted of a roughly rectangular chamber (2.6m wide, 3.65m long including stomion, ca.2m high, **Fig.5.15**) cut into *havara*, although the brittle nature of the *havara* required part of the north wall near the entrance to be shored up with a rubble support and the entrance to the tomb was fitted with a large stone frame.<sup>1129</sup> Three steps led down from this entrance to the chamber floor, which was flanked on the south and west sides by benches (90cm wide, 45cm high) running along the chamber walls.<sup>1130</sup> In the southwest corner of the lower area formed by these benches a square pit (40cm wide,

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<sup>1128</sup> Dalton (2007:Fig.2).

<sup>1129</sup> Shaeffer (1952:113-116).

<sup>1130</sup> Shaeffer (1952:116).

60cm deep) was cut into the floor.<sup>1131</sup> The roof of the chamber had collapsed, with the burial deposit covered by layers of havara and stones from the foundations of a building located immediately above.<sup>1132</sup> As the entrance was found sealed with a large (95cm high) stone slab and the burial deposits appear undisturbed (although somewhat crushed), however, the tomb seemed intact.<sup>1133</sup> Unfortunately, the lack of any published details regarding the dromos and its stratigraphy make it difficult to establish the relationship between the tomb and the architecture above.

Three intact and apparently articulated adult skeletons were found laid out along the benches (**Fig.5.15**), although the skeletal material was very disintegrated and largely reduced to powder.<sup>1134</sup> On the south bench, immediately to the left of the entrance, an individual was laid with the head towards the east. A pair of gold pectorals adorned the chest and a gold signet ring was presumably worn on one of their hands. A pair of WSh juglets and a small Mycenaean ware bowl were found on the bench close to the head. Above the area of the abdomen was a hemispherical silver bowl, pierced at the bottom, within which was a second, smaller hemispherical silver bowl decorated with gold and niello inlay. Between the legs of this individual was a pair of piriform jars and a chalice, all of alabaster.

A second individual appears to have been laid out on the south bench with the head towards the west, but is only represented by a patch of bone dust where the head is thought to have been and fragments from the bones of one leg, near the pelvis and legs of the previously discussed skeleton. Artefacts associated with this skeleton include a pair of gold diadems found in the area of the skull and a gold sheath possibly from a baton or sceptre, found next to a remaining segment of femur.

The third burial was laid out on the west bench with the head to the north and was adorned with a pair of gold crescent earrings and a gold signet ring on each hand. The excavator suggests that this individual was a female on the basis of this jewellery and their relatively small stature. Between the legs of this skeleton was a small cluster of silver objects, possibly once held in a small bag and consisting of a statuette of an infant, a pair of rings with hieroglyphic inscriptions (one meaning “great power” and the second a reference to luck and happiness), a small dish and a flower bud pendant. A PWW bowl and a terracotta lamp blackened by flame had been placed immediately

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<sup>1131</sup> Shaeffer (1952:116).

<sup>1132</sup> Shaeffer (1952:113).

<sup>1133</sup> Shaeffer (1952:113).

<sup>1134</sup> Shaeffer (1952:126-133).

next to the head, while a collection of Mycenaean vases, consisting of three small piriform jars and three small stirrup jars, had been placed between the skeleton and the chamber wall.

Numerous other artefacts, mostly ceramic, were found on the chamber floor or within the pit cut into it. In the southeast corner, in front of the first burial described above, was an alabaster swan-shaped vessel, a WSh juglet, fragments of gold foil and some unidentified sherds.<sup>1135</sup> In the northwest corner was a pair of Mycenaean craters, one of which contained a BR II bowl and a BR II jug within it, while the other contained a BR II bowl and a WS II bowl. A second BR II jug lay on the floor next to them.<sup>1136</sup>

The square pit in the southwest corner of the floor was entirely filled with restorable vessels, including: a large RLWM spindle bottle (79 cm tall, although the neck had broken off) standing upright along one wall of the pit; a RLWM arm-shaped vessel at the base of the pit; a pair of PWW bowls; a Monochrome or RLWM crater; a RLWM ovoid bottle; a RLWM lentoid flask; a WS II bowl; five BR II jugs and a small Mycenaean stirrup jar. The pit was apparently so full that some of its contents had spilled onto the floor of the chamber.<sup>1137</sup> On the floor immediately north of the pit were a Mycenaean alabastron and a finely carved alabaster goblet, while a Mycenaean piriform jar lay just to the east.

### **Chronology**

The jewellery and the pottery (particularly the Mycenaean vessels, which were all Myc.IIIA:2) date the tomb to LCIIA period (ca.1450-1375 BCE).<sup>1138</sup>

### **Discussion**

This tomb appears to have been discovered intact, with the collapsed roof preserving many of the tomb artefacts in the position in which they were originally deposited, apparently in well defined clusters. These discrete depositional contexts enable a number of observations on the possible roles that particular artefacts may have had in the interment rituals conducted at this tomb. The pottery deposited on the chamber floor and in the pit cut into it is particularly notable in this regard.

Concerning the cluster of pottery in the northwest of the chamber (two craters, three bowls and two BR II jugs), the possible role of craters found with bowls within

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<sup>1135</sup> Shaeffer (1952:125).

<sup>1136</sup> Shaeffer (1952:117).

<sup>1137</sup> Shaeffer (1952:122-123).

<sup>1138</sup> Åström (1972a:683); Shaeffer (1952:135).

them has been discussed previously in relation to the consumption of alcohol. In this case, however, the two craters are clearly associated with a pair of BR II jugs, suggesting that the contents of these jugs were consumed from the larger vessels during the interment ritual. As discussed in Section 3.3.1, BR jugs may have been used to transport wine, perhaps with opium dissolved in it, to the tomb. As such, it appears that these drinking vessels were deposited together in a cluster subsequent to their use within one of the interment rituals conducted at the tomb. While it could be suggested that these vessels (and their contents) were provisions for the deceased, particularly the individual on the west bench immediately above them, it is difficult to reconcile a provision of two craters with a single individual. The placement of the craters also suggests that they were not meant to be provisions or grave goods for either of the other two burials.

The pottery found within the pit in the southeast corner of the chamber floor appears to have all been deposited at once, judging by the placement of the RLWM spindle bottle at the foot of pit, but with its neck protruding above the rim, and the other vases stacked around it. While the excavators suggest that this pottery consisted of offerings made to one of the earlier burials in the tomb, moved at the time of a subsequent burial,<sup>1139</sup> an absence of evidence for further burials suggests a different role. Indeed, as there appears to be ample space remaining on the benches for any possessions or provisions to be placed, the conscious effort to differentiate this material by digging a pit for it suggests that it should not be associated with any particular individuals. This pottery should instead be viewed as the vestiges of ritual activities conducted by the living as part of the interment rituals at the tomb. The likely ritual functions of many of these vessels have been discussed in relation to previous case studies. These include roles as: perfume containers (the RLWM spindle bottle and arm shaped vessel and Mycenaean stirrup jar); vessels associated with the transport of beverages (the RLWM ovoid bottle and lentoid flask and the five BR II jugs); and vessels associated with the consumption of liquids (the crater and the three bowls). As such, the vessels filling the pit appear to have been associated with the use of perfumed oils as a purification component of the mortuary ritual and the consumption of psychoactive beverages, probably alcohol and maybe even opium.

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<sup>1139</sup> Shaeffer (1952:122).

Once again, the consumption of such beverages may have been designed to induce ASCs which facilitated the ritual participant's interaction with the world of the dead.

The vessels on the chamber floor next to the pit (the alabastron and piriform jar in Mycenaean ware and the alabaster goblet) could have also been associated with these activities or may equally have been deposited as possessions of or provisions for the deceased. The piriform jar in particular has parallels in the three jars found next to the skeleton on the west bench, which, along with the three stirrup jars, appear to have been placed as provisions (perhaps of perfumed oil in the case of the latter) for this individual given their location on the bench immediately next to the body. A similar suggestion can be made for the bowls placed next to the heads of two of the skeletons, although such positioning could also indicate a deposit made in the context of the living sharing their funerary consumption with the deceased, which could still be viewed as a form of provisioning. The two WSh juglets placed next to the head of the individual at the east end of the south bench (and perhaps the third WSh juglet on the floor before them) could have also been associated with the final sharing of consumption practices. In this case, however, there are parallels with the relatively common Late Cypriote practice of placing juglets near the head of the deceased. The possible significance of this practice will be discussed in further detail in section 5.2.3.

The majority of the other artefacts deposited in the tomb are most likely to have been the personal possessions of those interred. This certainly includes the jewellery, including the bag of silverwork associated with the west skeleton and the swan-shaped vessel on the floor. The silver bowls and alabaster vessels associated with the southeast skeleton also constitute the sort of exotic, high value artefacts that might be considered a personal possession. Given that the lamp near the west skeleton appears to have been used, however, this object is most likely to have been used to illuminate the tomb during the interment ritual.<sup>1140</sup> This again demonstrates the practice of depositing pottery that was used by the living during the interment ritual within the tomb itself.

Concerning the jewellery that appears to have adorned those interred, the excavators argue that the gold pectorals/diadems and the sheath for the sceptre/baton, combined with a lack of weaponry, suggest that these individuals may have been

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<sup>1140</sup> Lamps suspended on the walls of Enkomi British Tomb 66 also suggest the illumination of tombs during the interment ritual and perhaps even for subsequent rituals conducted within, Crewe (2009).

'priests'.<sup>1141</sup> While this assertion may be unfounded, the wealth of grave goods certainly suggests that these individuals enjoyed a high status. The proximity to the later Sanctuary of the Ingot God might also suggest some association with ritual practice, although the lack of information on any buildings preceding this LCIII structure makes it difficult to establish the nature of activity in the area during the LCII period.

### 5.1.6 French Tomb 47/1

LCIIIA

(ca.1200-1100 BCE)

This tomb was discovered in 1947 by French excavations in *Quartier* 12E, at the extreme southern end of the settlement near the town wall, and appears to have been located within the confines of a structure built against the wall.<sup>1142</sup> The tomb is of the shaft-grave type common in the LCIII period, consisting of a 1.3m deep rectangular pit with the sides lined with rubble stone walls (interior, 2.2m long, 0.8m wide, **Fig.5.16**).<sup>1143</sup> The upper part of the northern end of the grave (near the head of the interred individual), however, consists of a pair of stone slabs set at a slight angle off vertical, with their tops against each other. These slabs may have been designed as grave markers, or to block an entrance to the grave.<sup>1144</sup> It appears to have been discovered intact.<sup>1145</sup>

Most of the contents of the grave were found resting upon a thin layer of soil and consisted of the poorly preserved skeletal remains of a single adult, arranged with the head to the north and a number of artefacts. These included: a storage jar with a narrow neck,<sup>1146</sup> a PWW jug, a narrow-necked Bucchero jug, a WPWIII shallow bowl, a narrow cylindrical pyxis of steatite and a mortar and pestle of steatite, all clustered around the head of the skeleton. Near the feet were a stack of three hemispherical bronze bowls and a large (33cm high), narrow-necked Bucchero

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<sup>1141</sup> Shaeffer (1952:134).

<sup>1142</sup> Dalton (2007:Fig 4). Unfortunately, the precise context of the tomb is not discussed in detail by the excavator, Shaeffer (1952:232).

<sup>1143</sup> Shaeffer (1952:232).

<sup>1144</sup> Shaeffer (1952:233). The excavator does not make it clear whether the tomb shaft had been filled with deposit up to the top of the shaft. Given the nature of the tomb, however, this must surely have been the case. As such, the slab can only have blocked an entrance to the tomb if the shaft had once been covered by a wooden roof that eventually disintegrated.

<sup>1145</sup> Shaeffer (1952:232).

<sup>1146</sup> Unfortunately this vessel is not described in any detail, Shaeffer (1952:232).

jug.<sup>1147</sup> A second mortar and pestle of steatite, six bronze hoop earrings and a flat bronze dish/bowl may have belonged to a second, presumably disintegrated burial interred above the first.<sup>1148</sup>

Outside the grave, immediately before the marking/sealing slab a number of fragmentary ceramic vessels were found on a surface ca.50cm higher than the base of the grave shaft, but beneath the levels corresponding to the tops of the marking slab and the shaft walls. This pottery included at least three narrow-necked *Bucchero* jugs, a small Mycenaean style stirrup jar and a pair of WPWIII skyphoi.<sup>1149</sup> While the excavators could not establish any stratigraphical connection between this deposit and the grave, they suggest an association based on the similarities in the *Bucchero* vessels from both assemblages.<sup>1150</sup> Furthermore, the fact that the surface on which these vessels rest is below the level of the top of the grave, yet also abuts the grave marker/sealing stone, further suggests that the deposits are contemporary and related.

### **Chronology**

The pottery from this tomb firmly dates it to the LCIIIA period (ca.1200-1100 BCE).<sup>1151</sup>

### **Discussion**

Although the published details of this grave are not as comprehensive as they might be, particularly with regard to the skeletal remains and stratigraphy, the intact nature of the grave and certain distinctive features of its assemblage make it worthy of more detailed consideration. The lack of detailed analyses on the skeletal material in particular, however, makes it difficult to assess whether there were one or two individuals buried in the grave.

Regardless, it is notable that all of the ceramic and metal vessels found within the grave can be associated with the consumption of liquids, with the exception of the flat bronze dish from the possible second burial. In particular, the storage jar, PWW jug and *Bucchero* jugs can be associated with the transport of liquids to the tomb, probably beverages such as wine, but perhaps also an opium solution in the case of the *Bucchero* jugs. Furthermore, the three hemispherical bronze bowls and the WPWIII bowl can be associated with the serving and consumption of liquids. While it

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<sup>1147</sup> Shaeffer (1952:232-323).

<sup>1148</sup> Shaeffer (1952:232).

<sup>1149</sup> Shaeffer (1952:233-325, Figs.87&89).

<sup>1150</sup> Shaeffer (1952:234).

<sup>1151</sup> Åström (1972a:695).

is difficult to differentiate between artefacts which may have held provisions for the deceased and those that held commodities consumed during the mortuary ritual, the storage jar and jugs appear to constitute a volume of liquid above that which might be expected for the provision of one or even two interred individuals. As such, it is possible that the contents of some, if not all of these vessels were consumed during mortuary rites.

The non ceramic material (bronzes, mortar and pestle sets and steatite pyxis), on the other hand, was more likely to have been deposited as the personal possessions of the deceased, with the possible exception of the bronze bowls. While these bowls may have also been used during mortuary ritual for the consumption of liquids, their subsequent deposit in the tomb would have constituted the visible destruction of a significant amount of wealth. As such, these objects, whether deposited as possessions of the deceased or used to consume liquid during funerary rights, can also be associated with the increased emphasis on the visible destruction of metal wealth that appears to become characteristic of LCIII shaft burials.<sup>1152</sup>

The ceramic assemblage within the grave is mirrored by the collection of vessels found immediately outside it, next to the marker/sealing stone. In this case, the *Bucchero* jugs and stirrup jar are the vessels in which liquids were likely to have been brought to the grave, while the *skyphoi* can be associated with its consumption. While it is possible that the vessels found within the grave were placed as liquid provisions for the deceased, it is difficult to argue the same for the vessels found outside the tomb. These vessels are more likely to be the vestiges of activities conducted as part of the mortuary rituals conducted in association with the grave, probably after it was sealed. The *Bucchero* jugs possibly contained an opium solution and/or an alcoholic beverage while the stirrup jar probably contained a precious liquid such as perfumed oil. Beverages from the *Bucchero* jugs were probably consumed from the *skyphoi*, most likely as part of some mortuary rite conducted some time after the deceased was interred. This may have taken the form of mortuary feasting or drinking in honour of the deceased, perhaps reflecting a rite akin to the Near Eastern *marzēah*, but on a much smaller scale. Moreover, if the jugs did in fact contain psychoactives such as opium or strong alcohol, this ritual may have included attempts to contact the

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<sup>1152</sup> Cf. Keswani (2004:127); Niklasson-Sönnerby (1987:222).

deceased and the world of the dead by inducing ASCs through such consumption. The stirrup jar might again reflect the importance of purification during such rituals.

When considered together, the close contextual association and similarities between the ceramic assemblages within and immediately outside the grave in all likelihood reflect similar activities, conducted respectively before and after the sealing of the grave. This suggests that the consumption practices suggested by this evidence were not restricted to just the interment stage of a mortuary ritual, but were re-enacted on appropriate occasions. The apparent consumption of alcohol and perhaps also opium suggests that such mortuary activity corresponds closely to the practices suggested for the Near Eastern *marzēah*, with such psychoactive substances consumed in order to enable interaction with the world of the dead and relevant spirits of the deceased. Significantly, the evidence from this particular grave also emphasises that much of the ceramic material found within Late Cypriote tombs can be associated with comparable practices conducted before or during interment rituals, rather than representing only the deposit of provisions for the deceased.

## 5.2 The Complete Late Cypriote Tomb Corpus

This section consists of a detailed consideration of the complete corpus of published Late Cypriote tombs. It begins with a discussion of the material included within this corpus and the manner in which it is presented in this thesis. This is followed by a discussion of various patterns that have been observed in the artefact assemblages of these tombs, particularly in relation to the distribution of pottery that might be associated with psychoactive substances.

The full corpus of Late Cypriote tombs consists of 481 tombs published with varying degrees of detail,<sup>1153</sup> with hundreds more excavated or looted without any publication whatsoever. A comprehensive list of these published LCA tombs and a summary of the features of each relevant to this study are documented in **Tables EA5.2** and **EA5.3** in the electronic appendices.<sup>1154</sup> This encompasses tombs dating from the MCIII/LCI period through to the LCIIIB period (ca.1700-1050 BCE), although a handful whose final phase is dated to MCIII/LCI, but which do not contain any identifiable LC wares, have not been included.<sup>1155</sup> The data presented for each tomb on these tables are arranged alphabetically by site name and includes: the site name (usually consisting of the village/town and specific locality) and tomb number or name;<sup>1156</sup> a brief description of the site location on Cyprus;<sup>1157</sup> the date of the tomb's use; a summary of the tomb architecture, preservation, burial strata, skeletal remains and any other significant features of the tomb; an indication of whether the tomb was discovered intact; numerical lists of predominantly non-ceramic artefacts that give some indication of the 'wealth' of the tomb, with a separate entry for those that could have been sourced locally (metal objects and sphragistic devices) and those that must have been procured via long-distance trade routes (faience/glass, ivory, Egyptian alabaster, certain exotic stones, foreign ceramics); the number of ceramic

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<sup>1153</sup> This ranges from detailed excavation reports that include information concerning tomb architecture, burial strata, skeletal remains and complete artefact inventories, to those which only include limited and irregular details.

<sup>1154</sup> It was not feasible within the constraints of the present study to attempt to obtain information from unpublished tomb excavations. Although an attempt was made to consider all published Late Cypriote tombs, it is possible that with such a large number, some may have been overlooked.

<sup>1155</sup> This category predominantly includes tombs from Ayios Iakovos-*Melia* and Kourovia-*Paleoskoutella*. Cf. Gjerstad (1934:302-355, 416-438). A number of tombs previously dated to the LCIIIB2 have also been omitted as their assemblages suggest they should actually be classified as Iron Age tombs, Contra. Webb (1992:98).

<sup>1156</sup> In cases where a particular tomb has been numbered/named twice, both are listed.

<sup>1157</sup> For Enkomi tombs this field instead refers to the location in relation to the LCII/III architectural remains.

vessels discovered within the tomb;<sup>1158</sup> a summary of artefactual evidence for ASCs (as discussed in Section 3.3);<sup>1159</sup> and the primary reference material for the tomb.

**Table EA5.1** presents the same data, but includes only those tombs that were discovered intact, including disturbed tombs with intact burial strata or those that appear to have retained the majority of their contents despite such disturbance; a total of 99 tombs. As Late Cypriote pottery (particularly BR and WS ware) is often targeted and removed by modern looters, the ceramic inventories of looted tombs cannot be considered as a reliable indication of the original contents of such tombs. This is particularly relevant to a study of artefactual evidence for ASCs, as vessels such as the BR bilbil juglet are particularly popular amongst collectors.<sup>1160</sup> Consequently, observations concerning the numerical distribution of such ceramic evidence in Late Cypriote tombs will be primarily based upon data from these intact examples.<sup>1161</sup> An additional column indicating the minimum number of burials observed within each tomb, where known, is included in this table.

As discussed in Section 4.1.2, the majority of non-ceramic artefacts found within these tombs, particularly items of adornment, tools and weapons, were likely to have been deposited as personal possessions of the deceased. Most of the ceramic vessels, on the other hand, were likely to have been deposited for their consumable contents, probably meant as a provision or offering for the deceased or actually consumed during the mortuary ritual. The following consideration of the LCA tomb corpus will concentrate primarily upon those ceramic artefacts which may have been associated with psychoactive substances and the ASCs they induce.

### 5.2.1 Numerical Pottery Distributions

Based on the data presented in Table **EA5.1**, a number of observations can be made concerning the numerical distribution of ceramic vessels within LCA tombs. From a cursory glance at this data (and that presented in Tables **EA5.2-3**) it is immediately noticeable that considerable numbers of ceramic vessels were deposited in Late Cypriote chamber tombs. Most chamber tombs contain scores, or even

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<sup>1158</sup> In cases where the ceramic material is not completely inventoried, including where there were unrestorable sherds, the minimum number of vessels is given.

<sup>1159</sup> This focuses particularly upon possible evidence for opium consumption, although instances where there is strong evidence for alcohol consumption are also listed.

<sup>1160</sup> The prevalence of unprovenanced BR bilbil juglets in collections throughout the world is testament to this.

<sup>1161</sup> Although it would have been preferable to present this data in printed format within this thesis, the word count restriction of this thesis required its inclusion within the electronic appendices.

hundreds of ceramic vessels, with the highest numbers (several hundred in some cases) coming from tombs that appear to have been used for extended periods of time.

As discussed in Section 4.1.2, a consideration of the ratio between the number of individuals and the number of pots buried within a tomb may assist in interpreting the role of these vessels within mortuary ritual. As such, for those intact tombs in which the number of individuals interred has been estimated from the skeletal material, this number and the corresponding quantity of ceramic vessels are presented in **Table EA5.4**<sup>1162</sup>, with chamber tombs and shaft graves presented separately. Based on these figures, an average of 7.1 vessels per burial has been calculated for Late Cypriote chamber tombs and an average of 2.0 vessels per burial for shaft graves. These figures are roughly comparable to those calculated by Webb from a larger sample set of tombs that included a number that were not necessarily found intact.<sup>1163</sup> Webb's estimated pot to burial ratios were: ca.7 for LCI tombs; ca.10 for LCII tombs; ca.3 for LCIIIA tombs; and ca.12 for LCIIIB tombs.<sup>1164</sup>

Unfortunately, the poor preservation of skeletal material, particularly in the case of the chamber tombs, makes it extremely difficult to reliably establish the number of individuals interred (hence the common estimate of a minimum number by excavators). As such, the number of burials actually interred within these chamber tombs may, in many cases, have been greater than that estimated, suggesting that the average number of vessels per burial was somewhat lower than that calculated, both here and by Webb.<sup>1165</sup> This will have been partially offset, however, by the inclusion in the figures of any neonate and infant skeletons found within tomb chambers. Such young children appear often to be treated differently from adult burials and are generally associated with fewer ceramic vessels. Consequently, while it is not possible to establish a precise estimate for the average number of vessels deposited per burial within Late Cypriote chamber tombs, several vessels per burial does appear to be the norm.

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<sup>1162</sup> In the electronic appendices.

<sup>1163</sup> Webb (1992:97-98).

<sup>1164</sup> Webb (1992:97-98). A number of tombs Webb includes as LCIIIB should, however, actually be classified as Iron Age tombs.

<sup>1165</sup> Certain tombs in which the number of individuals interred appears secure, however, demonstrate much higher averages. For example, Enkomi French Tomb 49/2 and Kalavassos-Ayios Dhimitrios Tomb 11 contained an average of 12.0 and 11.25 vessels per individual respectively (not counting the three neonates interred at a later date in the later tomb). These were, however, both extremely rich tombs.

What can be said with certainty is that there is a significant decrease in the number of vessels deposited per burial during the LCIII period within shaft graves. Not only is there an average of just two pots per burial for such graves, many examples actually contained no pottery whatsoever. While this decrease may be partially explained by the deposit of hemispherical bronze bowls in such tombs, presumably in place of ceramic bowls, the previously discussed decline in the importance of mortuary ritual in the LCIII period<sup>1166</sup> is probably the key factor. This may have resulted in fewer participants in the interment ritual and, therefore, lower numbers of ceramics deposited within the grave.

The imprecision introduced by poor skeletal preservation in the calculation of pot to burial ratios for Late Cypriote tombs unfortunately makes it difficult to identify possible roles for these ceramics on the basis of this ratio alone. Closer consideration of the vessel forms generally found, however, may prove more informative. **Table 5.1**, therefore, presents the number of vessels, from intact tomb assemblages in which there were more than 100 vessels,<sup>1167</sup> that can be associated with either the pouring (jugs, juglets, flasks, bottles and stirrup jars) or the mixing and drinking (bowls, cups, tankards, kylikes and craters) of liquids.<sup>1168</sup> As can be seen from the data from these larger assemblages, vessels associated with the pouring of liquids constitute almost 44.8 percent of the ceramics, while those associated with mixing and drinking constitute 48.7 percent. This makes for a combined total of 93.5 percent of the ceramic assemblages of these tombs that can somehow be associated with the consumption of liquids. Once again, these figures are roughly comparable to those calculated by Webb from a larger sample set of tombs that included disturbed examples and those with smaller assemblages.<sup>1169</sup>

Given these figures, it appears that most Late Cypriote chamber tomb burials were interred with several vessels associated with the consumption of liquids. This

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<sup>1166</sup> Keswani (2004:97).

<sup>1167</sup> Calculations based on vessel form were restricted such large assemblages as they are likely to reduce the idiosyncratic variation often noticeable in smaller assemblages.

<sup>1168</sup> Vessels were assigned to these categories was based on a combination of the excavators own classification and published images of the vessels. Although some of the shallower bowls may have actually been used to present solid food, the vast majority of bowls found in Cypriote tombs are more suited to the consumption of liquids (See Chapter 3).

<sup>1169</sup> Webb (1992:97-98).

Site	Burial #	Pot #	Pouring Vessel #	Pouring Vessel %	Mixing & Drinking Vessel #	Mixing & Drinking Vessels %	Crater #	Jug #	Jug %	Juglet #	Juglet %	
Ayia Irini Tomba 20	11	124	52	41.9	70	56.5	2	35	28.2	17	13.7	
Ayia Irini Tomba 21	14	166	75	45.2	91	54.8	1	48	28.9	23	13.9	
Ayia Irini Isolated tomb (Quilici)	37	249	142	57	105	42.2	3	72	28.9	62	24.9	
Enkomi, Cypriote Tomb 2	6+	190	74	38.9	111	58.4	2	53	27.9	17	8.9	
Enkomi, Cypriote Tomb 10	?	426	152	35.7	245	57.5	15	101	23.7	39	9.2	
Enkomi, French Tomb 49/5	55	283	150	53	119	42	3	90	31.8	50	17.7	
Enkomi, French Tomb 49/11	?	170 +	83	48.8	72	42.4	16	37	21.8	26	15.3	
Enkomi, French Tomb PT 110	?	310	131	42.3	163	52.6	12	80	25.8	36	11.6	
Enkomi, Swedish Tomb 11	12+	247	128	51.8	97	39.3	13	78	31.6	28	11.3	
Enkomi, Swedish Tomb 13	?	214	101	47.2	104	48.6	8	63	29.4	36	16.8	
Hala Sultan Tekke Cypriote Tomb 2	5	224	82	36.6	112	50	9	59	26.3	11	4.9	
Kazaphani Tomb 2, Chamber A	?	516	288	55.8	199	38.6	4	76	14.7	137	26.6	
Kazaphani Tomb 2, Chamber B	?	525	289	55	178	33.9	1	101	19.2	165	31.4	
Kition Tomb 9	48	289	58	20.1	216	74.7	12	41	14.2	5	1.7	
Morphou-TTS Tomb I	20-24	560	249	44.5	296	52.9	5	171	30.5	75	13.4	
Morphou-TTS Tomb IV	10	111	66	59.5	44	39.6	0	45	40.5	21	18.9	
Myrtou-Stephania Tomb 4	5+	188	71	37.8	114	61.3	1	39	20.7	17	9.0	
Myrtou-Stephania Tomb 7	2+	181	83	45.9	86	47.5	1	41	22.7	43	23.8	
Myrtou-Stephania Tomb 14	2	168	57	33.9	104	31.9	0	38	22.6	19	11.3	
Average :				44.8%	Average :		48.7%	Average :		25.8%	Average :	15.0%

**Table 5.4 - Number and percentage of 'liquid consumption' vessels found within intact Late Cypriote chamber tombs containing more than 100 ceramic vessels.**

suggests a large degree of redundancy in the ceramics associated with an individual burial, particularly in cases where the number of vessels per burial is significantly higher than the average. This redundancy of vessels associated with liquids further suggests that the number interred with an individual may actually relate to the number of living participants involved in the mortuary ritual, with multiple vessels of the same type deposited by different participants. It therefore seems that the ceramic artefacts deposited in Late Cypriote tombs relate to dynamic and variable components of the mortuary ritual, rather than a static, invariable elements, such as the deposit of a standardised set of provisions for the deceased.

Given this observation, it appears that the ceramic assemblages from LCA tombs are functionally comparable to those from the ECA and MCA, with vessels associated with pouring, mixing and drinking liquids vastly predominant in all periods (generally over 90 percent of the assemblage).<sup>1170</sup> This suggests that the consumption of alcoholic beverages suggested for the earlier periods continued as a major component of mortuary ritual during the LCA. On the basis of the organic residue and other evidence discussed in Section 3.3 for the contents of specific vessel types found in LCA tombs, however, it is possible to consider the occurrence of many of these specific vessels in more detail.

### 5.2.2 Alcohol Consumption Vessels

Many of the vessels associated with liquid consumption from Late Cypriote tombs can be associated with varying degrees of confidence to the consumption of alcohol, as discussed in Section 3.3.2.

Foremost amongst these is the crater, usually of PWW or Aegean wares, which regularly occurs in LCII and LCIII tomb assemblages, and somewhat less frequently in LCI tombs. As discussed previously, these vessels were probably used for mixing (usually with water) and serving wine.<sup>1171</sup> In a number of tombs these vessels were found with a single bowl (usually WS or BRII) within them,<sup>1172</sup>

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<sup>1170</sup> Webb (1992:97-98).

<sup>1171</sup> Steel (1998: 290; 2002:109)

<sup>1172</sup> Examples include Ayios Iakovos-*Melia* Tomb 13; Enkomi, Cypriote Tombs 10 & 19; Enkomi French Tombs 49/2 & 49/11; Enkomi Swedish tombs 6, 11, 13, 17, 18, 19 & 22; Kalavassos-*Ayios Dhimitrios* Tombs 6 & 11. In Kouklia-*Teratsoudhia*, Tomb Complex 104, Chamber N, a bronze crater, bowls and jugs appear to have been carefully stacked in a cist in the centre of the tomb floor, Karageorghis (1990:12).

suggesting that the crater-bowl combination formed part of a ceramic set.<sup>1173</sup> Such drinking sets recall those depicted on the LCA cylinder seal from Idalion and the LCIIA 'Sunshade' crater, both of which comprise a crater, jug, goblet, conical rhyton and ladle (see Section 3.2.1). While jugs are almost ubiquitous in Late Cypriote tombs, conical rhyta and ladles occur much less frequently.<sup>1174</sup> The function of these could, however, be performed by the bull rhyta and small bowls more commonly found in these tombs.<sup>1175</sup>

While it is possible that crater-bowl sets were deposited as provisions for those interred, there does not appear to be any standardisation in the deposit of such drinking sets within LCA tombs, as might be expected for such a ritually prescribed and formalised practice.<sup>1176</sup> While craters are common, they generally make up a very small proportion of the ceramic assemblage of LCA tombs (**Table 5.1**)<sup>1177</sup> and many contain none at all. As they occur in the greatest numbers in tombs located within LCII-III coastal emporia (Enkomi, Kition and Hala Sultan Tekke), often alongside a range of foreign exotica, they actually appear to represent the adoption of foreign, particularly Aegean, drinking practices and paraphernalia.<sup>1178</sup> Rhyta (bull-shaped, conical or otherwise) appear even less frequently and cannot be considered a standard deposit within LCA tombs, nor do they appear to be specifically associated with craters. While jugs, juglets and bowls appear far more frequently and in much greater numbers, the many tombs that are missing some or all of these vessel types again argue against the ritually prescribed deposition of a standard drinking set in Late Cypriote tombs. Furthermore, as discussed above in relation to crater-bowl sets found within two of the case study tombs (Enkomi French Tomb 49/2 and Kalavassos-Ayios Dhimitrios Tomb 6), a role strictly as provisions for the deceased, or indeed their possessions, appears to be particularly unlikely given that their depositional context precludes association with a specific burial. Craters found in two Enkomi tombs (French Tomb 49/2 and Swedish Tomb 6) also contained a single jug in addition to a

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<sup>1173</sup> Steel (1998: 290; 2002:109)

<sup>1174</sup> Conical Rhyta are recorded from Kourion- Bamboula Tomb 12; Maroni-*Tsaroukkas* BM Tomb 18; Enkomi, British Tombs 12, 34, 53, 69 & 70. A conical Faience Rhyton was also found in Kition Tomb 4/5. Ladles have been found in Morphou-*TTS* Tombs I & IV.

<sup>1175</sup> While both Webb (1999:201) and Yon (1986:269-270) suggest the use of rhyta for libation, there is no reason to assume that such activity was not also associated with alcohol consumption.

<sup>1176</sup> Provisions for the deceased has been observed to generally be highly formalised, Pader (1982:58).

<sup>1177</sup> The number of burials within a given tomb is also generally much higher than the number of craters.

<sup>1178</sup> Steel (1998:291-292; 2002:110).

bowl within them, suggesting that the crater and bowl had been used to consume the contents of the jugs. It is also pertinent to note that use wear found on craters also indicates their previous utilisation in other contexts,<sup>1179</sup> suggesting that they were not manufactured especially for funerary deposit.

Another vessel discussed in Section 3.3.2 that may have been associated with alcohol is the Canaanite jar, which organic residue evidence suggests was often used to transport wine.<sup>1180</sup> These vessels are occasionally found within Late Cypriote chamber tombs, predominantly at coastal sites,<sup>1181</sup> often in association with drinking vessels. They were unlikely to have been deposited as the personal possessions of the deceased, so their contents must have been either a provision for the dead or consumed during mortuary ritual. The relatively large volume of these vessels, however, argues against their use to provision individual burials, as does the depositional context of the example from Kouklia-*Eliomylia* Tomb 119, which lay at the very top of the burial deposit (**Fig 5.17**). As such, it seems that the contents of these jars (most likely wine) were consumed by the living during mortuary ritual.

Other storage vessels found within or near chamber tombs may have also contained alcoholic beverages consumed during mortuary ritual, such as the three storage jars discussed in the case study of Enkomi French Tomb 49/5. Storage vessel sherds discovered in the dromoi and chambers of numerous other tombs may also derive from vessels used to transport large quantities of such liquids for mortuary consumption, particularly in the case of extramural cemeteries, where such evidence is unlikely to derive from non-mortuary activity.<sup>1182</sup>

The prime candidates for the possible transport of alcoholic beverages in Late Cypriote mortuary context, however, are jugs. These vessels appear in relatively large quantities, generally making up the majority of the pouring vessels, and were most likely to have been deposited for their liquid contents.<sup>1183</sup> The occasional jug found next to the head of an isolated, articulated skeleton (**Figs.5.18 & 5.20**)<sup>1184</sup> suggests

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<sup>1179</sup> Steel (2002:110; 2004b:173).

<sup>1180</sup> McGovern (1997); McGovern et.al (2008:194-195, Table 1); Tzedakis & Martlew (2001:Cat.No.140).

<sup>1181</sup> Examples include Hala Sultan Tekke Tomb 2, Kalavassos- *Mavrovouni* 'Village' Tomb 51, Kouklia-*Eliomylia* Tomb 119 and Maroni-*Tsaroukkas* TMTTP Tombs 14 & 15.

<sup>1182</sup> For example, at the extramural cemetery of Myrtou Stephanía, storage jar sherds are common in the dromoi and chambers of LCA tombs, Hennessey (1964).

<sup>1183</sup> With the possible exception of some of the largest BR jugs, which, as discussed in Chapter 3, do not seem to have been functional.

<sup>1184</sup> For example, in Enkomi Swedish Tomb 19 and Morphou-*TTS* Tomb V, Chamber 2.

that the contents were sometimes meant to be provisions for the deceased. As jugs commonly outnumber the burials within a tomb, however, such redundancy again argues against their deposit solely to provision the deceased, suggesting the contents of many were consumed by the living during mortuary rituals. In addition to alcoholic beverages, however, these vessels would also have been suitable for holding water and milk. While both might have been considered appropriate as provisions for the deceased, water is commonly used to offer libations and is symbolically associated with fertility,<sup>1185</sup> a common theme in mortuary ritual. The presence of craters in many tombs suggests that water may have also been provided to mix with wine within these vessels. Given the volume of jugs commonly found, it is most likely that both alcoholic beverages and water were consumed at Late Cypriote tombs, for drinking, libation and/or provisioning the deceased.

Other pouring vessels with relatively large capacities, such as the larger flasks and stirrup jars, may have had a similar role in Late Cypriote mortuary ritual. The smaller capacity of juglets, spindle bottles and the majority of stirrup jars, on the other hand, suggests that they would not have held alcoholic beverages, at least not on their own. Such vessels will be discussed in further detail in Section 5.2.3.

**Table 5.1** demonstrates that drinking vessels, including bowls, tankards, cups and kylikes, are the most numerous vessel type found in Late Cypriote tombs, making up on average almost half of the assemblage. As discussed previously, tankards, cups and kylikes can all be strongly associated with the ostentatious consumption of alcoholic beverages. The high degree of craftsmanship invested in these objects,<sup>1186</sup> however, suggests that they may in fact have been valuable enough to be personalised drinking vessels, deposited as a possession of the deceased. Indeed, the discovery of a gold bowl in the hand of a skeleton within Enkomi Swedish Tomb 17, and a pair of silver bowls set on the chest of one of the burials within Enkomi French Tomb 49/2 further suggests that valued, personalised drinking vessels were occasionally deposited with the deceased. The relatively low frequency of such vessels (far fewer than the number of burials) further supports the idea that many of them were the possessions of the deceased. In Enkomi British Tomb 66, however, a silver bowl was

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<sup>1185</sup> Chryssoulaki (116); Hitchcock (2009:99-100); Rehak (1995a).

<sup>1186</sup> Tankards are generally well made from local fine wares such as BS, BR and Bichrome Wheelmade ware, while cups and kylikes are generally of Aegean style wares.

found hanging from a nail in the tomb wall,<sup>1187</sup> suggesting that such valuable drinking vessels could also be ritual paraphernalia used by the living during mortuary rituals.

Ceramic bowls, on the other hand, occur in much greater numbers, making up the vast majority of objects counted as ‘drinking vessels’ and are, therefore, much less likely to have been deposited as possessions of the deceased. As discussed previously, with the exception of the flatter shapes,<sup>1188</sup> these vessels appear to be designed for the consumption of liquid, although the occasional spatial association of shallow bowls with craters or jugs<sup>1189</sup> suggests that even these may have been used to consume liquids. The massive quantity of bowls from Late Cypriote tombs again suggests a functional redundancy implying the use of these vessels by living participants in the mortuary ritual, most probably to consume liquids transported to the tomb area in jugs or storage jars. The occasional discovery of such bowls next to articulated skeletons (generally next to the head),<sup>1190</sup> however, does also suggest that these vessels could be deposited to provision the deceased with some liquid, or at least provide them with a vessel to drink from. As suggested for a number of the case studies above, such provisioning may have constituted a sharing between the living and the deceased of the consumption practices conducted during the mortuary ritual.

There are some noticeable diachronic changes in the components of Late Cypriote tomb assemblages associated with alcohol consumption. In particular, the introduction of Aegean-style mixing and drinking vessels such as the crater and the cup, chalice, kylix and skyphos from the 14<sup>th</sup> century BCE onwards, replacing vessels in indigenous BR and WS fabrics, suggests the adoption of foreign drinking practices and paraphernalia.<sup>1191</sup> This trend is particularly prominent in wealthier tombs and in coastal settlements. In LCIII shaft graves, despite the reduction in the number of ceramic vessels, the deposition of jugs and juglets alongside bronze bowls suggests that earlier practices of alcohol consumption continued.

This review of ceramic evidence that can be associated with the consumption of alcoholic beverages from Late Cypriote tombs suggests that the *marzēah*-like

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<sup>1187</sup> Crewe (2009:30).

<sup>1188</sup> A WPW bowl found in Kouklia-*Teratsoudhia*, Tomb Complex 104, Chamber N contained the rib of an animal, suggesting its use to present food, Karageorghis (1990:12).

<sup>1189</sup> For example, in Enkomi French Tomb 47/1 and Enkomi Swedish Tomb 22.

<sup>1190</sup> For example, in Ayia Irini Tomba 21, Ayios Iakovs-*Melia* Tomb 8, Enkomi Cypriote Tomb 19 and Enkomi French Tombs 49/2 & 1851.

<sup>1191</sup> Steel (1998:291-292; 2002:110).

tradition of consuming such liquids during mortuary ritual continued from the ECA-MCA into the LCA. In many cases, the significant quantities of jugs and bowls suggest the involvement of relatively large numbers of participants. At such a social event, alcohol consumption appears to have continued as a central component of mortuary feasting conducted near the tomb at the time of the final interment.<sup>1192</sup> As low doses of alcohol can produce feelings of relaxation and cheerfulness, reduce inhibitions and heighten emotions such as affection,<sup>1193</sup> its consumption in this context would have promoted convivial interaction between the participants. As suggested for similar activity earlier in the Bronze Age, this seems to have provided a forum in which kin-group identity, membership to ancestral lineage groups and related social status and rights were established and renegotiated after the death of certain family members.<sup>1194</sup>

There are, however, instances where alcohol appears to have been consumed in smaller groups, perhaps even by a single individual. At Kalavassos-Ayios Dhimitrios Tomb 6, for example, the discovery of a crater and bowl away from the burials suggest alcohol consumption by perhaps a lone individual. The skyphoi and Bucchero jugs found immediately outside Enkomi French Tomb 47/1, similarly suggest alcohol and perhaps opium consumption by a small number of people. This suggests that alcohol consumption during Late Cypriote mortuary ritual could also be a more sombre, individual affair, and not just a convivial social event. Furthermore, as discussed in Section 4.3, alcohol consumption may have had important psychological benefits for mourners by reducing their grief through the suppression of memories of the deceased.

Such ritualised alcohol consumption probably continued to be understood in relation to the participant's metaphysical beliefs. In both the social and individual settings, therefore, the ASCs induced via this alcohol consumption are still likely to have been considered by the participants as some form of interaction with the world of the dead and relevant spirits of the deceased. This may be particularly so in cases of extreme drunkenness, in relation to the lethargy, impaired motor skills, a loss of

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<sup>1192</sup> Food remains, primarily animal bones, are also recorded from a number of Late Cypriote tombs, such as Hala Sultan Tekke Tomb 21, Kalavassos-Ayios *Dhimitrios* Tomb 11 and Kouklia-*Teratsoudhia*, Tomb Complex 104, Chamber N. Such remains may have been ignored in earlier excavations.

<sup>1193</sup> Julien (2008:107-109); Meyer & Quenzer (2005:244)

<sup>1194</sup> Keswani (2005:349-350); Steel (2002:113); Webb & Frankel (2008:292-293).

bodily functions and even unconsciousness that can occur.<sup>1195</sup> Direct contact with the world of the dead to ensure that the spirit of the deceased was accepted into this realm may have continued to be considered a necessary part of Bronze Age Cypriote mortuary rites.

The occasional discovery of a bowl apparently placed next to the head of the deceased, however, suggests a further aspect of mortuary alcohol consumption that has not yet been considered. Such depositional associations may indicate that the deceased were also provisioned with alcohol. If so, such behaviour may again reflect beliefs that alcohol consumption provided a means of contacting the world of the dead. Providing the deceased with alcohol may have been viewed as providing them with something that would enable their souls to travel to the underworld. This possibility will be discussed in further detail in relation to opium consumption.

### 5.2.3 Opium Consumption Vessels

As frequently mentioned, the BR juglets and perhaps Bucchero jugs<sup>1196</sup> appear to have contained a liquid solution of opium. While juglets in general are quite common in Late Cypriote tombs, comprising on average 15 percent of the ceramic assemblages from intact tombs containing over 100 vessels (**Table 5.1**), those in BR, PBR (including BS variants) and Bucchero ware occur most frequently. BR juglets are found in 25.2 percent (121 of 481) of the published and partially published tombs that make up the complete corpus of Late Cypriote tombs presented in **Tables EA5.2** and **EA5.3**. When disturbed chamber tombs and shaft graves (of which the latter post-date the period when BR juglets are in use) are not taken into account, however, this figure rises to 53 percent, with BR juglets found in 44 of 83 intact Late Cypriote chamber tombs (**Table EA5.1**). Given that organic residue analysis strongly suggests that this particular vessel type contained an opium solution, it therefore appears that the consumption or provision of opium was a relatively common component of mortuary ritual for the majority of the LCA.

When other vessel types that may have also contained an opium solution (BR jugs, juglets of BS and WS ware in BR bilbil shape, Bucchero jugs and TEY juglets) are taken into account, 90.4 percent (75 of 83) of intact Late Cypriote chamber tombs can be considered to have contained vessels that possibly contained opium. Bucchero

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<sup>1195</sup> Julien (2008:107-109); Meyer & Quenzer (2005:244-246)

<sup>1196</sup> Despite being categorised as jugs, also have a relatively small capacity.

jugs are also found in exactly one third of the 15 intact LCIII A/B1 shaft graves recorded to date (**Table EA5.1**),<sup>1197</sup> even though far fewer ceramic vessels are deposited in these graves. As such, it appears that vessels that can be associated with opium were deposited within both chamber tombs and shaft graves throughout the entire LCA with considerable regularity.

As a consumable commodity, opium was probably deposited in Late Cypriote tombs either as a provision for the deceased and/or consumed by the living during the interment ritual. In a number of cases, the depositional context of BR juglets closely associated with an articulated skeleton suggests the former. In Ayia Irini Tomba 20, an undisturbed section of the tomb contained three BRI juglets which appear to have been placed immediately next to the heads of a pair of relatively intact skeletons (**Fig.5.19**).<sup>1198</sup> In Katydhata-Laonarka Tomb 80, BRI juglets were found next to both of the intact skeletons in the Late Cypriote burial layer.<sup>1199</sup> The discovery of BR juglets with burials placed in dromos niches, usually neonates or infants,<sup>1200</sup> also suggests the provisioning of the deceased with opium.

The placement of BR juglets next to the heads of the deceased is particularly interesting as this is also seen with Bucchero jugs (in Enkomi, French Tomb 47/1, **Fig.5.17**; and Enkomi, Swedish Tombs 14, 15 & 16, **Fig.5.20**) and WSh juglets (in Enkomi Cypriote Tomb 19, **Fig.5.21**; Enkomi French Tomb 49/2, **Fig.5.15**; and Enkomi, Swedish Tomb 22, **Fig.5.22**).<sup>1201</sup> Unfortunately, the mixed and disturbed state of the vast majority of Late Cypriote burials makes it very difficult to establish the full extent of this practice.

The discovery of juglets of different ware types (BR, Bucchero and WSh) in such a distinctive depositional context, however, does suggest a degree of functional similarity for these vessels. With regard to the Bucchero jug, apparent contextual parallels between this vessel and the BR juglet have already been discussed above in the Enkomi French Tomb 49/5 case study, in which the numerous BR juglets in the lower burial layer were compared to a like number of Bucchero jugs in the upper

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<sup>1197</sup> There is also a single LCI pit grave from Enkomi (Cypriote Tomb 20) that contained, amongst other objects, a single BRI juglet.

<sup>1198</sup> Pecorella (1977: Fig.248).

<sup>1199</sup> Astrom (1989: Fig.163).

<sup>1200</sup> Enkomi, Swedish Tomb 3, Kalavassos-Ayios Dhimitrios Tomb 9/11, Morphou-Toumba tou Skourou Tombs I & III. In addition, Enkomi, Cypriote Tomb 20 was an intact shallow pit grave containing the remains of a juvenile and a BRI juglet amongst the pottery.

<sup>1201</sup> In Enkomi, Swedish Tomb 17 the upper burial had gold bowl in its hand, an amphora near the head and a WSh juglet at its feet, Gjerstad et al (1934:Fig.204).

burial layer. The contextual similarity between these two vessels is also emphasised by the frequency of Bucchero jugs in Cypriote tombs of the LCIIC-LCIII periods (**Tables EA5.2 & EA5.3**) and the common discovery of both in tombs which were used for extended periods of time. Given that the Bucchero jug appears to have developed from the BR juglet or jug in terms of ceramic technique and materials (as discussed in Section 3.3.1), these contextual similarities provide further support to suggestions that the Bucchero jug also contained a liquid solution of opium,<sup>1202</sup> replacing the BR juglet in the LCIIC-LCIII ceramic repertoire. The common discovery of vessels previously suggested to have been precursors of the BR juglet (PBR, BS and TEY juglets) in tombs containing these vessels also provides a degree of contextual evidence to support the hypothesis that these earlier forms also contained an opium solution.

In the case of the WSh juglet, which only occurs frequently in tombs at Enkomi, similar contextual parallels with the BR juglet can also be observed. In addition to the placement of WSh juglets next to the head of the deceased, these vessels seem also to have been deposited with infant burials. In Enkomi Swedish Tomb 3 a WSh juglet was found together with a BR juglet in a dromos niche,<sup>1203</sup> which presumably contained infant burials. Furthermore, in Enkomi tombs that contain a relatively high proportion of WSh juglets, BR juglets appear in much lower numbers than usual or are completely absent,<sup>1204</sup> suggesting the deposit of the former in place of the latter. As such, the WSh juglet may have been another functional equivalent of the BR juglet, suggesting that the contents of these vessels was also a relatively strong psychoactive, either opium or some other substance, perhaps a mandrake root extract (see Section 3.3.3). The discovery of a juglet in BR ware in the form of a WSh juglet from Kition,<sup>1205</sup> further suggests some form of association between these two vessels.

Given the apparent pattern in the placement of BR and WSh juglets and Bucchero jugs next to the head or body of the deceased, it appears that these vessels were, in many cases, deposited in order to provision the dead. This, however, may not have been the case for all the juglets deposited in a tomb. As suggested by **Table 5.1** the number of juglets deposited in a tomb often exceeded the apparent number of

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<sup>1202</sup> Kritikos & Papdaki (1967:33); Merrillees (1979:169; 1989:150-151).

<sup>1203</sup> Gjerstad et al (1934:475-487).

<sup>1204</sup> For example Cypriote Tomb 10; French Tombs 49/11 & PT110, Swedish Tombs 3, 6, 10, 11 & 13.

<sup>1205</sup> Karageorghis (1985:98-99); Karageorghis & Demas (1985:30).

burials and there are cases where even the number of BR juglets or Bucchero jugs was greater than the number of burials. As discussed in the case study for Kazaphani Tomb 2, the total of nearly 100 BR juglets in both tomb chambers is likely to far exceed the number of burials, while Kalavassos Village Tomb 51 appears to have contained a single burial accompanied by two BRI juglets and a WSI juglet in BR form.<sup>1206</sup> A number of LCIII shaft graves from Enkomi (French Tomb 47/1 and Swedish Tombs 14, 15 &16) also contained multiple Bucchero jugs accompanying single burials. This suggests that the number of such vessels placed within a tomb may actually relate to the number of living participants in the mortuary ritual, rather than the number of burials. As proposed above for a similar redundancy of vessels associated with alcohol consumption, this might indicate the consumption of the contents of these vessels by the living as a component of the mortuary ritual.

The evidence suggesting that some of the opium contained within BR (and perhaps other) juglets was consumed by living participants of Late Cypriote mortuary ritual is, however, somewhat ambiguous. Although cases of the redundancy of these vessels may suggest such a role, there are no undisturbed deposits in which such vessels appear to have been placed in a context that suggests they were not associated with a particular burial. On the other hand, evidence for the consumption of alcohol in Late Cypriote mortuary ritual and opium in contemporary non-mortuary ritual (See Chapter 6), suggests that opium may also have been consumed during interment rituals and perhaps even mixed with wine or other alcoholic beverages.<sup>1207</sup> As only a small dose of opium is required for the induction of noticeable psychoactive effects, the contents of the 'opium juglets' provided for the deceased may have been shared between the living and the dead, with only a small amount provided for the latter. The varying amounts of such vessels found in Late Cypriote tombs, therefore, could represent differing levels of opium consumption by mortuary ritual participants and differing conventions regarding how much was provided for the deceased.

Such variation can be seen regionally. As mentioned previously, the largest number of BR juglets from a single tomb was discovered in Tomb 2 at Kazaphani, which contained almost 200 examples in two chambers. Other tombs with relatively large numbers include Angastina-Vounos Tomb 1 with 36 examples and Ayia Irini 'Isolated' Tomb with 32. Indeed, Ayia Irini tombs generally contained numerous

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<sup>1206</sup> Pearlman (1985).

<sup>1207</sup> A common method of orally ingesting opium, Hodgson (1999).

examples, while at nearby *Morphou-Toumba tou Skourou*, PBR and BS precursors of the BR juglet were also numerous. As these sites are all located in the northern half of the island (**Map 2**) it is, therefore, possible that LCA opium production was particularly intense in this area. In relation to the Bucchero jug, however, the apparent lack of activity in this region during the LCIIC-LCIII suggests that production was focused elsewhere. Indeed, the concentration of both Wheel-made Bucchero jugs and WSh juglets at Enkomi may suggest that these juglets and their contents originated here. The heavy bias towards this site in terms of LCIIC-LCIII tombs, though, could provide a false impression, particularly for the Bucchero jugs.

In terms of possible diachronic variation in the mortuary deposition of juglets associated with opium, the apparent shift from TEY, BS and PBR juglets at the start of the LCA, to BR juglets and then to Bucchero jugs in the LCIIC/LCIII periods was discussed in Section 3.3.1. What is particularly noticeable in terms of the distribution of BR juglets, however, is the continuation of BRI juglets well into the LCII period, where they are commonly found alongside BRII jugs, but with BRII juglets actually quite rare. Such overlap suggests that there is little chronological distinction between BRI and BRII wares (in terms of jugs and juglets at least) and even the possibility that the differences between them (particularly plastic versus painted decoration) relate to the existence of different manufacturing centres whose popularity peaked at different times and even varied for different vessel forms.

The widespread distribution of evidence for the deposition and consumption of opium suggests that this substance played an important role in Late Cypriote mortuary ritual. As discussed for the Kazaphani case study, in cases where the number of ‘opium vessels’ exceeded the number of burials, it appears that this substance was consumed by participants in the mortuary ritual in order to induce ASCs. As the consumption of even small doses of opium can produce experiences easily interpreted as an encounter with other-worlds, particularly a feeling of euphoria and the sensation of flying or floating,<sup>1208</sup> it may have been consumed during interment rituals in order to establish such interactions with the world of the dead. Given that a similar suggestion has been made for the consumption of large doses of alcohol, opium may, therefore, have been used as an alternative to alcohol, or added to alcoholic beverages

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<sup>1208</sup> Hayter (1968:42,48); Rätzsch (2005:410).

to enhance their psychoactive properties. In either case, the use of opium may have avoided the need for large quantities of alcohol and the relatively impractical state of extreme drunkenness.

Instances of the apparent provision of opium for the deceased, however, suggest an alternative role for the opium deposited in Late Cypriote tombs. In particular, the common association of such vessels with neonates and infant burials suggests the use of opium to pacify distressed children, an activity which has been recorded in a variety of cultures.<sup>1209</sup> This could, therefore, be interpreted as evidence that opium was deposited with certain individuals as a provision of a medicinal sedative or analgesic for use in the afterlife, perhaps in cases where they suffered a painful or stressful death. There is, however, evidence which argues against such a modern, rational interpretation.

Firstly, if such a strictly medicinal role for the sheer number of BR juglets and other possible ‘opium vessels’ found in Late Cypriote tombs were to be accepted, this would imply that an exceedingly large proportion of the population experienced a protracted and painful death. It would also assume that this physical suffering somehow continued in the afterlife, therefore requiring a provision of opium to comfort the deceased in this realm. Both of these possibilities seem unlikely.

Secondly, and perhaps most tellingly, there is little evidence from Bronze Age or even Classical texts to suggest that opium was explicitly used as an analgesic. In Egyptian medical treatises such as the Ebers Papyrus (ca.1500 BCE), opium instead appears to have generally been used as a sedative, particularly for children.<sup>1210</sup> Furthermore, while Hippocrates (ca. 460-370 BCE) refers to the use of opium (*mekónion*) as a narcotic and for treating internal diseases, coughing, diseases of women and epidemics,<sup>1211</sup> there is not a single reference to its use as an analgesic in the entire Corpus Hippocraticum.<sup>1212</sup> Dioscorides (ca.40-90 CE) similarly mentions the use of opium to induce sleep, aid digestion and relieve coughing and stomach problems.<sup>1213</sup>

Ancient texts also suggest that opium was used for psychological reasons. In Homer’s *Odyssey* (4:243-251), Helen mixes opium (*nepénthes*) into wine to help

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<sup>1209</sup> Gabra (1964:52-53); Hodgson (1999:122), Powell (2007:25).

<sup>1210</sup> Gabra (1956:48-53); Kapoor (1995:2); Kritikos & Papadaki (1967:35).

<sup>1211</sup> *On the Nature of Women* 33; *On Epidemics II.18*, cited in Megaloudi (2005:77).

<sup>1212</sup> Prioreshi & Babin (1993).

<sup>1213</sup> *Materia Medica* IV.64 1.3), cited in Megaloudi (2005:77).

Telemachus and his comrade forget their grief.<sup>1214</sup> Diodorus Siculus (ca.60-30 BCE), in commenting on this passage, suggests that opium was still used as an antidote for grief and anger in Egypt during his time.<sup>1215</sup> Demeter, in despair over the seizure of her daughter Persephone by Pluto is also claimed to have eaten poppies in order to fall asleep and forget her grief.<sup>1216</sup> From these texts it therefore appears that the primary ‘medical’ uses of opium, at least in the East Mediterranean during the Iron Age, was as a sedative antidote for grief<sup>1217</sup> and as a soporific.

The ability of opium to induce sleep may provide one possible explanation for the apparent widespread use of opium in Late Cypriote mortuary ritual, as sleep and death were commonly considered to be closely related, particularly in the East Mediterranean. The clearest example of this symbolic association occurs in ancient Greek mythology, where Hypnos, the god of sleep, and Thanatos, the god of death were considered to be twin brothers.<sup>1218</sup> Of utmost relevance here, both gods were also associated with the poppy, either carried in their hands or wreathed around their head.<sup>1219</sup> Certain biblical passages also suggest a symbolic association between sleep and death.<sup>1220</sup>

Of central relevance to this thesis, it appears that this symbolic association between sleep and death relates to unconsciousness, with the (apparent) unconsciousness of death considered a permanent equivalent to the temporary unconsciousness of sleep. In both cases, the soul may be considered to have separated from the body, with the phenomenon of dreaming reinforcing such beliefs.<sup>1221</sup> As such, it is also likely that the ASCs induced by opium consumption were viewed in a similar manner, perhaps as the initial stages of the soul separating from the body prior to its complete separation manifested by opium-induced sleep.<sup>1222</sup> The sensations of euphoria and flying or floating commonly caused by opium consumption once again seem perfectly suited to being interpreted as just such a supernatural experience. As

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<sup>1214</sup> Fagles (1996:131).

<sup>1215</sup> Diod.Sic.1.97.30, Megaloudi (2005:77).

<sup>1216</sup> Kritikos & Papadaki (1967:17). Demeter is also commonly portrayed bearing poppies, Merlin (1984:219-223).

<sup>1217</sup> Ethnographic accounts also suggest this use, Geddes (1976:211).

<sup>1218</sup> This relationship is confirmed by both Homer, *Iliad* 16. 681 and Hesiod, *Theogony* 758.

<sup>1219</sup> Kritikos & Papadaki (1967:17); Megaloudi (2005:77).

<sup>1220</sup> “Consider and answer me, O Jehovah my God: Lighten my eyes, lest I sleep the sleep of death” (Psa. 13:3); When Lazarus of Bethany died, Jesus informed the disciples: “Our friend Lazarus has fallen asleep ....” (Jn. 11:14).

<sup>1221</sup> See David (2002:281-282) for a discussion of such beliefs in Ancient Egypt. The importance of dreaming in shamanic practice also provides a relevant parallel here.

<sup>1222</sup> Cf. Nencini (2002:930); Nicgorski (1999:540).

extreme drunkenness can also cause unconsciousness, this would explain the existence of similar beliefs regarding alcohol.

The apparent provision of opium for the deceased may, therefore, represent the Late Cypriote belief that its consumption enabled the separation of the soul from the body. As such, opium may have been provided for the deceased in order to assist their soul's journey from the world of the living to the world of the dead. Such behaviour appears to be highly suited to the final stages of mortuary ritual, which, as discussed in Section 4.1.1, generally involved rites designed to ensure this transition.<sup>1223</sup>

In instances where the living participants of the interment ritual appear to have also consumed opium, however, these ancient medical texts also suggest that its ability to suppress the grief of a mourner, by sedating the consumer and inducing feelings of euphoria, may have been of central importance. As considerable emotional pain is likely to have been felt by those close to the deceased during the interment ritual, suppressing such emotions, even if only temporarily, may have been an important psychological benefit derived from the consumption of opium during mortuary ritual. This point is particularly emphasized by the following passage from Homer's *Odyssey* (4:243-251):<sup>1224</sup>

“Then Zeus’s daughter Helen thought of something else.  
Into the mixing-bowl from which they drank their wine  
she slipped a drug, heart’s-ease (*nepenthes*), dissolving anger,  
magic to make us all forget our pains ...  
No one who drank it deeply, mulled in wine,  
could let a tear roll down his cheeks that day,  
not even if his mother should die, his father die,  
not even if right before his eyes some enemy brought down  
a brother or darling son with a sharp bronze blade.”

Even where opium was consumed for such psychological reasons, however, it remains likely that the ASCs it induced were also interpreted in relation to metaphysical beliefs concerning the separation of body and soul. As such, opium induced ASCs may still have represented the partial separation of the soul on a

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<sup>1223</sup> Hertz (1960); Van Gennepe (1960:146-165),

<sup>1224</sup> Fagles (1996:131).

journey to the underworld. Opium consumption may, therefore, have been considered a means by which ritual participants could assist or initiate the journey of the soul of the deceased to the underworld by making part of the journey themselves.<sup>1225</sup> If such ritual action also happened to lessen the grief of the practitioner, then it was of benefit to both the living and the dead.

#### **5.2.4 Iconography in Tombs**

In addition to ceramic vessels, the distribution within Late Cypriote tombs of the iconographic evidence discussed in Chapter 3 is also of significant interest. While there is no need to discuss this imagery in detail again, consideration of the various depositional contexts in which it appears may further assist in interpreting its meaning. As demonstrated in **Tables 3.1** and **3.2**, the majority of objects on which such iconography is displayed could be classed as personal possessions (for example, cylinder seals and jewellery), suggesting that such iconography was closely linked to the identity of the deceased who wore or owned the objects on which it was exhibited.

##### **Depictions of Alcohol Consumption**

Banquet scenes apparently depicting the consumption of alcohol in a ritual context are in Late Cypriote tombs most commonly located on cylinder seals. Akhera-Chiflik Paradisi Tomb 3, Enkomi British Tomb 93 and Enkomi Swedish Tomb 2 all contained cylinder seals bearing banquet scenes and it is highly likely that most unprovenanced examples also came from looted examples. Other scenes probably related to alcohol consumption from Late Cypriote tombs include the five-piece 'drinking sets' (juglet, ladle, rhyton, crater and goblet) depicted on the Sunshade Crater fragment from Enkomi British Tomb 67 and on the cylinder seal from an unspecified tomb at Idalion.

Given the lack of sealings from LCA cylinder seals on Cyprus these devices do not appear to have been used for sphragistic purposes, but were instead more likely to have been worn as badges of status and perhaps authority.<sup>1226</sup> While this would mean that the images depicted on these seals were not readily observable, the choice of seal for a particular individual may still have been determined by the content of the

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<sup>1225</sup> This could have been reserved for participants with privileged, perhaps ritual stations or perhaps for those with a particular relationship with the deceased.

<sup>1226</sup> Smith (2009:17); Webb (1992b:114-117; 2002:126-128)

scenes portrayed.<sup>1227</sup> As such, seals depicting banquet scenes may have been worn by individuals who engaged in such activity themselves, perhaps even in ritual contexts where alcohol was consumed in order to induce ASCs with the purpose of interacting with the supernatural.

### **Representations of the Opium Poppy**

As presented on **Table EA3.3**, likely representations of the opium poppy are found in the form of pendants in carnelian from Ayia Irini Tomba 3 and Kition-*Chrysopolitissa* Tomb 9 and in faience from Maroni-Tsaroukkas BM Tomb 22. The unprovenanced cylinder seal from Enkomi depicting what appears to be an opium poppy in the context of a sacrificial procession is also likely to have come from a Late Cypriote tomb.

As discussed in Section 3.2.2, it is likely that this poppy iconography symbolised the psychoactive opium latex, with the occasional ritual setting suggesting its consumption to induce ASCs to enable interaction with the supernatural world and its inhabitants. As such, it is possible that those who wore such iconography, in the form of pendants or a cylinder seal, identified somehow with such activity, perhaps engaging in it themselves. In this regard, it is interesting to note that this poppy iconography derives from tombs with a significant number of possible opium vessels,<sup>1228</sup> with the exception of Maroni-Tsaroukkas BM Tomb 22, which was cleared by the BM and not well recorded. While this ceramic evidence cannot be linked clearly with the precise individual wearing the poppy representations, it does suggest that opium consumption was relatively common amongst the group with which they were buried.

Another artefact found in Late Cypriote tombs that possibly demonstrates an iconographic reference to the opium poppy is the pair of poppy-shaped bird rhyta from Enkomi tombs, Cypriote Tomb 10 and French Tomb PT 110. As discussed previously, if these objects are modelled on the opium poppy, the bird aspect of their decoration may refer to the experience of ‘ecstatic flight’ induced by opium consumption. As rhyta seem to have been used as pouring devices in drinking and/or libation ritual, these vessels may symbolise the use of opium solutions in such

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<sup>1227</sup> Smith (2009:17) suggests that a seal’s imagery was closely associated with the identity of its owner. Cf. Webb (2005:178-180).

<sup>1228</sup> Ayia Irini Tomba 3 contained 11 BRI juglets, four Proto BR juglets, four BRI jugs, four PBR jugs and nine BSV juglets (BR precursor shape); Kition Tomb 9 contained eight Bucchero jugs from the same burial layer as the poppy pendants.

contexts, perhaps mixed with wine. While it is possible that these two rhyta were used during the interment rituals conducted at the tombs in which they were found, their symbolic value alternatively may have meant that they represented the identity of certain individuals and were, therefore, deposited as one of their possessions. In either case, however, it is again pertinent to note that the tombs from which these vessels came also contained a relatively large number of potential opium containers.<sup>1229</sup>

### **5.3 Discussion**

The evidence discussed in this chapter collectively suggests a number of activities that accompanied the interment of the deceased in Late Cypriote mortuary ritual. Most widespread amongst these is the apparent consumption of psychoactive substances, such as alcohol and opium, which would have induced ASCs most likely interpreted as some form of interaction with the world of the dead. Food may also have been consumed. Perfumed oils also appear to have been used during the mortuary ritual, most probably applied to both the living and the deceased to ensure the purity of all the relevant participants in the interment ritual. Libations of alcohol, opium solutions and perhaps water may have also been conducted, presumably as an offering of these substances to particular underworld spirits, perhaps deified ancestors. In many cases, the deceased also appear to have been provided with a supply of opium, alcohol and perhaps other psychoactives. Other items apparently deposited with the deceased include some of their personal possessions or items of adornment and further consumable provisions, such as food, perfumed oils and perhaps other unidentified commodities.

Evidence for the consumption of both food and alcohol apparently represents the continuation of earlier practices of mortuary feasting, akin to the Near Eastern *marzēah*, into the LCA.<sup>1230</sup> This activity is likely to have continued to be seen as the sharing of a final feast with the deceased and to have constituted an important social occasion in which group identity was fostered and social status and rights were established and renegotiated after the death of certain family members. The psychoactive properties of low doses of alcohol, such as reduced inhibitions and

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<sup>1229</sup> Enkomi Cypriote Tomb 10 contained three BRI juglets, seven BRI jugs, 34 BRII jugs and two Bucchero jugs; Enkomi, French Tomb PT 110 contained six BRI juglets, four BRI jugs & 25 BRII jugs.

<sup>1230</sup> Herscher (1997:31-35); Manning (1998:47); Steel (1998: 290; 2002:109-110; 2004b:168); Webb & Frankel (2008:288).

feelings of relaxation, affection and cheerfulness are likely to have been particularly effective in facilitating such social interaction.

As suggested for alcohol consumption in previous periods, however, such activity may not only relate to rational human behaviour such as the convivial negotiation of resources and status, but may have also been involved in seemingly 'irrational' modes of behaviour such as interacting with the world of the dead. This is further suggested by the appearance of evidence for opium consumption during the Late Bronze Age, as the euphoric and soporific effects of opium consumption generally do not promote social interaction. Certain psychoactive properties of opium, such as the sensations of euphoria and flight and are, however, well suited to interpretation as encounters with the supernatural. Furthermore, given possible symbolic links between sleep, unconsciousness and death, opium induced lethargy and sleep may have been interpreted as interaction with the underworld, as would certain experiential characteristics of large doses of alcohol, such as lethargy, confusion, loss of bodily control and perhaps even unconsciousness. As such, the ASCs experienced from opium consumption and relatively high doses of alcohol may have been viewed by Bronze Age Cypriotes as a separation of their soul from their body and perhaps its travel to the underworld. Possible evidence for similar beliefs in LBA texts from Ugarit and Egypt appears to support such a hypothesis. As such, the consumption of alcohol and opium may have also been motivated by their ability to provide ritual participants with an experience that promotes the sense of spiritual involvement and fulfilment that is central to the maintenance of a religious belief system.<sup>1231</sup> In this context, it is the irrational and individual aspects of psychoactive consumption that are emphasised rather than seemingly rational functions such as provisions of medicine or promoting social interaction for communal benefit.

The ability of both opium and alcohol to suppress memory, combined with the euphoric and sedative effects of the former, also suggests that the consumption of either would have been of significant psychological benefit to those who experienced strong emotional responses (most probably grief) to the interment of the deceased. The apparent popularity of the consumption these substances during Bronze Age Cypriote mortuary ritual may, therefore, also relate to their ability to simultaneously

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<sup>1231</sup> Dornan (2004).

reduce an individual's grief and erase their memories of the deceased, allowing the living to focus upon resuming social life without them.

It appears, however, that the dead could also benefit from the ability of alcohol and opium to assist the soul's travel to the underworld. Instances where such substances appear to have been placed next to the body of the deceased (particularly next to the head) suggest that the deceased were commonly provisioned with opium, alcohol or some other psychoactive. Indeed, it is entirely possible that a large proportion of the opium vessels found in Late Cypriote tombs derive from such provisioning, rather than consumption by the living. Regardless, it is likely that the provision of such substances again reflects the belief that their consumption could enable one's soul to travel to the underworld. Providing the deceased with such substances, then, may have been viewed as an important component of the interment ritual by providing a means by which their soul could leave the world of the living and be incorporated as an ancestral spirit into the world of the dead.

The frequency of vessels associated with opium in Late Cypriote tombs suggests that by at least the Late Bronze age, opium had become an important component of mortuary ritual, used in a manner similar to large doses of alcohol to enable interaction with the world of the dead, by both the living and the recently deceased. The apparent variation in this practice across the island may indicate that differential access to opium, or perhaps various communities had differing views on exactly who should embark on such journeys: privileged individuals, entire families or perhaps only the dead themselves.

Despite its apparent use for what most modern observers would consider an irrational function, opium consumption may have been introduced into Cypriote mortuary ritual for rational, practical reasons. Even low doses of opium can induce sensations interpreted as contact with other-worlds, as opposed to the large doses of alcohol that would be required for a similar sensation. It is, however, also possible that opium and perhaps other psychoactive substances, were also consumed during earlier mortuary rituals. Juglets which may have contained such commodities are certainly common in Early and Middle Cypriote tombs (RP and particularly Middle Cypriote BS and TEY wares) and may be antecedents of these Late Cypriote opium containers. Indeed, as knowledge of the psychoactive properties of many plants most probably predate the production of alcohol, the incorporation of alcohol into mortuary ritual could just as easily follow the use of other psychoactives. Far more extensive

residue evidence for the consumption of such substances, however, is required before such possibilities can be adequately assessed.

Given these observations, we may infer that opium and alcohol induced ASCs had a range of meanings in association with Late Cypriote mortuary ritual. The socialising role of lower doses of alcohol and the ability of opium and larger doses of alcohol to suppress memory and grief can be understood to give these mental phenomena significant socio-political meaning. The possible symbolic association between these ASCs and interaction with the underworld, meanwhile, can also be seen to give them important symbolic meanings, both for the individual and for the wider society. These meanings were not static and invariable, however. The case studies presented above suggest significant variation in the use of ASCs within Late Cypriote mortuary ritual, partly determined by the identities of the deceased and living participants in the ritual. As such, it appears that certain aspects of the meaning associated with ASCs in Late Cypriote mortuary ritual were emphasised over others, dependant upon the context of their use. Such variation is further suggested in the non-mortuary use of such phenomena presented in the following chapter.

## Chapter 6. Late Cypriote Non-Mortuary Ritual – A Contextual Analysis

This chapter consists of a detailed contextual analysis of the artefactual evidence for ASCs, established in Section 3.3, from non-mortuary Late Cypriote contexts, with a particular focus upon those of a ritual character. As with the mortuary evidence considered in the previous chapter, the analysis of non-mortuary evidence conducted here will consider both the broader context of all Late Cypriote sites and specific contexts where the evidence for ASCs appears abundant and well documented. Once again, the aim of this analysis is to identify any patterns in the distribution of vessels associated with psychoactive substances that can assist in developing an understanding of the way ASCs may have been utilised in contexts outside of mortuary ritual. Although Webb has thoroughly reviewed most of the sites discussed in this chapter in relation to ritual practice and iconography,<sup>1232</sup> she did not consider ceramic material in detail and the possible use of ASCs was not considered at all.

This chapter begins with a detailed examination of three well published sites which exhibit significant evidence for alcohol or opium consumption in non-mortuary ritual contexts, with the aim of identifying the meaning associated with the ASCs these substances induced. Following these case studies is a review of all excavated and published Late Cypriote sites that consisted of remains beyond simply tombs or graves. The full corpus of these sites, presented in **Table 6.1**, will also be considered in relation to ceramic evidence for alcohol and opium consumption and the relevant iconographic representations discussed in Chapter 3. The Chapter will conclude with a discussion of the possible use of ASCs during Late Cypriote non-mortuary ritual, as suggested by the patterns in this evidence.

### **6.1 Non-mortuary Ritual Case Studies**

The three sites considered in this section were chosen on the basis that they are well published excavations that appear to have been the focus of religious ritual or cult,<sup>1233</sup> while also exhibiting relatively strong ceramic evidence for the consumption

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<sup>1232</sup> Webb (1999)

<sup>1233</sup> For a detailed review of the cultic nature of each, see Webb (1999). The main features of each site that suggests such behaviour will, however, also be highlighted here.

of alcohol and/or opium. Each site is reviewed with particular attention given to these vessels and their depositional context in an effort to interpret the meaning of the ASCs induced via the consumption of their contents. Particular focus will be given to the way in which these ASCs may have been incorporated into the rituals conducted at each site. The detailed consideration of case studies is again designed to provide interpretations against which a review of the broader context can be hermeneutically balanced (see Section 2.1.1). The three sites are presented in chronological order.

It is also important to note that the majority of the ceramic vessels that are considered in this section (and indeed throughout this chapter) as possible evidence for ASCs are those that were discovered largely intact from relatively undisturbed contexts. While fragments of vessels discovered in disturbed contexts (including fill) can provide a very general level of contextual information, such evidence is of significantly less interpretive value than that from more secure contexts.<sup>1234</sup> Emphasis will, therefore, be given to the latter.

### **6.1.1 Athienou-Bamboulari tis Koukouninas<sup>1235</sup>**

LCIA-LCIIIA

(c.1600-1100 BCE)

The site of Athienou is located roughly near the middle of Cyprus, c.20km southeast of the modern city of Nicosia (**Map 3**). The site is located on a natural hillock rising 2m above the surrounding plain and covers an area of approximately 2500m<sup>2</sup>. Although no settlement has been discovered nearby, a cemetery containing LBA and IA burials is located c.100m to the south of the site.

Dikaios and Paraskeva made 30 soundings in 1958 and the Institute of Archaeology of the Hebrew University subsequently conducted large-scale excavations during 1971 and 1972, uncovering 90% of the site down to virgin soil. They discovered evidence of three occupation phases spanning the entire LCA (Strata IV-II) and a fourth phase representing sporadic IA settlement (Stratum I). The location of the site on a low hill, however, meant that only a small depth of archaeological material remained; nowhere more than 1m. This had resulted in extensive destruction of architectural remains, with erosion obliterating any remains

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<sup>1234</sup> Cf. Last (2006:125).

<sup>1235</sup> Unless otherwise noted, the following description of this area is derived from Dothan (1981); Dothan & Ben-Tor (1983).

in the south and southwest of the site.<sup>1236</sup> As a result, the architectural remains uncovered were quite fragmentary.

As the Stratum III remains are of most relevance to this study, only they will be considered in detail. The architectural remains of this stratum (**Fig.6.1**) consist of an open court (approximately 17m E-W x 18m N-S) bordered to the north and east by a number of rectangular rooms.

At the western end of the north wing there was a large rectangular room (locus 628, c.6.8 x 5.7m) with a plaster floor, probably accessed from the court by an entrance in the southeast corner. A large group of 'votive vessels', consisting of 17 coarsely hand-made miniature juglets and bowls (discussed further below), was found in the southern half of this room. A smaller rectangular room (c.2.9 x 2.3m) was also located at the east end of this north wing, although a floor corresponding to Stratum III was not uncovered as the Stratum II floor of this room was not removed. Although not well preserved, the area between these two corner rooms may have been an entrance hall providing access to the court from outside the structure. Fragments of plaster floors to the north of the remaining walls, suggest the possibility that further rooms existed to the north.

The eastern wing of the Stratum III remains was represented by a pair of north-south running walls. In the area between them further traces of plaster floor were uncovered, with depressions marking where large storage pots once stood. Three circular pits in a rough row were found approximately 2.5m east of the north-south wall. These contained a number of ceramic vessels including: bowls of BR11, WS, PWW1, Plain Wheel-made ware (PW) and Aegean-style wares; a Mycenaean-style jug and fragments of others; a Bucchero jug; three large (31-42cm high) stirrup jars of Aegean wares and a Myc. IIIB 'Rude Style' crater. An ivory rhyton was also found in the southernmost pit.

A number of pits further to the east, some containing more crudely hand-made miniature 'votive vessels', have also been attributed to Stratum III. One of the easternmost pits (Locus 670) contained a BR1 juglet.

Within the courtyard, piles of the 'votive vessels' were the dominant feature of Stratum III, with hundreds of these miniature vessels found in each pile (**Fig.6.2**).<sup>1237</sup>

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<sup>1236</sup> Modern and ancient robbing of architectural stone also contributed to this poor state of preservation.

<sup>1237</sup> Approximately 10,000 separate vessels were recorded from across Stratum III.

They included miniature versions of common Late Cypriote wares such as BR, Bucchero and WSh juglets, BR bowls and also miniature Mycenaean-style vessels. The majority of these ‘votive vessels’, however, were crudely hand-made miniature bowls and jugs. In certain areas of the courtyard (Loci 504 and 527), though, full-sized WSh juglets (**Fig.6.3**) dominated the assemblage.<sup>1238</sup>

Three pits full of artefacts within the courtyard were also attributed to this stratum. A pit near the centre of the courtyard (loci 516, 531, 536 and 563) contained more ‘votive vessels’, a local-style cylinder seal, an Egyptian finger ring bearing the hieroglyph of the Egyptian god Ptah, metal scrap and nodules, six miniature squat, wide-mouthed BR II juglets and seven miniature Bucchero juglets (also squat, wide-mouthed).

A pit to the west of the courtyard (Locus 672) contained a huge amount of pottery including four BR I juglets and two squat, wide-mouthed BR II jugs. The pit also contained seven PW jugs (hand and wheel made), a RS jug, a PWW II jug and scores of the small, crudely made juglets and cups, some miniature versions of recognisable Late Cypriote Wares. Another three BR I juglets and a squat, wide-mouthed Bucchero jug were found on the floor of the court to the east (Locus 504), although the BR juglets were coarsely made and undecorated. Another squat, wide-mouthed Bucchero jug was found on the floor to the west of the pit.

Large quantities of metal artefacts were also found in Stratum III, with approximately 120kg of small nodules (2-6 cm in diameter) found primarily in an around the pit in the centre of the courtyard (loci 516, 531, 536 and 563) and 202.5 kg of larger nodules (approximately 10cm minimum diameter) found near the eastern edge of the site. Although large amounts of slag were not found, analysis of metal finds indicates that some smelting did take place at Athienou. Approximately 5kg of scrap metal (bronze nails, chisels and casting spillage and folded pieces of lead) was also found primarily in and around the pit in the centre of the courtyard.

### **Chronology**

According to the excavators, material from Stratum III dates from the late 16<sup>th</sup> to the end of the 13<sup>th</sup> centuries BCE. Although no finer stratigraphic division was

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<sup>1238</sup> The precise number of these vessels is not specified, however.

possible, the bulk of this material dates to the 14<sup>th</sup> and 13<sup>th</sup> centuries BCE and much of the earlier material probably belonged to Stratum IV.<sup>1239</sup>

Stratum II was dated to the 12<sup>th</sup> century B.C.E. due to the presence of Myc.IIIC pottery, with little suggestion of any break in the use of the site between Strata III and II. The site appears to have been abandoned sometime during the 12<sup>th</sup> century B.C.E., with faint traces of IA use (Stratum I) indicating some further, sporadic occupation.

### **Discussion**

Numerous features of the site strongly suggest that it was a focus for ritual activity. Foremost amongst these is the discovery of thousands of ‘votive vessels’ from Stratum III, which the excavators argue had a cultic function as they were seen to be unsuitable for any ‘mundane’ purpose.<sup>1240</sup> In addition, the size of the main structure in Stratum III suggests a public nature<sup>1241</sup> and the presence of an enclosed courtyard or temenos is a feature commonly found at other Late Cypriote cult buildings.<sup>1242</sup> Bucrania discovered in a Stratum II pit within the courtyard have also been compared by the excavators to large numbers of bucrania found inside contemporary temples at Enkomi and Kition (see below).<sup>1243</sup>

The excavators suggest that Athienou may have been a station on the trade route between nearby mining areas at Trouilli and Sha (8 and 20km away respectively) and the large trade centres on the east coast of the island.<sup>1244</sup> In addition, the evidence of metallurgical activity at the site is suggested to indicate that metalworking and cult practice were conducted side by side in the Stratum III use of the site.<sup>1245</sup> This association is again compared to evidence from Enkomi and Kition,<sup>1246</sup> while Åström also compares the pottery assemblage from Athienou to that from Kalopsidha-*Koufos*, where evidence of metalworking was also apparent.<sup>1247</sup>

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<sup>1239</sup> Peltenburg (1986b:157). Webb (1999:28) suggests that the metallurgical installations may not have been added until around this time.

<sup>1240</sup> Dothan (1981:92); Dothan & Ben-Tor (1983:25, 139). Steel also argues that such miniature vessels are specific to cult assemblages, Steel (2004a:177).

<sup>1241</sup> Knapp (1986:51).

<sup>1242</sup> Steel (2004a:176-177); Webb (1999:157-165).

<sup>1243</sup> Dothan & Ben-Tor (1983:140).

<sup>1244</sup> Dothan (1981:93); Dothan & Ben-Tor (1983:140); Maddin et al. (1983:136).

<sup>1245</sup> Dothan (1981:93); Dothan & Ben-Tor (1983:140).

<sup>1246</sup> Dothan (1981:93).

<sup>1247</sup> Åström (1985:178). See also Dothan (1981:93); Steel (2004a:177). For further detail of Kalopsidha-*Koufos* see Åström (1966:7-143).

Although the actual production of metal at the site has been questioned,<sup>1248</sup> the close association of metalworking debris and ritual at the site provides further support to Knapp's suggestion that the Late Cypriote elite exploited ritual ceremony in order to exert control over the copper industry.<sup>1249</sup> The discovery of a number of large pithoi in Stratum II, argued to have contained olive oil, may have been used in the storage and redistribution of such produce, perhaps to miners from the surrounding region.<sup>1250</sup> The rituals conducted at the site, therefore, may have been used to establish and maintain control not only over copper production, but also over the storage and distribution of the agricultural produce needed to support this industry.<sup>1251</sup>

In terms of the rituals conducted at Athienou, Webb argues that the discovery of a possible bull figurine,<sup>1252</sup> a basin with bucrania protome<sup>1253</sup> and a 'cult chariot' with bulls<sup>1254</sup> suggest that the bull was an important component of the cult iconography at Athienou.<sup>1255</sup> Bucrania uncovered from a Stratum II pit in the courtyard provides another association with this animal. Åström argues that these symbols may indicate the worship of a deity associated with fertility,<sup>1256</sup> or, alternatively, that the evidence for metalworking may indicate the worship of a deity seen to protect the metalworking industry.<sup>1257</sup> Numerous ethnographic examples for a symbolic association between fertility and metallurgy,<sup>1258</sup> however, suggest that these two interpretations may not be incompatible. Given the nearby Late Cypriote cemetery and the continued importance of mortuary ritual, however, it is also possible that rituals conducted at Athienou were addressed to ancestral spirits.

Concerning the actual nature of the ritual practice conducted at Athienou, the excavators argue that the thousands of miniature vessels from Stratum III had a votive

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<sup>1248</sup> Muhly (1985:33). Contra Maddin et al. (1983:136).

<sup>1249</sup> Knapp (1986;1988;1993).

<sup>1250</sup> Keswani (1993:77-78).

<sup>1251</sup> Knapp (1986;1988;1993).

<sup>1252</sup> The leg of a zoomorphic figurine, possibly a bull, was found in Stratum III, Dothan & Ben-Tor (1983:Fig.48:24).

<sup>1253</sup> Fragments of a circular limestone basin, decorated at the base of one side with a bucrania protome, were found in a pair of deep pits from Stratum I, Dothan & Ben-Tor (1983:129-131: Fig.60:1).

<sup>1254</sup> A bronze 'cult chariot' figurine with bulls also found at the site in 1915, Dothan & Ben-Tor (1983:140).

<sup>1255</sup> Webb (1999:28-29).

<sup>1256</sup> Åström (1985:179).

<sup>1257</sup> Åström (1985:179).

<sup>1258</sup> Childs & Killick (1993:325-328); Eliade (1962); Reid & MacLean (1995:149-150); Schmidt & Mapunda (1997:75-85). Such associations include procreative analogies for the smelting of ores, the addition of fertility medicines to the furnace to ensure a good smelt and sexual taboos enforced upon those involved in the smelt.

function.<sup>1259</sup> As some of these vessels were considered too small (less than 1cm high) or too solid to have been used as receptacles, they were argued to be unsuitable for any ‘mundane’ purpose and were involved in the offering of ‘gifts to the gods’.<sup>1260</sup> Åström, however, suggests that, as they imitated jugs and bowls, these vessels were respectively designed to be pouring and drinking vessels, albeit ones which could only hold a small amount of liquid.<sup>1261</sup> Åström compares some of the miniature vessels with Early Helladic ‘ouzo cups’ and suggests, therefore, that the miniature vessels may have been used to consume a potent drink during ritual banquets, perhaps within the courtyard. Åström also cites the discovery of large numbers of kylikes at Pylos, Knossos and Mycenae as evidence for comparable behaviour in the Aegean. Hamilakis similarly argues that the vast quantities of poorly made, standardised conical cups found in Neopalatial contexts on Crete were mass produced for use in large-scale drinking ceremonies.<sup>1262</sup> Hamilakis further argues that the plain character of these conical cups may also represent an attempt to promote communal spirit and corporatism.<sup>1263</sup> As discussed below, the frequent occurrence of drinking vessels, particularly Y-shaped BR bowls, from other Late Cypriote cult sites certainly suggests that consumption of liquids such as wine was a common component of cult practice at these sites.<sup>1264</sup> As previously discussed, alcohol consumption also appears to have been a major component of mortuary rituals on Cyprus throughout the Bronze Age.

The use of such crudely made, miniature vessels within ritual practice as vessels for the consumption of psychoactive substances has another close parallel in contemporary Hittite ritual. From Boğazköy-Hattuša strikingly similar assemblages of crudely made miniature vessels, including conical bowls, juglets and flat bowls, have been recovered from the ‘sacred ponds’ and temple buildings.<sup>1265</sup> Interestingly, these vessels are also referred to as ‘votive vessels’, due to their discovery in ritual contexts. Schoop, however, has recently pointed out that these vessels also occurred in Hittite settlement contexts and also in Hittite banquet scenes where a seated male is depicted drinking from such vessels which are carefully held with the fingertips. These Hittite ‘votive vessels’, therefore, may have been used in some form of the Hittite ‘drinking

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<sup>1259</sup> Dothan (1981:92); Dothan & Ben-Tor (1983:25, 139).

<sup>1260</sup> Dothan (1981:92); Dothan & Ben-Tor (1983:25, 139). See also Steel (2004a:177).

<sup>1261</sup> Åström (1985:178).

<sup>1262</sup> Hamilakis (2002:196).

<sup>1263</sup> Hamilakis (2002:196; 2008:12).

<sup>1264</sup> Steel (1998:292; 2004a:177).

<sup>1265</sup> Schoop (2011:246).

the god' ritual discussed in Section 3.1.2,<sup>1266</sup> probably involving the consumption of a psychoactive liquid such as alcohol, although other substances, including opium, have also been suggested.<sup>1267</sup> As discussed, such banquet scenes depicting a seated male drinking from a small bowl or cup have also been associated with the Near Eastern *marzeah*.<sup>1268</sup>

This example suggests that the 'votive vessels' from Athienou may not have been votive at all, but rather, may have been used in a drinking ritual similar to the Hittite 'drinking the god' ritual, with the vessels discarded immediately afterwards. Indeed, vessels such as the jugs, large stirrup jars and Mycenaean-style crater from the east wing of the complex were likely to have been associated with the mixing and pouring of wine, suggesting one possible candidate for any liquid consumption from the miniature vessels.

Given that a number of BRI bilbil juglets were found within the courtyard, alongside the 'votive vessels', however, it is also likely that opium was consumed, at least on some occasions. Indeed, although the number of BR bilbils found at the site (nine not including rough imitations) is relatively low compared to the number of 'votive vessels', their presence is noteworthy given that this is the only known instance where multiple examples of this vessel have been found in a non-mortuary context.<sup>1269</sup> These vessels, therefore, constitute the most substantial evidence for the Late Cypriote consumption of opium outside of mortuary contexts.

Furthermore, other small capacity, closed shapes from the site, such as Bucchero jugs and WSh juglets, may also provide evidence for the consumption of opium and perhaps other psychoactives. In particular, the massive quantities of WSh juglets, which have previously been argued on contextual grounds to have been functionally equivalent to the BR bilbil juglet (again apparent here), suggests that psychoactive liquids may have been consumed in considerable quantities at Athienou. When considered together, the large number of such small pouring vessels appears to have been sufficient to supply a liquid commodity, probably psychoactive, for consumption by ritual participants from the 'votive vessels', particularly if also mixed with water or wine.

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<sup>1266</sup> Schoop (2011:246). Cf. Haas (1994:669-673).

<sup>1267</sup> Schoop (2011: Note 15).

<sup>1268</sup> Barnett (1985:2-3); Carter (1995:300-305); Courtois et.al (1986:70); Pinnock (1994).

<sup>1269</sup> As discussed in Chapter 3, this may relate to the relative lack of excavated non-mortuary sites dating to the LCI-LCIIB, when these BR bilbil juglets were produced and used.

The sheer number of ‘votive vessels’ found at the site and the apparent focus of activity within the courtyard also suggests that the rituals conducted there involved a significant number of people and could best be described as a communal ritual. At the same time, the size of the ‘votive vessels’, suggests that any opium or alternative psychoactive consumed at the site was distributed in a relatively small dose. As such, it may be of particular relevance that even for low doses of opium, the primary experiential characteristics of euphoria and the sensation of flight were still likely to have been noticeable. Given that such experiences are well suited to interpretation as some form of interaction with the supernatural world they may have been understood as an encounter with the particular supernatural entities worshipped at the site. In the context of a communal ritual this may have been viewed as an active participation in a shared experience.<sup>1270</sup> As noted in Section 2.2, such a focus on the active, ‘embodied’ ritual experience was a common feature of ritual in pre-modern societies.<sup>1271</sup>

Opium (and perhaps any other psychoactives) may have been consumed in low doses as larger amounts may not have been economically viable. The effects of larger doses, particularly the soporific effects, may also have been considered inappropriate in the context of large scale communal rituals, as these usually followed prescribed patterns of performance. It is also possible, however, that certain effects of opium-induced ASCs were amplified or altered by the performance of activities such as rhythmic dancing and music. As discussed in Chapter 1, the combined use of psychoactives, dancing and music to induce ASCs is often observed ethnographically, for instance, during Voodoo spirit-possession rites.

As also noted in Section 1.5.1, ASCs often increase suggestibility and, therefore, in the context of organised religion, heighten the common faith of those who experience them together.<sup>1272</sup> The use of such states in a group setting at Athienou, therefore, may have reinforced the religious beliefs of the participants by providing personal experiences which could be interpreted as direct encounters with one or more of the supernatural beings occurring within their belief system. The experience of cosmic ‘oneness’ common in ASCs and also recorded by opium consumers, combined with the group setting of the ritual, may have also had the effect

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<sup>1270</sup> This contrasts with the focus on passive observation which characterises many modern religious rituals.

<sup>1271</sup> Dornan (2004); Lewis (1971:11); Morris & Peatfield (2002:110; 2004:46, 54); Pearson (2002:75); Whitley (2008:94).

<sup>1272</sup> Bourguignon (1973b:338).

of strengthening a collective identity. One aspect of meaning associated with any ASCs induced through psychoactive consumption at Athienou, therefore, may have centred upon their ability to provide personal religious experience that also contributed to a strong sense of membership to a particular social group.

At Athienou, the ritual use of ASCs seems to have been associated with the intra-community exchange of commodities (seemingly copper and agricultural produce) and perhaps labour or even crafting expertise, as suggested by the possible evidence for copper production. The rituals conducted at the site may, therefore, have been viewed as a crucial component of such interaction, providing a structured performance by which such exchange was sanctified (and sanctioned), whilst reinforcing the idea of a belief system common to all. The ritualised use of ASCs would have further strengthened the social bonds between the participants by heightening their emotional involvement in such activity. Furthermore, as copper production and the redistribution of agricultural produce appear to be controlled via religious sanction by the LCIII period,<sup>1273</sup> it is possible that the rituals conducted at Athienou reflect a slightly earlier form of supernatural control over economic transactions. As such, it may be that elites in positions of ritual authority assumed control over proceedings at Athienou, perhaps even restricting access to sacred substances such as opium. If only privileged individuals could access and distribute such substances, and thereby interact with the supernatural, the supernatural may have effectively become a 'commodity' that was exchanged for copper and other produce provided by nearby communities. As such, the ritual use of ASCs at Athienou may have originally been used by emergent religious elites to establish and legitimise a subordinate, productive role for the populations in the region.

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<sup>1273</sup> Knapp (1986;1988;1993).

## 6.1.2 Kition-Kathari<sup>1274</sup>

LCIIC-LCIIA

(c.1300-1100 BCE)

The Late Cypriote site of Kition, lying beneath the modern town of Larnaca, on the island's southeast coast, is represented by remains of a settlement enclosed with a circuit wall dating to the 13<sup>th</sup> and 12<sup>th</sup> centuries BCE (**Fig.6.4**). While Early Bronze Age tombs in the area suggest an earlier settlement,<sup>1275</sup> the 13<sup>th</sup> and 12<sup>th</sup> century BCE structures were founded on bedrock, suggesting that extensive evidence for earlier periods is unlikely to remain.<sup>1276</sup> Furthermore, as the site is located within a modern city, the vast majority is covered by modern buildings or has been destroyed by construction activity. Excavations conducted by the Department of Antiquities between 1962 and 1981, however, have revealed two areas of Late Cypriote architecture, Areas I and II.<sup>1277</sup> Area II (ca.2000 m<sup>2</sup>), in the north of the site at the locality of *Kathari*, revealed a portion of the city wall and several structures dating to the 13<sup>th</sup> and 12<sup>th</sup> centuries BCE, including a number of temples associated with industrial installations. Area I was located approximately 200m to the southeast and appears to have been a contemporary residential and/or industrial quarter. Of central relevance to this thesis, a number of artefacts suggesting an association with opium and its consumption were uncovered from the Temple Precinct, prompting a more detailed consideration of this area.

### Area II

A number of building phases dating to the LCA (Floors II-IV) were uncovered in this area, revealing five distinct monumental buildings apparently dedicated to cult practice and a series of structures associated with metallurgy and possibly textile production.

### Floor IV (LCIIC)

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<sup>1274</sup> Unless otherwise noted, the following description of the site is derived from final excavation reports and catalogues, Karageorghis (1976b; 1985); Karageorghis & Demas (1985).

<sup>1275</sup> Karageorghis (1974:1). A depression in the bedrock within Temple 2 of Area II contained EC/MC sherds and may have originated from an earlier tomb destroyed by LC levelling of the area.

<sup>1276</sup> Karageorghis (1974:2)

<sup>1277</sup> LCA material was also uncovered in a sounding during French excavations at the Bamboula Hill in the east of the site, Yon (1985). An LCA 'necropolis' may have also extended over a large area along the north and western parts of the town.

The earliest structural remains found in Area II belong to a sanctuary complex dating to the LCIIIC (**Fig.6.5**), including two cult buildings (Temples 2 and 3), a possible industrial quarter and numerous pits and channels.

Temple 2, located near the southern edge of the precinct, was roughly rectangular in plan (17.6-17.3m E-W, 6.6m N-S) and consisted of a large central hall (R.24) containing a double row of pillars and a stone-built hearth flanked by small entrance hall to the east (R.24B) and a 'storeroom' or perhaps cella to the west (R.24A). Relevant artefacts attributed to Floor IV include a number of small Myc.IIIB stirrup jars, a WSh juglet bearing a Cypro-Minoan inscription, bowls of BRII and WSII wares and two Myc.IIIB chalices/goblets. Fragments of Myc.IIIB skyphoi, a Myc.IIIA crater and a Myc. IIIB conical rhyton were also found.

Temple 3, located towards the northern edge of the precinct, was also constructed in association with Floor IV, but was abandoned and built over at the end of this phase. It was roughly trapezoidal in plan (5.55 E-W x 2.65-3.15 N-S), consisting of a larger 'main hall' in the east and a smaller 'inner sanctum' to the west. A hearth and 'offering table', collectively described as an altar, were found in the east of the main hall, immediately in front of the external entrance. No portable finds were discovered in Temple 3.

Around Temple 3 were numerous features cut into the bedrock and associated with the Floor IV use of the area. This included: a number of pits and a well to the north and east; and, to the south, a series of 90 small pits, a rectangular basin and a channel that extended from another well to some of the features to the east. The excavators suggest that these features are the remains of a sacred garden associated with Temples 2 and 3.<sup>1278</sup> In one of the pits to the east (Pit h) seven fragmentary Mycenaean-style Psi figurines, a fragmentary 'Pastoral Style' crater, and a BR juglet in the form of a WSh juglet were found.

A poorly preserved four room building and associated courtyard located in the southwest of Area II appears to have been the predecessor of the more extensive workshops of later levels. The extensive use of cement and plaster flooring suggests the possible dyeing of textiles, while considerable quantities of copper slag suggest metallurgical activity.

### **Floors IIIA-II (LCIIIA-LCIIIB)**

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<sup>1278</sup> Karageorghis & Demas (1985:258).

Temple 1, located in the south west of the precinct (**Fig.6.6**) was the largest building at the site (27.85m E-W x 18.5m N-S), with external walls of ashlar masonry emphasising its monumental character. Its construction is assigned to Floor IIIA (LCIIIA). The layout is dominated by a large hall (23.95 x 18.5m), with three small rooms (Rooms 20, 20A and 20B), or perhaps the foundations of a large platform,<sup>1279</sup> along the west side. Unfortunately, details of other interior features of the temple, including any floors, appear to have been removed by later Phoenician building activity, which cleared the interior down to bedrock. Many of the features cut into the bedrock discussed above (the small pits, much of the channel, the rectangular basin and a well), however, were located within the confines of the temple. Although these have been assigned by the excavators to the phase preceding the temple's construction, the channels and basin align with the temple walls, suggesting that they were actually internal features of Temple 1.<sup>1280</sup> Furthermore, amongst the objects recovered from the well (Well 1) were several skyphoi and bowls of Myc.IIIC:1 and CGI wares suggesting the use of this feature throughout the life of the temple. In an open area immediately south of the temple (Courtyard C) finds of note from Floors IIIA-II include the head of an ivory rod imitating an opium poppy capsule (**Table 3.2x, Fig.3.34**), a pair of incised ox scapulae, a muzzle from a terracotta bull figurine, and fragments from a PWP bowl and a Canaanite jar.

In Floor IIIA Temple 2 was reconstructed on a slightly larger scale (now 17.45m E-W x 7.7m N-S internally), with the walls realigned and rebuilt with ashlar. Although no objects were found on Floor IIIA, a number were found in the fill between this floor and Floor III including a fragmentary Myc.IIIC:1 skyphos in R.24A, a nearly complete WSh juglet in R.24B and, in the main hall, three triton shells, two fragmentary skyphoi and a fragmentary crater of Myc.IIIC:1 ware, two fragments of a faience goblet and six stone anchors. Structurally, Temple 2 remained largely unchanged in later phases (Floors III-I). Objects found on Floor III of the main hall include nine Myc.IIIC:1 and Late Myc.IIIB skyphoi and shallow bowls, jugs of Myc.IIIC:1 and Coarse wares, a miniature bottle/juglet of PW ware and numerous sea-shells. A pit cut into this floor was filled with ash, charcoal, bones and numerous sherds of Myc.IIIC bowls/skyphoi, while the ashes of the Floor III hearth also contained a Myc.IIIC skyphos and fragments of two kylikes. A lack of internal

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<sup>1279</sup> Callot (1985:183).

<sup>1280</sup> See also, Smith (2009:66, Fig.II.2).

features and artefacts from Floors II and I suggest that the use of Temple 2 had significantly declined.

Temple 4 (c.17m E-W x c.8.2m N-S) was built in Floor IIIA in the eastern sector of the temple precinct against the city wall. Both the inner and outer facades were faced with ashlar and the architectural arrangement remained largely unchanged throughout the LCA. It was dominated by a rectangular main hall (R.38, c.12 x 7.1m) with a T-shaped arrangement of pillars, benches along two walls, a roughly circular clay and mudbrick hearth (0.9-1.1m diam.) and a 1.4m deep well, containing, amongst other artefacts, a large pithos, a Canaanite jar and a PWW jug. A series of three smaller rooms opened off the east end of this hall (R.38A-C), while an enclosed paved courtyard with an ashlar constructed well was located immediately to the east of the building (R.39). Artefacts attributable to Floor IIIA were primarily found in the fill between Floors IIIA and III in the northernmost side room (R.38C). These included a number of ivory objects including a plaque depicting the god Bes and the ivory rod discussed by Karageorghis as a possible opium-smoking implement (discussed in Section 3.3.1, **Fig.3.63**), along with numerous bronzes, a jug of PWW ware, a fragmentary Myc.IIIC:1 skyphos, ten PWW ware bowls imitating the BR II Y-shape, two Late Myc.IIIB bowls, and a Decorated LCIII bowl. Objects found on Floor III include sherds of a Myc.IIIC:1 amphoriskoi and bowls of PWW and Late Myc.IIIB ware. A pit cut into this floor within R.38A contained ash, animal bone and fragments of two Myc.IIIC:1 skyphoi, while numerous pithos sherds were found on this surface in R.38B. Also of relevance was a poppy-shaped bead of carnelian attributable to Floor II that was found on the Street A immediately to the north and another WSh juglet on Floor III of the space between Temple 4 and Temenos A (Courtyard A).

Temple 5, also built in Floor IIIA, was located in the southeast of the temple precinct, south of Temple 4 and abutting the eastern stretch of the city wall. It consisted of a large main hall (R.58) with an enclosed room at the west end (R.58A) and, to the east, a courtyard with a possible altar (c.29m E-W including courtyard, 9.15m N-S). Ashlar masonry does not appear to have been used in its construction. The hall contained a double row of column bases, benches against the north and south walls and a series of roughly circular patches of heavy burning and ash between each pair of column bases, perhaps hearths. Ash and bone was found within at least two pits, while a third may have held a storage jar. Upon Floor IIIA was the large cylindrical clay vessel suggested by Karageorghis as a device used to inhale opium

fumes (discussed Section 3.3.1, **Fig. 3.64**).<sup>1281</sup> This object appears to have remained in place and presumably was still used in Floors III and II. Other objects found in the main hall on Floor IIIA include a fragmentary crater of Levantine ware and a White Shaved ware juglet. On Floor III a roughly square altar (c.2x2m, 40cm high) of worked stone and mudbrick was constructed between the western wall and the southern row of columns. In association with this floor were: fragments of two pomegranate/poppy shaped glass bottles (discussed in Section 3.2.2),<sup>1282</sup> wall brackets, a bowl of Late Myc.IIIB ware and a shallow pit containing numerous bones and a Late Myc.IIIB bowl. Within the main hall in association with Floor II (LCIIIB) the space between the columns appears to have been filled with walls of rubble or mudbrick, creating a pair of partition walls, or perhaps benches. Objects from this phase include concentrations of bones and animal skulls, including antlers and bucrania, the torso of terracotta human figurine, a modelled faience eye, three clay wall brackets, more fragments of a glass pomegranate/poppy bottle, a serpentine mace head, two PWP pyxides and a juglet of PWW ware. A stone anchor added to the altar may have been used to tether animals for sacrifice. The small room at the west end of the main hall (R.58A, c.6.75 x 1.25m) contained only a fragmentary wall bracket on Floor IIIA, although a fragmentary Bucchero ware amphora was found in the fill between Floors IIIA and III. Furthermore, a pit found beneath Floor IIIA in this room also contained, amongst other objects, a spouted BRII bilbil juglet,<sup>1283</sup> a WSh juglet and a Black Lustrous Wheel-made (BLWM) bowl.

Founded in Floor IIIA, Temenos A was a large enclosed courtyard (35.5m E-W x 9-10.5m N-S) located along the north edge of the precinct against the city wall and covering the area where Temple 3 had previously stood. On Floor IIIA it contained a small structure, perhaps storeroom, built against the city wall (Room 35), Well 3, a plastered hearth and, along the southern wall a large area of burnt material (probably another hearth) flanked by two small benches. The objects found on Floor IIIA consisted almost entirely of small fragments, including those of a Canaanite jar, PW jugs, an LMIIIB pithoi and bowls of faience and Myc.IIIB ware. In Floor III the northern workshops (see below) expanded into the western end of the area and a stepped altar apparently topped with Horns of Consecration (Altar D) was

<sup>1281</sup> Karageorghis (1976a:128).

<sup>1282</sup> Cf. Smith (2009:98-99, Fig.III.12).

<sup>1283</sup> While the fabric and decoration of the BR juglet classifies it as BRII, the shape is more reminiscent of BRI, Karageorghis (1985:102).

constructed. The plaster hearth continued to be used and a thick layer of ash, bone and the body of a bull figurine were found upon it. Elsewhere on Floor III were fragments of Myc.IIIC:1 bowls/skyphoi and fragments of a 'Pastoral Style' bell crater. In Floor II the 'storeroom' was abandoned, while numerous pithos fragments across this level suggest that such vessels originally sat in some of the larger pits dug into this floor.

Also founded in Floor IIIA, was a second enclosed courtyard, Temenos B (19.5m E-W x 13.4m N-S), located immediately between Temple 2 and Temenos A. Enclosed by walls with ashlar facades, and with a pair of double doors at the eastern end, this area appears to have been a monumental entrance hall and processional route to Temple 1, located immediately to the west. Amongst the few artefacts that were recorded from this area were two fragments of a crater of Levantine ware from the fill between floors IIIA and III.

In Floor IIIA the industrial complex was significantly expanded. The rooms in the 'western workshops' may have been used for textile manufacture, particularly suggested by numerous clay reels, spindle whorls, loomweights and pits full of bone ash.<sup>1284</sup> The 'northern workshops' had direct access to Temple 1 via R.12 and appear to have been devoted to copper/bronze working, based on the discovery of a furnace and numerous fragments of copper slag. In R.12, however, the discovery of three bucrania and five horns on Floor IIIA immediately before a large stone anchor set upright, suggest the sacrificial slaughter of animals tethered to the anchor.

Floor I in Area II (CGI) follows a partial destruction of the temple precinct, perhaps due to an earthquake, at the end of LCIIIB. The structures were rebuilt with minimal effort during this CGI phase and finally abandoned at the end of the same period. Due to the Iron Age date of this floor, the material derived from it is beyond the scope of this thesis and is, therefore, not considered here.

### **Chronology**

The presence of LCII wares combined with the rarity of Myc.IIIC:1 pottery suggest to the excavator that Floor IV dates to the LCIIIC period. The introduction of large amounts of this last ware in Levels IIIA and III further suggests that these phases date to the LCIIIA period. The appearance of Granary Class or 'Wavy line'

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<sup>1284</sup> Smith (2002b:299; 2009:34-41).

pottery and PWP ware on Floor II date it to the LCIIIB period, while the predominance of Iron Age WPI wares on Floor I date it to the GCI period.

## Discussion

The monumental nature of much of the architecture in Area II, the use of attention focusing devices such as hearths and altars and the proliferation of artefacts invested with symbolic value (for example, figurines, rhyta, notched scapula and horns of consecration) strongly suggest the performance of rituals of a religious character. The nature of any supernatural entities worshipped in association with these Late Cypriote temples, however, is rather ambiguous. Evidence for a structure or room where permanent images of divine objects of worship could be displayed is completely lacking<sup>1285</sup> and iconography is quite varied. For instance, while the proliferation of bull imagery and cattle remains in some of these buildings (particularly Temple 5), suggested to the excavators that a male fertility deity may have been worshipped,<sup>1286</sup> Temples 4 and 5 contain both female figurine fragments and bull iconography, implying that such designation may not be so simple.<sup>1287</sup> The discovery of female figurines near Temple 3 might also indicate the worship of a female divinity, while the frequent use of stone anchors as architectural components, and the discovery of ship graffiti on the wall of Temple 1 could also suggest that seafaring and maritime trade were of importance.<sup>1288</sup> Smith also suggests that some form of ancestor worship may have been conducted in the precinct,<sup>1289</sup> although any tombs in the area appear to have been largely obliterated by the construction of the temples.<sup>1290</sup>

As frequently observed by other scholars, the close association between the *Kathari* cult buildings and workshops for metal and probably textiles suggest close links between cult and such industry.<sup>1291</sup> Smith, however, has further suggested that Temples 2 and 4 may also have been the focus of similar industrial or craft activities. Metal scrap associated with Temple 2 might represent its use as a collection point for

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<sup>1285</sup> Karageorghis & Demas (1985:250).

<sup>1286</sup> Karageorghis & Demas (1985:260). Contra Karageorghis (1976:128), where a goddess of fertility of the Astarte/Aphrodite type is suggested to have been worshipped in this temple.

<sup>1287</sup> Karageorghis & Demas (1985:262); Webb (1999:83).

<sup>1288</sup> Webb (1999:44, 302).

<sup>1289</sup> Smith (1999:252).

<sup>1290</sup> A depression beneath Temple 2 and a large pit in Temeons A may have been destroyed chamber tombs, Karageorghis & Demas (1985:28, 61).

<sup>1291</sup> Karageorghis & Demas (1985:253-254); Webb (1999:76). See also Knapp (1986), Smith (2009:34-51).

the recycling of metal, while beads and pierced shells suggests textile finishing work.<sup>1292</sup> The discovery of bronze scrap, ivories, a fragment of a potter's wheel, a bronze scale pan and a number of stone weights in Temple 4, meanwhile suggest that it may have been a workshop for the collection of reusable raw materials, such as metal and ivory, and perhaps furniture repair and ceramic production.<sup>1293</sup> This apparent combination of ritual activity and craft industry parallels the very same association observed at Athienou.

Significant evidence for the consumption of psychoactive substances such as alcohol and opium has also been uncovered at Kition-*Kathari*, with evidence for the consumption of alcohol is particularly frequent. Mixing vessels include craters, represented by fragments found in Pit h (Floor IV), Temples 2 and 5 and both temenoi (A and B). Drinking vessels are particularly prevalent and include: two kylikes, three goblets (including one of faience) and dozens of bowls and skyphoi, from Temple 2; numerous bowls and skyphoi, including ten PWW ware bowls imitating the BR II Y-shape, from Temple 4; three bowls from Temple 5; and fragments of bowls (some of faience) and skyphoi from Temenos A. Vessels in which alcoholic beverages may have been brought to the precinct include jugs from Temples 2 and 4 and Temenos A and Canaanite jar fragments from Courtyard C, Temples 4 and 5 and Temenos A.

While the excavators suggest that vessels such as the conical rhyton from Temple 2 and skyphoi may have been used for libations,<sup>1294</sup> the previously discussed depictions of such vessels as components of a standardised drinking set (**Figs.3.10 & 3.16**)<sup>1295</sup> also suggest an association with wine consumption. Indeed, the large volume of drinking vessels and presence of vessels closely associated with wine consumption (craters and perhaps Canaanite jars) suggests that alcohol consumption was an important component of the cultic activities conducted within the Temple Precinct. It is possible, however, that such practices also involved a libation component recognised as an offering or shared consumption with the supernatural entities addressed.

Smith has suggested that alcohol consumption in association with Temples 2 and 4 may have been a component of ceremonies that contributed to establishing links

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<sup>1292</sup> Smith (2009:54).

<sup>1293</sup> Smith (2009:246).

<sup>1294</sup> Karageorghis & Demas (1985:241).

<sup>1295</sup> Assuming that skyphoi may have been used in place of goblets.

between those that met there, rather than with the divine.<sup>1296</sup> The heightened emotional involvement provided by the combination of alcohol consumption and interaction in religious ceremony would have significantly increased the opportunities for establishing and reinforcing the social links between those meeting at *Kathari*. Evidence for the sacrifice of animals, suggested by the discovery of cattle remains and possible tethering blocks, and the subsequent cooking or burning of the meat, may also indicate that any meat not burnt as offerings was consumed as part of such sociable rituals.

In addition to alcohol, the excavators have associated the consumption of opium with the rituals conducted at *Kathari*.<sup>1297</sup> As discussed previously, Karageorghis has suggested that both the ivory ‘pipe’ from Temple 4 and the ceramic cylinder from Temple 5 were used to smoke opium.<sup>1298</sup> This has led to further suggestions that opium poppies may have been the plants grown in the Floor IV ‘sacred garden’.<sup>1299</sup> The excavators uncritically suggest that opium may have been used in this context as a sedative, euphoriate and aphrodisiac.<sup>1300</sup> As discussed in Section 3.3.1, however, the association of these two artefacts with opium smoking is extremely tenuous as the ‘pipe’ is ill-suited as a smoking device and the tube was more likely to have been the base of an offering stand. Furthermore, without any supporting botanical remains, the hypothesis that opium poppies were grown in the ‘sacred garden’ (if indeed this is what the cut features of Floor IV represent) must similarly be dismissed.

There are, however, artefacts that do suggest more secure associations with opium. Foremost amongst these are the ivory sceptre-head/finial depicting a poppy capsule and the BRII bilbil juglet from a pit in the small back-room of Temple 5. Other vessels from Area II that may have been associated with opium include: the glass pomegranate/poppy vessels from Temple 5 and Temenos A; the Bucchero amphora also from the back room of Temple 5; and perhaps the WSh juglets from Temples 2 (two examples), 4 and 5 and Courtyard A; and the BR juglet in WSh juglet form from Pit h (Floor IV). The concentration of such vessels in Temple 5, in particular, suggests that opium consumption may have been an important component

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<sup>1296</sup> Smith (2009:54).

<sup>1297</sup> Karageorghis & Demas (1985:259).

<sup>1298</sup> Karageorghis (1976a). See also Smith (2009:65).

<sup>1299</sup> Karageorghis (1985:258). See also Smith (2009:246).

<sup>1300</sup> Karageorghis (1976:129); Karageorghis & Demas (1985:259).

of the rituals conducted in this building. The discovery of a BRII bilbil and a WSh juglet together with only a single bowl within a pit in this temple also reinforces the argument that these two vessels contained similar substances.

As discussed for Athienou, the senses of euphoria and flight experienced during opium induced ASCs, even in the case of low doses, are particularly suited to interpretation as interaction with the supernatural world. As such, it is possible that opium (and perhaps another strong psychoactive in the case of the WSh juglets) was consumed during rituals conducted at *Kathari* in order to establish some form of connection with the supernatural. The relatively low number of vessels that can be associated with opium consumption, and their occasional discovery in contexts to which access may have been restricted, such as the back-room of temple 5,<sup>1301</sup> however, suggests that it was only consumed at *Kathari* by a limited number of individuals, probably those in positions of ritual authority.

In relation to cultic opium consumption at *Kathari*, Smith elaborates on the possible role of this psychoactive, arguing that it induced a ‘liminal’ mindset suitable for performing divination, in particular, the reading and interpreting of scapula (scapulomancy).<sup>1302</sup> Smith argues that a number of artefacts from Area II, in addition to those associated with opium consumption, can be associated with divination, including gaming pieces (clay balls and astragali), a possible gaming board and the notched scapuli.<sup>1303</sup> The scapuli were probably obtained from cattle sacrificed at the temples as part of the divination ritual.<sup>1304</sup> Smith further argues that as oracular divination was a means for a person or community to divine the future, it may have been particularly important during times of stress and change, such as those experienced on Cyprus at the end of the Bronze Age.<sup>1305</sup>

An association between opium consumption and divination may not be restricted to only inducing the ‘liminal mindset’ required for scapulomancy, however. In relation to opium consumption at *Kathari*, Peatfield has suggested that it was consumed to induce sleep in order to seek divine revelation through dreaming.<sup>1306</sup>

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<sup>1301</sup> Many of the small rooms off the main halls of the *Kathari* temples are likely to have been cult storerooms, Karageorghis & Demas (1985:249).

<sup>1302</sup> Smith (2009:160, 248).

<sup>1303</sup> Webb (1985; 1999:249) has previously argued that these were often used for divination purposes in the ancient world.

<sup>1304</sup> Smith (2009:160).

<sup>1305</sup> Smith (2009:162).

<sup>1306</sup> Peatfield (1981). Divination via dreaming is recorded in both ancient Egypt and Archaic/Classical Greece, Burkert (1985:115); David (2002:281-282).

Such ritual consumption of opium for its soporific effects may reflect the continuation of beliefs that opium induced sleep enabled contact with the supernatural, as suggested in Section 5.2.3 in relation to a symbolic link between sleep and death. In this case, however, it may be that it is contact with supernatural realms associated with deities worshiped at Kathari that is being sought, rather than contact with the realm of the dead. As argued by Winkelman,<sup>1307</sup> ASCs are commonly used for divination as they circumvent ‘normal’ cognitive processes and can be employed to seek novel solutions to problems by accessing subconscious information.

This possible role of opium induced ASCs in divination may also explain the evidence for the apparent restriction of opium consumption at *Kathari*. If this substance was used to inspire divine revelation its use is likely to have been restricted to individuals who held a specific, and probably privileged, ritual role as oracles. As such, the ivory sceptre-head/finial from Area II may have been borne by just such an individual, emphasising ritual authority and a privileged relationship with the supernatural, inspired through opium consumption.

Regardless of the nature of the supernatural entities addressed in the Kition-*Kathari* Temple Precinct, its prominent position in a harbour town suggests that it was a place where merchants and travellers came together to conduct ritual observances, socialise and perhaps trade goods. The rituals conducted in the Temple Precinct may, therefore, have focused upon those which were believed to influence one’s commercial fortunes, particularly divination received from divinely-inspired oracles. In this context, alcohol-induced ASCs may have been of benefit in promoting social interaction, while those induced by opium may have played important roles in providing oracles with access to the supernatural.

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<sup>1307</sup> Winkelman (1990:323-324).

### 6.1.3 Enkomi-*Ayios Iakovos*

LCIIC-LCIIB

(ca.1300-1100 B.C.E.)

The site of Enkomi-*Ayios Iakovos* was introduced in the previous chapter. Of relevance here, a number of monumental LCIIC-LCIIB structures located near the centre of the settlement have been interpreted as having a specialised ritual function.<sup>1308</sup> Unfortunately only the areas revealed by the Cypriote expedition and a small portion of the extensive area uncovered by the French expedition have been published in sufficient detail to allow for a study of possible evidence for ASCs. The published evidence relevant to this thesis is primarily concentrated in Area I of the Cypriote excavations and the ‘Sanctuary of the Ingot God’ uncovered by the French. Both locations will be considered in detail below.

#### Area I<sup>1309</sup>

Area I is located at the eastern end of the French Quartier 4W (**Fig.6.7**). In Level IIIA (LCIIC/IIIA) a monumental building simply called the ‘Ashlar Building’ (32.5x28.5m, **Fig.6.8**), was constructed over the levelled remains of earlier structures, with concrete floors and the lower courses of the walls built predominantly of ashlar.<sup>1310</sup> The building was dominated by a large central hall (Rooms 10, 13 and 14; 15.8 x 4.5m) and furnished with two ashlar pillars and a built hearth located along the central axis. A 5.2m deep well surrounded by stone slabs at floor level was built into the middle of the eastern wall. Within it were numerous undescribed potsherds including Mycenaen IIIB and IIIC:1b and Bucchero wheel-made wares, the later presumably jugs, although a Bucchero ware amphora (**Fig.6.10**) is also listed amongst the well finds from Area I.<sup>1311</sup> As the well appears to have been reused in Level IIIB, however, much of this pottery may derive from this later period. In the southwest of building, Room 1A contained another well (5.6m deep), which contained the skull of an ox and pottery, including more Bucchero wheel-made sherds. The building appears to have been destroyed by fire ca.1200 BCE, with much of the debris cleared out and dumped into the streets to enable reconstruction (in Level IIIB). As a result, little

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<sup>1308</sup> Webb (1999)

<sup>1309</sup> Unless otherwise noted, the following description of this area is derived from Dikaios (1969-1971).

<sup>1310</sup> Tombs located within the limits of the streets to the north and south and those located within courts of the preceding level IIB buildings (Cypriote tombs 1, 2, 5-7, 10-15 and 18-20) were covered over when the Ashlar building was constructed.

<sup>1311</sup> The precise find-spot of this artefact is not given.

portable material remained, although a large number of Myc III C:1 crater and bowl fragments were recovered from Level IIIA.<sup>1312</sup>

After its destruction ca. 1200 BCE, the Ashlar Building was rebuilt on a significantly different plan to its predecessor, with the central hall of Level IIIA split into a number of smaller units through the addition of rubble walls (**Fig.6.9**). The so-called ‘Sanctuary of The Horned God’<sup>1313</sup> (Rooms 9, 10 and 45) now dominated the southwest sector of the building and the ‘Sanctuary of the Double Goddess’<sup>1314</sup> (Rooms 11 and 12) dominated the east. These ‘sanctuaries’ appear to have been used across two phases of LCIIIA use (Levels IIIB and IIIC), separated by what appears to have been a temporary but dramatic destruction of the building resulting in a more limited use in the later phase. The building was eventually abandoned after Level IIIC.

The ‘Sanctuary of the Horned God’ was dominated by Room 45 (8.75 x 6.75m, termed the West Megaron by the excavator), which featured a row of three columns and a hearth (ca.0.5m diam.) located between the northern and central pillars. Finds associated with Levels IIIB-C in this area include: numerous animal bones associated with ashy deposits, including three bucrania; miniature gold leaf models of ox horns; a bronze figurine of a bull with a shoulder hump; two bronze arrowheads; and a fragment of a white faience bowl. Rooms 9 and 10 appear to have been associated store-rooms or adyton. Finds from Room 9 include a stone trough with a perforated base, numerous bird and mammal bones, including deer antlers, a bull horn and articulated leg joints; gold jewellery including a bull horn of gold leaf and a gold rosette possibly from a stone bull-head rhyton (**Fig.6.11**);<sup>1315</sup> a PW juglet; and a strainer spout from a BR II jug. In Room 10 were another perforated stone trough and three large deposits of wheel-made bowls mimicking the Base-Ring II Y-shape (276 bowls in total), stacked upside-down (**Fig.6.12**). Also amongst the stacks were more animal bones, a wide-mouthed alabaster jar and a squat, wide-mouthed BR II jug.<sup>1316</sup>

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<sup>1312</sup> Dikaios (1969-1971:574-576, 578-579, 591-594).

<sup>1313</sup> Named after a large bronze figurine of a male wearing a horned helmet discovered in the Level IIIC deposit of a small annexe to the east (Room 10).

<sup>1314</sup> Named after a terracotta female figure with upraised arms against the east wall and, from a small room to the west, a double-sided bronze plaque (5.5cm high) depicting a nude female with her hands on her breasts, Webb (1999:99-100).

<sup>1315</sup> Dikaios (1969-1971:Pl.136). Such Rhyta are well known in the Aegean, Rehak (1995c).

<sup>1316</sup> Although the BR juglet is not listed amongst the finds or in the pottery catalogue, it can clearly be seen in a photograph of the stacks and amongst an example of pottery from the stacks, Dikaios (1969-1971:196, Pls.35/4, 95/4).

A pit dug into destruction debris above Level IIIB in the southeast corner contained the famous bronze statue of the 'Horned God' (54.2cm high, **Fig.6.13a**). Room 13, immediately north of Rooms 9 and 10, may have also been associated with the 'Sanctuary of the Horned God', replacing Room 45 as the focus of ritual activity in Level IIIC after the latter was abandoned subsequent to the Level IIIB destruction. Finds of note from this room include a pair of hearths associated with traces of burning, a fragmentary Myc.IIIC:1 kylix, a jug of unspecified ware and a pair of Canaanite jars.

The 'Sanctuary of the Double Goddess' consists of the 'East Megaron' (Room 12) and Room 11, immediately to the west.<sup>1317</sup> Room 12 (7.0 x 6.2m) was dominated by a large, roughly circular hearth (c.1.7m diam., 10cm high) built of a layer of sherds covered with mud mortar. Upon the hearth sat a pair of Myc.IIIC:1 cups, an amphoriskos and unspecified vessel of plain ware and a whetstone. Numerous other pottery vessels were found scattered around the hearth, including a jug, two amphoras, five skyphoi and two more cups all of Myc.IIIC:1 ware, and a jug and amphora of plain ware. Room 11 (3.0 x 2.35m) may have been a store-room or adyton associated with Room 12. Within a shallow pit in the southeast of the room was a bronze statuette depicting a female on both sides (5.5cm high, **Fig.6.13b**), described as a double female deity in the 'Hermes' fashion by the excavator.

More artefacts of note were found in other parts of the building. On the floor of a large courtyard (12.0 x 7.75m) immediately to the north of Room 12, were abundant pottery fragments; including those from numerous bowls, a WSh juglet, a Canaanite jar, a pithos and a WPVIII conical rhyton. A well in the east of the courtyard also contained a large amount of largely undescribed pottery, including four Myc.IIIC hydrias.<sup>1318</sup> In Room 5 (1.8 x 3.4m), located in the southeast of the building, numerous fragments of Canaanite jars were found on the floor, while a well near the eastern wall contained seven miniature terracotta bull figurines, a pair of moufflon horns, an ox horn and Bucchero sherds. Room 39, in the northwest, contained a rectangular clay tub surrounded by numerous fragments of Myc.IIIC:1 bowls and a well containing more Myc.IIIC:1 pottery. In debris from the Level IIIB destruction was the necklace of consisting of eight poppy-shaped carnelian beads discussed in Section 3.2.2 (**Fig.3.38**). Room 15 in the northeast contained a Bucchero jug, a

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<sup>1317</sup> Webb (1999:Fig.36).

<sup>1318</sup> Dikaios (1969-1971:207).

Canaanite jar fragment and a Plain Wheel-made bowl of BR II Y-shape. Fragmentary jugs of Bucchero ware have also been recorded from Rooms 14, 24 and 43.

### **Chronology**

Dikaios originally dated Level IIIA of the Ashlar building to the LC IIIA period (ca.1220-1190 BCE) due to the presence of Myc.IIIC:1b.<sup>1319</sup> Based on observations that pottery identified as Myc.IIIC:1b may have actually been Myc.IIIB:2, however, it has been redated to the LC IIC period.<sup>1320</sup> Given difficulties distinguishing between these two classes of pottery,<sup>1321</sup> it may be best to simply date the Ashlar Building to the second half of the 13<sup>th</sup> century BCE.

Dikaios dated the Level IIIB reconstruction of the Ashlar Building to ca.1190 BCE, and the Level IIIB occupation to remainder of the LC IIIA period, ca.1190-1100 BCE.<sup>1322</sup> Re-evaluation of the dating of Level IIIA suggests a slightly higher date for Level IIIB and the subsequent Level IIIC, with both considered to date to the LC IIIA period.<sup>1323</sup>

### **Discussion**

The lack of portable artefacts found in the Level IIIA Ashlar Building makes it difficult to interpret whether it had a cultic function in this period. While the excavator suggests that it was used for domestic purposes at this time,<sup>1324</sup> Webb adds that the monumental nature of the architecture implies that it was at least an official residence.<sup>1325</sup> The location of two specialised ritual areas within the Level IIIB 'Reconstructed Ashlar Building' does, however, suggest the possibility of ritual activity within the Level IIIA structure.

The cultic nature of the Level IIIB-C sanctuaries of the 'Horned God' and 'Double Goddess' appears more secure, though, as both contained artefacts of considerable symbolic value. According to the excavator, the proliferation of cattle remains, particularly bucrania, and bull iconography (gold horns, the possible stone bull rhyton and the statue of Horned God) in Rooms 1A, 9, 10, 13 and 45 suggest a single ritual complex, dedicated to the Horned God.<sup>1326</sup> Rooms 11 and 12 are similarly

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<sup>1319</sup> Dikaios (1969-1971:457-459, 487-489).

<sup>1320</sup> Negbi (1986:104-105). See also Crewe (2004:158).

<sup>1321</sup> Kling (1984:33-38, 1991:181-182, 2000:287); Sherratt (1991:186-187).

<sup>1322</sup> Dikaios (1969-1971:464-465, 489-492).

<sup>1323</sup> Crewe (2004:158); Negbi (1984:105); Webb (1999:91). Kling, however, dates Levels IIIB and IIIC to the LC IIIB period, Kling (1989:87).

<sup>1324</sup> Dikaios (1969-1971:171).

<sup>1325</sup> Webb (1999:92).

<sup>1326</sup> Dikaios (1969-1971: 183, 195, 197-198).

assigned to the worship of the Double Goddess,<sup>1327</sup> with the monumental hearth in the latter further suggesting ritual activity.

Although the excavator suggests that most of the other areas of the building were domestic in character,<sup>1328</sup> Webb rightly points out that the discovery of utilitarian objects and features does not necessarily imply secular use and that the two sanctuary complexes may have extended well beyond the few rooms proposed by Dikaios.<sup>1329</sup> Cult paraphernalia was found throughout the building, while the interconnecting nature of the rooms does not suggest residential units. Possible metal-working workshops in the western sector further suggest industrial activities associated with the sanctuaries, comparable to those found at Kition-*Kathari*.

The rituals conducted in association with the two sanctuaries appear to have involved activities commonly observed at other Late Cypriote cult sites, particularly the consumption of alcohol and the sacrifice and consumption of livestock, especially cattle. Ceramic evidence from the Sanctuary of the Horned God suggesting the former includes the large stacks of Y-shaped bowls found in Room 10 and the kylix, jug and two Canaanite jars from Room 13. In association with the Sanctuary of the Double Goddess the cups, skyphoi, jugs and amphora found on or around the hearth in Room 12 and the Canaanite jar and conical rhyton from the courtyard immediately north may also be associated with alcohol consumption. Numerous crater fragments from Level IIIA further suggest that the consumption of alcohol, particularly wine, was an important activity in Area I.

The large number of Y-shaped bowls (276) found stacked in Room 10 is particularly suggestive of the provision and consumption of alcohol for large numbers of participants involved in the rituals associated with the Sanctuary of the Horned God, perhaps wine provided from the numerous Canaanite jars found in the area. As such, alcohol consumption associated with such activity seems to have been a quite social affair, unlikely to have involved the consumption of extreme doses of alcohol.

In this context, the ability of alcohol to reduce inhibitions and promote cheerfulness and relaxation may have been the most relevant aspects of the ASCs its consumption can induce. The consumption of meat from sacrificed livestock may have accompanied this alcohol consumption. At the same time, burning the meat and

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<sup>1327</sup> Dikaios (1969-1971:191).

<sup>1328</sup> Dikaios (1969-1971:192, 211).

<sup>1329</sup> Webb (1999:100-101).

pouring libations of alcohol or water onto the ground (or perhaps into one of the perforated stone troughs found in Rooms 9 and 10)<sup>1330</sup> may have constituted the offering of food and drink to the supernatural entity worshiped here, possibly the Horned God. Sharing a feast with both the deity and other ritual participants in this way emphasises that such ritualised consumption can be considered to combine both ‘spiritual’ and social meaning. This combination of alcohol consumption and presentation of offerings to a deity may have constituted a ritual comparable to the Hittite ‘drinking the god’ ritual.

A handful of vessels possibly associated with opium may also indicate the consumption of this stronger psychoactive during rituals conducted in Area I. These include numerous Bucchero vessels and fragments, including a single amphora and multiple jugs, found scattered throughout the Area, the squat wide-mouthed BRII jug from Room 10 and possibly the WSh juglet found in the courtyard north of Room 12. As was the case at Kition, however, the relatively low number of these vessels argues against the consumption of opium by large numbers of ritual participants. If it was consumed at either of the Area I sanctuaries, it is again likely to have been done so only by a limited number of participants, probably privileged ritual specialists and perhaps in association with divination ritual. The discovery in Room 39 of a necklace of eight poppy capsule-shaped pendants of carnelian may have been worn by one of these ritual specialists as a symbol of the importance of opium to their relationship with the supernatural.

#### **Quartier 5E - ‘Sanctuary of the Ingot God’<sup>1331</sup>**

The ‘Sanctuary of the Ingot God’, located near the south edge of Quartier 5E (**Fig.6.14**), was constructed of rubble walls, with no traces of ashlar observed. Although the precise architectural layout appears to have changed somewhat throughout its primary periods of use (Sols IV-I, **Fig.6.15**), it consisted primarily of a large rectangular hall (16.4 x 9.6m) with small entrance passages located to the northeast and southwest (the latter leading to Rue 5) and a side-room or adyton to the west. During Sols IV and III there also appears to have been a small annexe to the southeast containing a well, while in Sols III and II there was another small room or adyton was immediately in front of the northeast entrance, which was created by the

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<sup>1330</sup> Dikaios (1969-1971:199) argues that these troughs suggest an elaborate ritual involving liquid offerings.

<sup>1331</sup> Unless otherwise noted, the following description of the site is derived from Courtois (1971; 1973); Webb (1999:102-113; 2001). Unfortunately, many of the finds are not published in detail.

addition of internal walls. A courtyard to the west has also been associated with the sanctuary, although it does not appear to have communicated directly. The sanctuary appears to have been built over the remains of a similar structure (Sols VI and V) which is only known from soundings.

Within the hall (**Fig.6.16**), an internal wall along the central axis and six stone column bases suggest a number of roof supports. Stone benches ran along all but the east wall (at least from Sol III onwards) and a series of hearths built of plaster and sherds (circular in Sol VI, rectangular in Sol III and a double hearth in Sols II and I) were located near the southeast entrance. Immediately north of the hearth was a pair of stone blocks with concave upper surfaces, used in different phases, and a pierced stone block next to the western of these.

Although limited, finds from Sols VI-V did include a bucranium, a shallow bowl and stemmed goblet of WPWIII and large fragments of a pithos. Finds from Sol IV were also few in number and included sheep and goat bones and scattered sherds of Proto White Painted (PWP) and PW ware.

Finds from Sol III, however, were numerous (**Fig.6.16**). Most prominent are the dozens of bucrania predominantly found on the floor near the north and west benches. Bovine scapulae, many of them incised, were similarly frequent in these areas, with a number found together with a bronze knife in a niche built into the north bench. Also on and near the north bench were two skyphoi, a jug, a kalathos, a tripod vessel and a crater all of PWP ware, ten PWW bowls imitating the BR II Y-shape, two ladles, a cooking pot, two Canaanite jars and numerous other animal bones (mostly ovicaprid). Artefacts from on and around the western bench include a pair of skyphoi and an annular rhyton/kernos ring with a bull protome in PWP ware, a narrow necked Bucchero jug, a Canaanite jar, a ladle, a lamp, six inscribed clay balls, a cylinder seal, a ring and stamp seal of bronze and an iron knife. Fragments of two skyphoi, a kylix and a large jar of PWP, a coarse ware jar, a PWW bowl and a bronze bull horn were found in the northeast of the hall. In the northeast adyton were a crater and jug of PWW III, another two PWW bowls imitating the BR II Y-shape and the bronze statue of the 'Ingot God' (34.5cm high, **Fig.6.17**) after which the sanctuary is named. Within the west adyton were three bowls and a kalathos of PWP ware, a Canaanite jar and a stirrup jar (size unknown). Within the well in the southern annexe were a kalathos, jar, crater and fragmentary bowls of PWP, cooking pots, another Canaanite jar, a pithos and many more animal remains, including antlers.

From Sols II and I many more bucrania and scapulae were recovered. A pair of two-headed centaur or sphinx figurines of PWP ware (**Fig.6.18**) were found in a plaster niche on the north bench, alongside skyphoi and a jug of the same ware and two PWW offerings stands. On the west bench were another two jugs, a bowl and two amphoriskoi of PWP. On Sol II in the northeast adyton were a BR II bowl, a PWP gourd vessel and three more Canaanite jars, while another jug and a clay sieve were found just to the south. In the western adyton a small stone baetyl was found surrounded by a skyphos, kylix and amphora of PWP and eleven complete anthropomorphic figurines and fragments of at least ten more. Another PWP kalathos was also found sitting on a small plaster platform in the same room.

From the courtyard to the west, hundreds of figurines were recovered from Sols VI-I. These were predominantly anthropomorphic and most appear to be female figurines broken from ring dance compositions consisting of three or four such figures.

### **Chronology**

The chronology of this building remains the subject of ongoing debate.<sup>1332</sup> Sols VI and V are currently dated to the LC IIC and LC IIIA respectively.<sup>1333</sup> Due to a lack of PWP ware, Sol IV is dated to the end of LC IIIA.<sup>1334</sup> As Sols III to I did contain this ware, all of a similar style, these three phases are assigned to a single relatively short phase towards the end of the 12th Century BCE (LC IIIA/B).<sup>1335</sup>

### **Discussion**

The assemblage from the ‘Sanctuary of the Ingot God’ (particularly from Sol III) is one of the largest and most varied Late Cypriote cult assemblages discovered to date<sup>1336</sup> and its association with religious ritual seems clear. Images of the supernatural appear to have been housed in side-rooms, with the bronze figure of the Ingot God found in the northwest adyton and an aniconic baetyl uncovered from the western adyton. This may indicate the worship of two deities from the one structure and may parallel the possible pairing of male and female deities seen in Area I.<sup>1337</sup>

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<sup>1332</sup> See Webb (1999:102; 2001:77-78).

<sup>1333</sup> Webb (1999: 119) See Courtois (1971); Kling (1989:37-38).

<sup>1334</sup> Iacovou (1988:9).

<sup>1335</sup> Iacovou (1988:8-9); Kling (1989:174).

<sup>1336</sup> Webb (1999:102).

<sup>1337</sup> The pairing of cult buildings to a male and a female deity has also been suggested for the temples at Kition-Kathari, Karageorghis & Demas (1985:261).

The two-headed sphinx/centaur figurines may also be representations of such a pairing of supernatural entities.<sup>1338</sup>

Evidence for the sacrifice of livestock is particularly strong. The two stone blocks with concave upper surfaces may have been for slaughtering, with the pierced stone nearby used to tether the victim.<sup>1339</sup> Scores of bucrania and scapulae from cattle suggest that this species was most commonly sacrificed, but ovicaprid and deer remains suggest other species were also used. As many of the bucrania were cleaned at the back and perhaps used as masks,<sup>1340</sup> however, the bull seems to have been of particular symbolic value. This is further suggested by the incision of many of the cattle scapulae, which was probably associated with scapulomancy.<sup>1341</sup>

As was the case in Area I and also at Kition-*Kathari*, artefacts that can be associated with alcohol consumption are frequent. In particular, craters recorded from the north bench, the northeast adyton and the well in the southern annexe and a total of seven Canaanite jars strongly suggest the consumption of wine. Possible drinking vessels include numerous skyphoi, bowls (mostly Y-shaped), kylikes and perhaps the kalathoi, while the sieve found on Sol II might indicate the straining of solids from beer or wine. The three ladles may also have been used to serve alcoholic beverages, as suggested by the inclusion of these objects in the Late Cypriote depictions of drinking sets discussed in Chapter 3 (**Figs 3.10 & 3.16**). The discovery of cooking pots in the sanctuary, however, also suggests their possible use to serve food. The annular rhyton or kernos ring may also have been used in association with alcoholic beverages, although it is unclear whether this would have involved either their consumption or their use for libation.

Although the numbers of these vessels does not imply the consumption of alcohol by quite as many participants as suggested by the hundreds of bowls stacked in Room 10 of Area I, this alcohol consumption is still likely to have been a relatively social event. Cooking pots suggest that the activities conducted in this sanctuary again involved the consumption of food, possibly meat from sacrifices, as a component of convivial rituals. The offering of both food and drink to the supernatural entities worshiped in the sanctuary is also suggested by the discovery of a number of vessels in the western adyton surrounding the baetyl. As such, socialising with other ritual

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<sup>1338</sup> Webb (1999:112).

<sup>1339</sup> Webb (1999:106).

<sup>1340</sup> Karageorghis & Demas (1985:260).

<sup>1341</sup> See Webb (1985; 1999:249).

participants seems to have been focused in the main hall, while interaction with the deities was conducted in the adyton where their cult images were housed.

The single Bucchero jug found on the western bench is the only possible evidence from the Sanctuary of the Ingot God that might suggest the consumption of opium. Given the prevalence of evidence for divination rituals, such as the incised scapulae and incised clay balls, this substance may have again been consumed for its ability to induce ASCs suitable for such activity, including dream-filled sleep. If so, this practice again appears to have been limited to a small number of ritual participants.

## 6.2 All Late Cypriote Non-Mortuary Sites

This section consists of a review of the complete corpus of published Late Cypriote sites at which remains of a non-mortuary nature<sup>1342</sup> have been uncovered. It begins with a discussion of the material included within this corpus and the manner in which it is presented. It is followed by a discussion of various patterns that have been observed in the distribution of pottery that can be associated with psychoactive substances, such as alcohol or opium, and what such patterns might indicate in terms of the use of ASCs in Late Cypriote Society.

A complete list of excavated and published Late Cypriote non-mortuary sites is presented below in **Table 6.1**.<sup>1343</sup> The sites are listed alphabetically and the data listed includes: the site name (usually consisting of the village/town and specific locality); a brief description of the site's location on Cyprus; the dates of the site's use; a summary of the nature of the site, including architecture and other significant features; an indication of whether the site contained any elements interpreted as ritual in character; a summary of any artefactual evidence for ASCs (as discussed in Chapter 3 and listed in **Table 3.3**);<sup>1344</sup> and the primary reference material for the site.

Establishing whether certain areas within a site were a focus for ritual activity is of central importance to this thesis in order to assess the possible ritual use of ASCs. Although the tombs and graves discussed in the previous chapters can easily be associated with mortuary ritual, sites of a non-mortuary character were clearly associated with a much greater variety of activities. The way in which a ritual context can be identified archaeologically, as discussed in Section 2.2.1, therefore, is central to establishing which Late Cypriote sites can be considered to have been a location for ritual activity. Webb has previously reviewed in detail many of these Late Cypriote sites that may have been associated with ritual,<sup>1345</sup> so it is not necessary to closely review every case once again. However Webb does concentrate primarily upon evidence for ritual practices of an overtly religious nature addressed to supernatural

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<sup>1342</sup> Including sites at which tombs or graves have been found alongside other remains.

<sup>1343</sup> As with the corpus of Late Cypriote tombs presented in the previous chapter, time constraints have precluded obtaining information from unpublished excavations. An attempt has been made to consider all published Late Cypriote sites.

<sup>1344</sup> This focuses particularly upon possible evidence for opium consumption, although instances where there is strong evidence for alcohol consumption are also listed. As for the case studies, this will focus primarily upon complete vessels from relatively undisturbed contexts.

<sup>1345</sup> Webb (1999).

entities (cult).<sup>1346</sup> At some sites, however, there is evidence for ceremonial activities not clearly addressed to the supernatural, particularly in the case of certain monumental administrative buildings. While these cases are not considered as ritual contexts by Webb, the possibility that they were the focus of some degree of ritualised behaviour is recorded in **Table 6.1** and discussed further below.

Sites which appear to lack any evidence for ritual activity have also been included in **Table 6.1** as it is important to assess whether evidence for the use of ASCs has been recorded from these sites, particularly given that such evidence could have important implications for the interpretation of similar evidence from ritual contexts. Patterns in the distribution of Late Cypriote evidence for ASCs can only be identified by considering all types of all sites of this period together.

### 6.2.1 Alcohol Consumption

**Table 6.1** suggests that vessels associated with alcohol consumption occur in a range of different Late Cypriote non-mortuary contexts.

There appears to be a particularly strong association between religious ritual and alcohol consumption. In addition to the previously discussed evidence for such activity from the cult areas at Kition and Enkomi, ceramic vessels closely associated with alcohol consumption were found at a number of other cult sites. At Ayios Iakovos-Dhima (LCIIA) three craters and a large jug were discovered surrounding a terracotta ‘bathtub’ set into the plaster floor of a small, extra-mural sanctuary.<sup>1347</sup> In the ‘Sanctuary of Aphrodite’ at Kouklia-*Palaepaphos* a pithos sunk into floor contained a jug, 2 bowls and a Canaanite jar,<sup>1348</sup> while in LCIIIC levels of the intramural sanctuary at Myrtou-*Pighades* a restorable crater was found in the courtyard and another two craters, numerous bowls and a conical rhyton were found in the ‘East Block’.<sup>1349</sup>

Interestingly, with the exception of Ayios Iakovos, the cult buildings at these sites appear to have been the focus of relatively large scale public rituals addressed to supernatural entities. As argued for the cases of Enkomi and Kition, alcohol consumption in such contexts may have been quite a social affair, with the ability of

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<sup>1346</sup> Webb (1999:10-17).

<sup>1347</sup> Gjerstad et al. (1934: 356-361).

<sup>1348</sup> Maier (1976:96).

<sup>1349</sup> du Plat Taylor (1957).

**Table 6.5 - Complete list of excavated and published Late Cypriote non-mortuary sites.**

Site	Location	Date	Site Description	Ritual Character?	Evidence for ASC?	Primary References
<i>Alassa-Paliotaverna</i>	SW Cyprus. Kourion River Valley	LCIIC-LCIIIA	II-shaped monumental administrative building with central court. Southern wing dominated by 'Hearth Room' containing large, stone-lined rectangular pit.	Maybe. Perhaps ritualised feasting and redistribution of goods.	Maybe. Pottery from Hearth Room mostly PWP bowls and pithos sherds. Bowls in a 'well' and BRII fragments (probably bowls) in sunken feature.	Hadjisavas (1986; 1994 ; 1996; 2001a; 2001b; 2003).
<i>Alassa-Pano Mandliaris</i>	SW Cyprus. Kourion River Valley	LCIIC-LCIIIA	Settlement associated with <i>Paliotaverna</i> . Numerous domestic structures. Locus 003 is a possible shrine with 2 bull figurines.	Maybe. 3 possible shrines within settlement. Maybe associated with intramural burials nearby.	Maybe. WSh juglet in pit associated with Locus 003 'shrine'. 4x WPW strainer jugs ( <b>Fig. 3.65</b> ).	Hadjisavas (1989; 1991; 2006).
Apliki	NW Cyprus	LCIIB-C	Two buildings and small outdoor area belonging to a larger settlement.	Unlikely	Maybe. A number of BR and Bucchero jug fragments. Building A had two nearly complete jugs (1x squat, wide-mounted BR jug and 1x Bucchero jug). Pit in B.III had nearly complete BR jug. WSh juglet in ash layer of Building A. Crater and goblet fragments also present.	du Plat Taylor (1952).
<i>Athienou-Bamboulari tis Koukounninas</i>	Central. c.20km southeast of Nicosia	LCIA-LCIIIA	Complex arranged around a central court. 1000s of miniature vessels in courtyard. Also evidence of metalworking.	Yes.	Yes. 9x BRI juglets and also rough imitations. Hundreds of WSh juglets. Miniature cups possibly for consumption of contents.	Dothan (1981); Dothan & Ben-Tor (1983).
Ayia Irini	NW. Morphou Bay	LCIIC	Court surrounded on 3 sides by rectangular buildings. Central building appears to house a 'cult house'.	Very likely.	Maybe. 1xBRII jug (squat, wide-mouthed) near hearth in 'cult house'	Gjerstad et.al. (1934).
<i>Ayios Iakovos-Dhima</i>	NE, start of Karpass Peninsula	LCIIA	Extramural sanctuary, plaster floor with bathtub, wall and altars.	Yes.	Maybe. Faience juglet in BR bilbil shape, BR jug (squat, wide-necked) and 3 craters near bathtub.	Gjerstad et.al. (1934); Åström (1966:147; 1972:1); Sjoqvist (1940:2-4); Gjerstad et al (1980:60-63).

Site	Location	Date	Site Description	Ritual Character?	Evidence for ASC?	Primary References
Ayios Sozomenos (Nikolidhes)- <i>Glyka Vrysis</i>	Central. 13km SSE of Nicosia	MCIII-LCI	Large 'domestic' building, possibly fortified. Artefacts not published in any detail.	Unlikely	Unknown. Pottery not published, although BR mentioned.	Fortin (1995); Gjerstad (1926:37-47).
Enkomi, Cypriote Excavations	East coast	LCIIC-LCIIIA	Walled, urban settlement Areas I and III, including sanctuaries of Horned God and Double Goddess.	Yes for the sanctuaries of the Horned God and Double Goddess.	Maybe. Area I: Hundreds of BR bowls stacked in adyton (R.10). Bucchero amphora in well and numerous Bucchero jug, crater and Canaanite jar fragments in and around the sanctuaries. Area III: Some BRI & II jug and juglet fragments probably derived from looted tombs (based on their date and fragmentary nature). Crater and other drinking vessel fragments.	Dikaios (1969-1971).
Enkomi, French Excavations	East coast	LCIIIA - LCIIIB	Walled urban settlement with numerous monumental buildings, including the Sanctuary of Ingot God. Not well published.	Yes for the Sanctuary of the Ingot God. Perhaps also for other monumental buildings.	Maybe. 'Sanctuary of the Ingot God': Numerous craters and Canaanite jars across all phases. Bucchero jug in Sol III. Pottery from other areas not well published.	Courtois (1971; 1973; 1984; 1992); Courtois, Lagarce & Lagarce (1986), Schaeffer (1936; 1952; 1971).
Episkopi- <i>Phaneromeni</i>	SW coast	LCIA-LCIIIA	Settlement of agglomerative domestic areas. Not published in detail.	Unlikely	Unknown. Pottery not published in detail. No BR ware recorded.	Carpenter (1981).
Hala Sultan Tekke Settlement	SE coast, near Larnaca	LCIIIA	Harbour town with numerous domestic complexes and a possible copper workshop.	Unlikely except for a possible pair of small intramural shrines to the south of Area 8.	Unlikely. BR juglet in looters pit, a few other BR sherds in settlement, Bucchero jug in pit in trench 3 (probably all from looted tombs). Crater and Canaanite jar fragments common.	Åström et.al. (1976; 1977; 1983;1989); Hult & McCaslin (1978); Hult (1981); Öbrink (1979a; 1979b); Åström (1998a; 2001); Åström & Nys (2007).

Site	Location	Date	Site Description	Ritual Character?	Evidence for ASC?	Primary References
Idalion- <i>Ambilleri</i>	Central. South of Nicosia	LCIII	Fortified complex on the summit of a hill (Western Acropolis) including domestic areas and a 'Cult house'.	Yes.	Maybe. 4x Bucchero jugs in altar room of Period 1-2, along with BR bull figurines and other jugs. Another 4x Bucchero jugs from adjacent areas in Period 3. Two poppy-shaped carnelian pendants also recovered from the area around the cult building. Fragments of Aegean-style drinking vessels (craters and skyphoi) common across excavation areas.	Gjerstad et.al. (1934:460-628); Alin (1978).
Kalavassos- <i>Ayios Dhimitrios</i>	South-central Cyprus	LCIIC	NE Area: Monumental administrative Building, X and associated buildings. Central, West, East, SE Areas: Settlement including primarily domestic buildings. Some relatively monumental.	Maybe at Building X. Ritualised feasting and redistribution of goods.	Maybe. NE Area: BR cup and fragments of 2 BR? juglets (shape unknown) in central court of B.X (P 51 C, 7.1, RDAC 1984:29). Well in A.173 (inside B.X) contained 4x BR II jugs (2x squat, wide mouthed) & 2x Bucchero jugs (squat, wide-mouthed HM), dozens of bowls & cups and fragments of a Canaanite Jar. Other Areas: squat, wide mouthed BR II juglets in A.77 (B.IX) & 210 (B.III) and fragments in Buildings II & III and SE excavation Area. Unconfirmed Papaver sp. botanical remains from B.II and B.VIII. Almost complete PWW crater from B.III. Several nearly complete large stirrup jars and Canaanite jars.	South (1980; 1982; 1983; 1984a; 1984b; 1987; 1988; 1989; 1991; 1992; 1995; 1996; 1997; 2008, pers. comm.); South & Todd (1985); South et.al. (1989).
Kalopsidha- <i>Koufos</i>	East Cyprus	LCI-IIA	Settlement with possible sanctuary similar to Athienou. Lots of miniature vessels and metallurgy. Limited excavation areas.	Maybe. Architectural remains not clearly defined.	Maybe. A small number of BR sherds, including juglets.	Åström (1966); Crewe (2010).
Kition- <i>Kathari &amp; Chrysopolitissa</i>	Modern Larnaca	LCIIC-LCIIIA	Walled settlement with Temple precinct ( <i>Kathari</i> ) and domestic and industrial complexes ( <i>Chrysopolitissa</i> ).	Yes for <i>Kathari</i> .	Yes. <i>Kathari</i> : BR II juglet and Bucchero Amphora in different levels of in Temple 5 adyton. WSh juglets, craters, Canaanite jars and drinking vessels also found in multiple temples. Poppy-shaped ivory sceptre head from Courtyard C. <i>Chrysopolitissa</i> : Fragments of craters, kylikes and Canaanite jars, although these could derive from looted tombs in the area.	Karageorghis (1976b); Karageorghis & Demas (1985).

Site	Location	Date	Site Description	Ritual Character?	Evidence for ASC?	Primary References
Korovia- <i>Nitovikla</i>	NE, Karpass Peninsula	LCI- IIA?	Fortress with central courtyard.	Possible altar in courtyard	No. Pottery shapes not published. Fragments of BR ware small and worn and may derive from nearby looted tombs.	Gjerstad et.al. (1934); Hult (1992).
Kouklia- <i>Palaepaphos</i> and surrounding localities.	West Cyprus	LCIIC- IIIA	Monumental cult building (Temple to Aphrodite) apparently surrounded by a number of walled settlements.	Yes. The Temple of Aphrodite.	Maybe. Temple: Very few artefacts found. Pithos sunk into temple floor contained a jug, 2 bowls and a Canaanite jar. Evreti wells: Craters, kylikes and Canaanite jar fragments common.	Maier (1969; 1974; 1976; 1977; 1979); Maier & Karageorghis (1984); Maier & Wartburg (1985); Iacovou (2008).
Kourion- <i>Bamboula</i> Settlement	SW coast	LCIA- LCIIB	Settlement with a section of circuit wall. Freestanding and agglomerative domestic structures. Pottery not published in any detail.	Unlikely.	Unknown. Ceramics not discussed in any detail.	Benson (1979; 1980) RDAC; Daniel (1938); Weinberg (1983).
Maa- <i>Palaekastro</i>	West Cyprus	LCIIIA	Small walled settlement with monumental 'official residence' and large storage/industrial building.	Unlikely.	Maybe. Craters, skyphoi and cups associated with B.II & IV in court/hearth-rooms. Occasional small BR juglet fragment. Numerous kylikes, skyphoi and Canaanite jars.	Karageorghis & Demas (1988).
Maroni- <i>Tsaroukkas</i>	South- central Cyprus	LCIIA- IIC	Scattered remains of a coastal settlement. Only trial excavations published	Unlikely	Unlikely. No undisturbed contexts. Much material may come from nearby looted tombs.	Manning (1998b); Manning et.al. (1994; 2002; 2006).
Maroni- <i>Vournes</i>	South- central Cyprus	LCI-II	Monumental administrative building and associated buildings. Not published in detail.	Maybe. Perhaps ritualised feasting and redistribution of goods.	Maybe. Pottery not published at all. According to Sewell (pers. comm.) there are numerous BR juglets and fragments. These probably derive from looted tombs in and around the building.	Cadogan (1983; 1986; 1987; 1988; 1989; 1992).
Morphou- <i>Toumba tou Skourou</i>	NW Cyprus	MCIII- LCIIC	Settlement including industrial quarter for pottery production, storage buildings and perhaps a domestic building.	Maybe. Probable mortuary feasting above tombs.	Maybe. 4x BR jug fragments above Tomb 2. House B: BR jug fragments in wells 3 & 8 and a squat, wide mouthed BR jug in room 5.	Vermule and Wolsky (1978, 1990), Vermule (1974).

Site	Location	Date	Site Description	Ritual Character?	Evidence for ASC?	Primary References
Myrtou-Pighades	NW Cyprus	LCIIA-IIC	Intramural cult buildings surrounding a court with altar topped with Horns of Consecration. Strong evidence for animal sacrifice in court (bones and tethering blocks).	Yes.	Maybe. P.III-IV: BR and Bucchero (squat, wide-mouthed) fragments in area beneath later court (CD 1, 3 & 4). P.V-VI: Crater in courtyard. 'East block' contained another 2 craters, numerous bowls, a conical rhyton and a Bucchero jug. BSIII juglet (BR precursor) in 'west block' Room 5 2x BR II jugs (squat, wide-mouthed) in nearby rooms.	du Plat Taylor (1957).
Phlamoudhi-Melissa	NE, start of Karpass Peninsula	MCIII-LCIIC	Corridor house to LCIIA, then monumental administrative building. Contained lots of pithoi. Not published in detail.	Unlikely.	Maybe. BR found in abundance, but sherds only. Shapes unknown.	Smith (2008b).
Phlamoudhi-Vounari	NE, start of Karpass Peninsula	LCI-LCIIA	Monumental platform on hill. Possible sanctuary or ceremonial redistribution centre. Not published in detail.	Maybe. Ritualised feasting and redistribution of goods?	Maybe. BR only in small quantities, occasional juglet fragments. Also a fragment of a TEY juglet. Pottery was predominantly bowls and jugs, suggesting alcohol consumption.	Al-Radi (1983); Horowitz (2008).
Politiko-Phorades	Central Cyprus, NE Troodos	LCI	Smelting site	Unlikely.	Unknown. Unspecified BR and BS sherds found amongst metalworking levels.	Knapp (1998; 1999).
Pyla-Kokkinokremmos	SE coast, near Larnaca	LCIIC-LCIIIA	Walled settlement containing a series of domestic units, with possibly one industrial unit that involved liquids (Complex D).	Unlikely.	Maybe. Almost no BR at all. A handful of sherds. One fragment of a WSh juglet. A number of complete craters, kylikes, Caananite jars and large stirrup jars.	Karageorghis & Demas (1984)
Sanidha-Moutti tou Ayiou Serkhou	South Central Troodos	LCII	Pottery production site. Few architectural remains.	Unlikely	No. A few small fragments of BR II (bowls) and a handful of jug fragments.	Todd & Hadjicosti (1991); Tod et.al. (1992) Todd & Pilides (1993; 2001).
Sinda	Near middle of Mesoaria	LCIIC-LCIIIA	Walled settlement partially excavated in three small excavation areas.	Unlikely.	No. Only 31 sherds of BR and 11 of Bucchero, probably from looted tombs, although a complete squat, wide-mouthed BR II juglet was found in Period II.	Furumark & Adelman (2003); Furumark (1965).

alcohol to reduce inhibitions and promote cheerfulness and relaxation the most relevant aspects of the ASCs its consumption can induce. At Myrtou Pighades, abundant evidence for the sacrifice of livestock again suggests the consumption of meat may have accompanied this alcohol consumption. It therefore appears that feasting, involving the consumption of both alcohol and meat was a common component of Late Cypriote cult practice.<sup>1350</sup> Such feasting may have also involved the burning of meat and pouring libations as a symbolic sharing of the feast with the relevant deity in a ceremony comparable to the Hittite ‘drinking the god’ ritual. Furthermore, as the combination of alcohol induced ASCs and religious ceremony is likely to have enhanced the emotional involvement of the participants, such rituals were likely to have been particularly effective for establishing and reinforcing social links between them.

At the same time, it remains possible that the psychoactive effects of alcohol consumption in such a social context may have still been viewed as some form of interaction with the supernatural, particularly in the case of extreme drunkenness. While difficult to establish with any certainty, given the previously discussed links between extreme drunkenness and the underworld, this may have been particularly the case where ancestral spirits were the supernatural aspects addressed, akin to the *marzeah*. Given that the rites conducted at Ayios Iakovos-Dhima may have been directed towards ancestral spirits,<sup>1351</sup> this is a distinct possibility in this case. As the larger LCII-LCIII cult sites appear to have been dedicated to more ‘public’ entities,<sup>1352</sup> however, contact with the underworld and its inhabitants may have been considered unnecessary, unwelcome or even sacrilegious. Extreme drunkenness may, therefore, have been consciously discouraged in such public cult contexts.

Alcohol consumption as a component of feasting also appears to have been an important activity within what have been termed ‘monumental administrative buildings’, so named as they appear to have been buildings from which agricultural produce (particularly olive oil) and perhaps other commodities were stored and redistributed.<sup>1353</sup> At *Alassa-Paliotaverna*, the pottery recovered from the so-called ‘Hearth Room’ of

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<sup>1350</sup> Steel (2004a:176-177) Webb (1999).

<sup>1351</sup> Cf. Collard (2008:33-34); Webb (1992:94-95, 1999:34).

<sup>1352</sup> See Webb (1999).

<sup>1353</sup> South (1995:194, 1996:42-43, 2000:345); Webb & Frankel (1994:17-20).

Building II (**Fig.6.19**) consisted primarily of WPVIII bowls and pithos sherds.<sup>1354</sup> Within the comparable Building X at Kalavassos-*Ayios Dhimitrios* (**Fig.5.4**) a well in A.173 contained: scores of bowls and cups of WPVIII, apparently broken intentionally; fragments of a Canaanite jar; a number of jugs, including four BR II jugs (two squat, wide mouthed) and two squat, wide-mouthed hand-made Bucchero jugs; animal bones (mostly meat-bearing ovicaprid bones) and a variety of plant remains.<sup>1355</sup> This deposit particularly suggests that feasting involving the consumption of alcohol and meat was an important component of the activities conducted in Building X at Kalavassos. Unfortunately, the artefactual assemblages from the two other Late Cypriote examples of such buildings at Maroni-*Vournes* and Phlamoudhi-*Melissa* are largely unpublished, preventing the opportunity to examine whether similar evidence was discovered in these two cases. Phlamoudhi-*Vounari*, however, may provide evidence of alcohol consumption in a similar context. The pottery assemblage from this site, which largely consisted of a monumental platform and may have been a sanctuary or ceremonial redistribution node, was dominated by bowls and jugs,<sup>1356</sup> suggesting that alcohol consumption was a central activity here. The assemblages found within isolated wells at Kouklia-*Evreti*, which contained numerous fragments of craters, kylikes and Canaanite jars,<sup>1357</sup> have also been compared to the feasting evidence from the Kalavassos well.<sup>1358</sup> The original architectural context of these features has been completely obliterated.

As mentioned above, Webb does not consider the Late Cypriote monumental administrative buildings to have been contexts in which religious rituals took place.<sup>1359</sup> While these structures certainly lack any iconographic references to what might be considered a deity, their monumental and non-domestic nature does suggest the possibility that some of the activities conducted within them included ritualised components. Given that the copper-working and other industries appear to have been controlled through the manipulation of ideology and ritual during the LCA,<sup>1360</sup> it is likely that the production, storage and exchange of the agricultural commodities stored in these

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<sup>1354</sup> Hadjisavvas (1994:111).

<sup>1355</sup> South, A. K. (1988:227-228; 1991:131; 1995:194; 1996:42; 2008).

<sup>1356</sup> Al Radi (1983); Horowitz (2008).

<sup>1357</sup> Maier & Wartburg (1985).

<sup>1358</sup> Steel (2004b:171).

<sup>1359</sup> Contra Hadjisavvas (1994:113; 1996:32) in the case of Building II at Alassa.

<sup>1360</sup> Knapp (1986; 1988;1993;1996b).

buildings was controlled in a similar manner.<sup>1361</sup> As such, feasting in these buildings may have been a component of rituals used to establish and legitimise elite control over agricultural produce. Given that such rituals were likely to have been most effective if the status of the elites was ideologically linked to the supernatural, then ritual practices addressed to otherworldly entities remains a strong possibility.

In this regard, it is interesting to note that the monumental administrative buildings at both Kalavassos and Maroni appear to have been closely associated with numerous chamber tombs (some containing considerable wealth in the case of Kalavassos, see Chapter 5, particularly Section 5.1.2). As these monumental administrative buildings have been interpreted as the seats of regional hierarchies,<sup>1362</sup> those who built and ‘owned’ the buildings may have belonged to a kin group who had buried their dead in the area and subsequently established a supreme status within the settlement.<sup>1363</sup> If so, the continued importance of this kin group may have been legitimated through references to their privileged lineage.<sup>1364</sup> Such descent claims may have involved attempts to contact ancestral spirits during feasts akin to the Near-Eastern *marzēah*.

As such, it is possible that the evidence for feasting from Late Cypriote monumental administrative buildings represents the adoption of mortuary feasting into rituals associated with elite control over agricultural commodities.<sup>1365</sup> In such a context, extreme drunkenness may again have been considered to enable contact with the world of the dead and ancestral spirits. At the same time, the size of these buildings and the large number of drinking vessels found within the Alassa and Kalavassos examples suggest dozens of participants in these rituals,<sup>1366</sup> perhaps indicating that the more sociable aspects of lower doses of alcohol may also have been important. In this context, the use of Mycenaean-style fine wares (predominantly WPW bowls) may suggest a competitive

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<sup>1361</sup> See, for example Hadjisavvas (1992).

<sup>1362</sup> Keswani (1996). See also Webb (1999:287-288).

<sup>1363</sup> Manning (1998) suggests that these buildings may have been built by a dominant kin group over the tombs of rival groups.

<sup>1364</sup> In such hierarchies, elites often portray themselves as the descendants of deified ancestors, Hayden (2003:355).

<sup>1365</sup> For discussion of the reasons ritual forms generally avoid the introduction of new elements, see Rappaport, (1999:32-33).

<sup>1366</sup> See South (2008:313).

element to the feasting in which the display and use, and perhaps even destruction, of such ‘foreign’ ceramics also emphasised the wealth and status of the host.<sup>1367</sup>

Although ceramic vessels associated with alcohol consumption are common from more domestic areas of Late Cypriote settlements, the vast majority of this evidence consists of relatively small fragments from disturbed contexts,<sup>1368</sup> which significantly limits the available information concerning the context of alcohol consumption at these sites. At certain sites, however, the occasional discovery of intact vessels securely associated with domestic dwellings does suggest that the consumption of alcohol was relatively common in such contexts. At *Maa-Palaekastro*, for instance, craters, skyphoi and cups were found within a court and ‘hearth-rooms’ associated with a pair of apparently domestic buildings (Buildings II and IV).<sup>1369</sup> Corresponding evidence for food production and consumption may indicate small-scale feasting activities in this context. Largely complete Aegean-style stirrup jars of the larger variety and a WPVIII crater were similarly found in domestic areas at *Kalavassos-Ayios Dhimitrios*.<sup>1370</sup> A number of complete craters, kylikes, Caananite jars and large stirrup jars were also found in an apparently domestic context at *Pyla-Kokkinokremmos*.<sup>1371</sup> As there is little evidence to suggest a link to the supernatural in these contexts, alcohol appears to have been consumed for convivial purposes. In such cases, the most relevant aspects of alcohol-induced ASCs are again likely to be its ability to reduce inhibitions and promote cheerfulness and relaxation. At *Alassa-Pano Mandilaris* four intact WPW strainer jugs (**Fig. 3.65**) were also found in association with what appear to be predominantly a domestic settlement area.<sup>1372</sup> In this case, however, numerous intramural tombs and three possible household shrines were found in and around the dwellings,<sup>1373</sup> suggesting the possibility that alcohol was consumed during small scale *marzeah*-like rituals addressed to ancestors who were buried in the area. If so, alcohol’s ability to facilitate contact with

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<sup>1367</sup> South (2008:313-314); Steel (1998; 2002; 2004b).

<sup>1368</sup> Fragments of such vessels are common in disturbed contexts at Hala Sultan Tekke, Idalion-Ambillieri, Kition-Chrysopolitissa and Maa-Palaekastro.

<sup>1369</sup> Karageorghis and Demas (1988).

<sup>1370</sup> South et.al (1989).

<sup>1371</sup> Karageorghis and Demas (1994).

<sup>1372</sup> Hadjisavas (1989; 1991; 2006).

<sup>1373</sup> Hadjisavas (1989; 1991; 2006).

the underworld via extreme drunkenness may also be relevant aspect of alcohol induced ASCs in this context.

All of these examples suggest that alcohol induced ASCs may have had both ‘spiritual’ and social meaning in Late Cypriote society. The degree to which either of these two aspects of meaning was emphasised or most relevant would have depended upon both the amount of alcohol consumed and the context of its consumption.

## 6.2.2 Opium

In contrast to the evidence for alcohol consumption, it appears that evidence for the consumption of opium is restricted to a much narrower range of sites. From the data presented in **Table 6.1** it appears that vessels associated with opium consumption are almost exclusively restricted to cult sites. The occurrence of BR bilbil juglets in secure contexts, for example, consists only of those examples previously discussed from Athienou and Kition-*Kathari* Temple 5.<sup>1374</sup> A glass imitation of a BR bilbil found at Ayios Iakovos-*Dhima* (**Fig.3.61b**),<sup>1375</sup> also fits this pattern. While fragments of these vessels are present at numerous sites, these are not restorable, are generally found in mixed deposits, usually predate any associated architecture and in almost all cases are found relatively close to disturbed tombs, from which they most likely derive.<sup>1376</sup> While this pattern is based on an extremely limited sample size there does not appear to be a single example of a poppy-shaped BR juglet securely associated with a Cypriote context not somehow related to cult practice, mortuary or non-mortuary.

While the distribution of BR bilbils is also likely to be heavily influenced by the fact that this vessel type predates the majority of Late Cypriote non-mortuary sites, which predominantly date to LCII-LCIII, a similar association with cult contexts can be observed with the Bucchero jug and the WSh juglet, which do occur during these later periods. Both of these vessel types were recovered from secure cult contexts at the

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<sup>1374</sup> Two fragmentary BR juglets have also been recorded from the central courtyard of Building X at Kalavassos, South (1984:29). Unfortunately the precise form of these vessels is unknown, South (pers.comm.)

<sup>1375</sup> Gjerstad et al. (1934:358, Object #32).

<sup>1376</sup> Examples of this occur at Enkomi, Hala Sultan Tekke, Maa-*Palaekastro*, Maroni-*Vournes* and Sinda (See Table 6.1).

previously discussed areas of Atheinou, Kition and Enkomi and have also been associated with other non-mortuary ritual contexts.

For example, at *Idalion-Ambelleri* the 'altar room' of an LCIII intramural cult-house contained an initial floor assemblage (Period I) that included a pair of *Bucchero* jugs and five bull figurines (**Fig.6.20**), with another two *Bucchero* jugs found on the subsequent floor (Period II).<sup>1377</sup> Another four *Bucchero* jugs were recovered from adjacent areas in the subsequent Period 3, while two poppy-shaped carnelian pendants were recovered from separate disturbed contexts in the area around the cult building.<sup>1378</sup> At *Myrtou-Pighades* a *Bucchero* jug was found alongside the previously mentioned craters, bowls and rhyton found together in the East Block. A BSIII juglet (BR precursor) was also found in the West Block, while two squat, wide-mouthed BR II jugs were found in rooms within the cult complex.<sup>1379</sup> The previously discussed ceramic assemblage from the well in Building X at *Kalavastos*, while not clearly a cult context, also included a pair of *Bucchero* jugs, although these were not the poppy shaped variety. Other possible opium containers from possible Late Cypriote cult sites include: a squat, wide mouthed BR jug found next to the hearth of a 'cult house' at *Ayia Irini*;<sup>1380</sup> four BR jugs (including 2 more squat-wide mouthed varieties) from the well in Building X at *Kalavastos*;<sup>1381</sup> a WSh juglet found associated with a household 'shrine' (Locus 003) at *Alassa-Pano Mandliaris*;<sup>1382</sup> and fragments of BR and TEY juglets from *Phlamoudhi-Vounari*.<sup>1383</sup>

Although the presence of opium within poppy-shaped *Bucchero* jugs types is yet to be confirmed via organic residue analysis, their repeated discovery at ritual locations suggest the continued contextual association, earlier exhibited by the BR bilbil, between such sites and vessels associated with opium consumption. As discussed for the case studies presented above, opium was most likely to have been consumed in association with Late Cypriote religious ritual as it readily induces experiences that are commonly interpreted as encounters with other worlds. Such opium-induced ASCs may have been

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<sup>1377</sup> Gjerstad et.al. (1934:593).

<sup>1378</sup> Gjerstad et.al. (1934:460-628).

<sup>1379</sup> du Plat Taylor (1957).

<sup>1380</sup> Gjerstad et.al. (1934: 642-824).

<sup>1381</sup> South (pers.comm.).

<sup>1382</sup> Hadjisavas (199:177).

<sup>1383</sup> Al Radi (1983).

used by ritual specialists during divination rituals,<sup>1384</sup> to enable interaction with supernatural powers that can confer such abilities, perhaps by inducing dream-filled sleep. Furthermore, during the LCIIIC-LCIII periods, the low numbers of these vessels outside of tombs and graves and their apparent restriction to ritual contexts also suggests that the consumption of opium for such purposes had become an activity restricted to certain ritual specialists. Opium may have become considered a sacred substance that enabled its consumer to personally interact with supernatural powers. As the high status and authority of ritual specialists is likely to have been closely linked with establishing such relationships with the supernatural, access to this substance may have been restricted in an effort to preserve these positions of privilege. The poppy-shaped carnelian beads and poppy-shaped sceptre head found in association cult contexts at Enkomi, Kition and Idalion may have been emblems worn by such ritual specialists, symbolising the central role of opium to their privileged relationship with the supernatural. It is, therefore, perhaps unsurprising that this phenomenon appears to occur during a time when social organisation was becoming increasingly hierarchical and religious ideology became associated with economic and political authority.<sup>1385</sup> Similar restriction of the use of ASCs to the elite segments of society may correspond to increasing social hierarchy and strategies related to ideological status legitimisation.<sup>1386</sup>

In addition to the poppy iconography just mentioned, the images of genii bearing possible BR and Bucchero jugs/juglets in ritual contexts (discussed in Section 3.2.1, **Figs.3.8 & 3.14**) may also reflect the consumption of opium in religious ritual.

Given these observations, the meaning associated with opium induced ASCs in Late Cypriote society appears to relate to their ability to enable personal encounters with the supernatural world and its inhabitants. As such interactions appear to have become increasingly the privilege of ritual specialists towards the end of the LCA, the meaning of opium induced ASCs may also have similarly become associated with the ritual authority derived from such relationships with the supernatural.

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<sup>1384</sup> In this regard, it is pertinent to note that numerous incised scapulae were also discovered at Myrtou-Pighades, du Plat Taylor (1957).

<sup>1385</sup> Knapp (1986;1988;1993;1996b).

<sup>1386</sup> Dobkin de Rios & Smith (1977); Hayden (2003:359; 362); Lewis (1971:132, 170); Morris & Peatfield (2002:108; 2004:54).

One final point with regard to the possible opium vessels discussed in Chapter 3 is that the squat, wide-necked BRII jug does occasionally occur in contexts that do not appear to have been ritual in character. These vessels have been recorded from domestic settlement areas at both Kalavastos-*Ayios Dhimitrios* and Morphou-*Toumba tou Skourou*. Given that this vessel cannot be associated with opium via either organic residues or its shape and decoration, this apparent exception to the contextual pattern observed in other opium vessels casts further doubt over the possible contents of this particular jug/juglet shape. Indeed, even if these vessels did contain some form of opium solution, the lack of ‘commodity branding’ exhibited by these vessels may indicate that their contents were viewed in a completely different way to the opium contained within poppy-shaped BR juglets. Organic residue analysis on these vessels may help to clarify this matter.

### **6.3 Discussion**

The evidence reviewed in this chapter suggests that ASCs were an important component of Late Cypriote social life beyond their previously discussed role in mortuary ritual. Evidence for the consumption of alcohol and opium from a variety of different contexts suggests that the ASCs induced by their consumption were understood and utilised in a number of different ways.

Alcohol appears to have been primarily consumed in non-mortuary contexts for its ability to promote conviviality. Evidence for its consumption by varying numbers of people in association with public cult buildings, monumental administrative buildings and domestic dwellings all suggest that alcohol induced ASCs can be associated with social activity. The ability of alcohol to reduce inhibitions and promote cheerfulness and relaxation (at least at low doses) would have made it particularly suitable for consumption in such social contexts. Alcohol-induced ASCs may have helped to establish and maintain emotional ties between those who consumed it together, promoting social cohesion and group identity. In ritual contexts particularly, its psychoactive properties would have significantly enhanced the socialising aspects of ritual that are generally considered to be one of its greatest benefits to human society.

Given previous arguments for an association between extreme drunkenness and supernatural realms such as the underworld, however, it is also possible that alcohol-

induced ASCs were still associated with some form of interaction with the supernatural. Where alcohol appears to have been consumed in close proximity to tombs, large doses may have been consumed during *marzēah*-like rituals with the goal of interacting with the underworld and ancestral spirits. Interaction with ancestral spirits in this way may have restricted the fostering of social bonds and group identity to those belonging to the appropriate kin group, whilst simultaneously emphasising their privileged status. In contexts where lower doses of alcohol were consumed, lesser drunkenness may still have been considered a partial interaction with supernatural realms, although this aspect of alcohol induced ASCs may have been accorded minimal importance. As such, in non-mortuary contexts, the symbolic aspects of meaning associated with alcohol induced ASCs can therefore be viewed as less significant than the socio-political aspects.

The more noticeable and psychologically isolating psychoactive properties of opium on the other hand appear to have accorded opium-induced ASCs a much different role. The apparent restriction of evidence for opium consumption primarily to cult sites suggests that its consumption was largely to enable contact with the supernatural in what can be described as a personal spiritual interaction. The ability of opium to induce experiences readily interpreted as encounters with the supernatural would have made it particularly effective for this use. The consumption of opium in contexts of religious ritual not clearly related to mortuary practice, however, suggests that opium induced ASCs (particularly sleep) were not just considered as contact with the underworld, but also with supernatural powers associated with realms beyond that of the dead. In addition, while evidence from Athienou suggests that it was possibly consumed by a relatively large number of ritual participants earlier in the LCA, the number of ritual participants consuming opium towards the end of this period appears to significantly diminish. This may reflect a restriction of interaction with the supernatural, enabled via opium consumption, as the privilege of certain high status ritual specialists, perhaps in the context of performing divinations. This restriction of opium-induced ASCs may, therefore, have been involved with the establishment and maintenance of social differentiation and the legitimatisation of authority. In this context opium-induced ASCs can be understood to combine significant symbolic and socio-political meaning.



## **Chapter 7. Late Cypriote Altered States of Consciousness**

The evidence considered in the previous two chapters suggests that ASCs were an integral component of Late Cypriote ritual practice and can be associated with a range of symbolic and socio-political meanings depending upon their specific character and the context of their use. In particular, evidence for the consumption of alcohol and opium suggests variations in the way that the ASCs induced by these substances were used and understood. This chapter will review this range of meanings and consider how they may have related to the cultural and historical changes observed on Cyprus during the LCA.

### ***7.1 Alcohol-Induced ASCs***

Late Cypriote evidence for alcohol induced ASCs appears to derive largely from feasting contexts. Found in both mortuary and non-mortuary contexts, this evidence commonly consists of large numbers of bowls and jugs and smaller numbers of craters, drinking vessels (such as tankards and kylikes) and storage vessels which may have been used to transport alcohol, such as the Canaanite jar. Faunal remains which appear to represent the sacrifice of livestock and consumption and/or offering of meat are commonly found alongside this ceramic evidence.

The large number of vessels commonly found in these contexts, often including scores or even hundreds of drinking vessels, suggests the involvement of relatively large numbers of participants in these feasting events. During such social occasions, it is likely that relatively low doses of alcohol were generally consumed. As lower doses usually produce feelings of relaxation and cheerfulness, reduce inhibitions and heighten emotions such as affection, alcohol consumed in this context was likely to have promoted convivial interaction between the participants. The lethargy, impaired motor skills, loss of bodily function and even unconsciousness induced by extreme doses of alcohol, on the other hand, would have hindered such interaction and may have been avoided or even discouraged, at least during non-mortuary feasting.

The feasting evidence from Late Cypriote mortuary contexts appears to reflect the continuation of a tradition of feasting associated with the final interment ritual that dates

back to at least the start of the Bronze Age. This would have provided a forum in which kin-group identity, membership in ancestral lineage groups and related social status and rights were established and renegotiated after the death of certain family members.<sup>1387</sup>

Evidence for feasting-related alcohol consumption from non-mortuary sites, including public cult structures, monumental administrative buildings and domestic dwellings, can similarly be viewed as an activity that helped to establish and maintain emotional ties between participants, promoting social cohesion and group identity. In ritual contexts in particular, alcohol's psychoactive properties would have significantly enhanced the socialising aspects often considered, from a functionalist viewpoint, as one of the primary benefits of ritual for human societies.<sup>1388</sup> As such, the ASCs induced by relatively low doses of alcohol in such convivial contexts can be understood to have significant socio-political meaning relating to the development of group identity and the negotiation of individual rights and status. This aspect of the meaning of alcohol-induced ASCs can be viewed as closely related to the social function often ascribed to feasting, in which surplus agricultural commodities are used to achieve political or social ends.<sup>1389</sup>

There is, however, much to suggest that considerable symbolic meaning was also associated with alcohol induced ASCs in Late Cypriote society, particularly where it has been consumed in ritual contexts. In the case of alcohol consumption associated with mortuary ritual, a symbolic association between drunkenness and the underworld is suggested by LBA texts from both Ugarit and Egypt.<sup>1390</sup> These texts suggest that unconsciousness induced by extreme doses of alcohol, and perhaps the preceding stages of the lethargy, impaired motor skills and loss of bodily function, were understood as some form of interaction with the underworld and its inhabitants, perhaps via the loss or projection of one's soul.

Evidence for the consumption of alcohol by a small number of participants during interment rituals, suggested, for instance, at Kalavassos-Ayios *Dhimitrios* Tomb 6 and Enkomi French Tomb 47/1, suggests that alcohol may have been consumed for such symbolic reasons during Late Cypriote mortuary ritual. In such cases, high doses of

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<sup>1387</sup> Keswani (2005:349-350); Steel (2002:113); Webb & Frankel (2008:292-293).

<sup>1388</sup> See Bell (1997:27-46).

<sup>1389</sup> Dietler (1990; 2006); Hamilakis (1999:40; 2000:59); Hayden (2001; 2003:173, 183).

<sup>1390</sup> Armstrong (1998: 104,110); Bryan (n.d.); Boyle (2005); Manniche (1997); Pope (1972).

alcohol may have been consumed in an attempt to establish some form of interaction with the underworld or spirits of the deceased and ancestors. Such direct contact with the world of the dead may have been considered a necessary part of Late Cypriote mortuary rites to ensure that the spirit or soul of the deceased was accepted into this realm and the community of ancestors. The occasional discovery of a drinking vessel apparently placed next to the head of the deceased may also reflect such beliefs, whereby provisioning the dead with alcohol provided them with a substance that enabled their soul to travel to the underworld.

In cases where alcohol appears to have been consumed by a limited number of ritual participants, this may have been a sombre, individual affair, as opposed to a convivial social event. At the same time, however, a symbolic association between extreme drunkenness and interaction with the underworld may also have existed for the alcohol consumed during mortuary feasts. Mortuary feasting may have been viewed as the sharing of a final feast with the deceased, with the community of ancestors into which they were about to be received also present. Extreme drunkenness may have been an accepted, or even necessary, part of such feasts in order to establish contact with these deceased spirits. If so, Late Cypriote mortuary feasting may have resembled the Near Eastern *marzēah*.<sup>1391</sup>

The feasting activities attested at LCIIIC/IIIA monumental administrative buildings, such as those at Kalavassos and Alassa, may also have been symbolically connected with ancestral spirits and the world of the dead. Although not clearly associated with mortuary ritual, these buildings were often constructed near earlier tombs. The feasting activities conducted within these buildings, therefore, may represent the adoption of mortuary practices into a new context; ceremonies used to legitimise control over agricultural (and perhaps other) commodities through references to the controlling group's privileged ancestral lineage. The feasting ceremonies conducted in these buildings, therefore, may have resembled the *marzēah* even more closely and have been associated with symbolic meanings comparable to those described above for mortuary feasting.

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<sup>1391</sup> Herscher (1997:32); Steel (2002:109).

Feasting in other Late Cypriote contexts, on the other hand, does not appear to have had clear symbolical associations with the underworld or ancestors. It is likely, however, to have been a context in which participants commonly emphasised their adherence to basic religious values.<sup>1392</sup> As such, ritualised drunkenness in non-mortuary contexts may still have been considered a partial interaction with supernatural realms, as suggested for the Hittite ‘Drinking the Gods’ ritual.<sup>1393</sup>

These symbolic meanings can further be considered to interrelate closely with aspects of socio-political meaning. In particular, interaction with the supernatural via alcohol consumption can be viewed as a personal ‘spiritual’ experience for ritual participants. Such experiences can provide an individual with a sense of involvement and fulfilment that assists in the maintenance of communal religious beliefs (and perhaps ideologies)<sup>1394</sup> and reinforces ideas of group membership and identity.

A final aspect of meaning which can be associated with alcohol induced ASCs concerns the possible psychological benefits of consuming large doses of alcohol during funerary rites. Consuming large quantities of alcohol can reduce memory function and can, therefore, reduce the grief of mourners through the suppression of memories of the deceased, enabling the living to focus upon resuming social life without them. This can be understood as benefiting the wider community and can, therefore, be considered an aspect of socio-political meaning that works initially on an individual, psychological level.

## **7.2 *Opium-Induced ASCs***

The experiential characteristics of opium induced ASCs are significantly different from those induced by alcohol, so it is perhaps unsurprising that the meanings associated with them also appear to differ. In particular, as the euphoric and soporific effects of opium consumption generally do not promote social interaction, opium-induced ASCs are far less suited to convivial occasions such as feasting. On the other hand, as the strongest evidence for the consumption of opium, the BR bilbil juglet, appears to derive largely from tombs, the symbolic meaning associated with opium induced ASCs in this

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<sup>1392</sup> Bell (1997:120).

<sup>1393</sup> Bryce (2002:190); Haas (1994:669-673).

<sup>1394</sup> Dornan (2004).

context may actually compare closely with that suggested for extreme drunkenness during mortuary ritual.

Certain experiential characteristics of opium induced ASCs, such as sensations of euphoria and flight, are well suited to interpretation as encounters with the supernatural. Furthermore, given possible symbolic links between sleep, unconsciousness and death, opium induced lethargy and sleep may also have been interpreted as interaction with the underworld and its inhabitants, just as extreme drunkenness appears to have been. The prevalence of BR juglets within Late Cypriote tombs, therefore, may indicate the consumption of opium during the interment ritual, alongside alcohol, once again as an attempt to contact the underworld and spirits of the dead in order to assist the recently deceased's incorporation into the community of ancestors. The occasional discovery of these vessels (and also WSh juglets) next to the heads of those interred, however, suggests that the deceased were also meant to consume the opium, enabling their soul to access the underworld. Indeed, it is possible that the majority of the evidence for opium consumption found in Late Cypriote tombs derives from such 'provisioning', rather than widespread consumption by the living. In either case, a prominent symbolic meaning associated with opium induced ASCs in Late Cypriote mortuary contexts appears to involve beliefs that opium consumption enabled one's soul to travel to the underworld.

The emotional benefits suggested above for drunkenness during mortuary ritual could equally be attributed to opium induced ASCs. Indeed, as opium consumption can suppresses both emotion and memory, whilst also having euphoric and sedative effects, it is likely to have been of even greater psychological benefit to those who experienced strong emotional responses, most likely grief, during interment rituals. Once again, the benefit of this to the community as a whole can be considered an aspect of socio-political meaning that works initially in terms of individual psychology.

Outside of mortuary ritual, the apparent restriction of evidence for opium consumption (BR juglets and perhaps also Bucchero jugs and WSh juglets) primarily to cult sites suggests that its consumption was again largely understood to enable contact with the supernatural. Once again, the sensations of euphoria and flying or floating may have been interpreted as encounters with other-worlds. Evidence from the end of the LCA (particularly from Kition and Enkomi) suggests that opium induced ASCs may have

been utilised during divination rituals, enabling interaction with the supernatural powers that can confer such abilities, perhaps via inducing dream-filled sleep. As such, it appears that the symbolic meaning associated with opium induced ASCs in non-mortuary contexts closely corresponds to that suggested for their use in mortuary contexts; enabling contact with the supernatural.

Evidence from Athienou suggests that opium was consumed in relatively low doses by a large number of ritual participants. This implies aspects of socio-political meaning associated with opium induced ASCs in this context, in addition to the meaning related to likely symbolic associations with the supernatural. In particular, the group setting for the personal 'spiritual' experience enabled through opium consumption may have been a particularly effective way of strengthening common religious beliefs and ideology, whilst also establishing and reinforcing the concept of a communal identity.

Towards the end of the LCA, however, the number of ritual participants consuming opium during religious rituals appears to diminish significantly. This may represent the restriction of personal interaction with the supernatural, enabled via opium consumption, as the privilege of certain high status ritual specialists, perhaps in the context of performing divinations. This restriction of opium induced ASCs may, therefore, suggest a different aspect of the socio-political meaning associated with such mental states, apparently relating to the establishment and maintenance of social differentiation and the legitimatisation of authority. As the high status and authority of ritual specialists is likely to have been closely linked with establishing such relationships with the supernatural, access to opium-induced ASCs may have been restricted in an effort to preserve such privilege. The meaning of opium-induced ASCs may, therefore, have become associated with the ritual authority derived from these interactions with the supernatural.

### ***7.3 Diachronic Change***

This last example illustrates the way in which the symbolic and socio-political aspects of the meanings of ASCs can interrelate, particularly in the context of historical and cultural change. As the LCA is a period in which such social changes appear to be quite marked, a consideration of the way in which variation in these meanings related to

social, political and economic developments may provide further understanding of the way in which such phenomena are used in human societies.

Of most relevance to the ritual use of ASCs, the social developments observed through the course of the LCA appear to have included significant changes in the way in which religious ritual was practiced. For instance, ancestral spirits appear to have been the primary focus of Cypriote religious ritual in the ECA and MCA and possibly well into the LCA.<sup>1395</sup> The increasing occurrence of extra and intramural sanctuaries and temples from the LCII onwards, however, suggests that rites addressed to communal or kin-group ancestral spirits gradually gave way to those addressing more inter-communal or 'public' beings.

This change in the focus of Cypriote ritual practice seemingly relates to the disturbance of previous kin-based communities brought about by the movement of people out of their ancestral rural settlements into newly established coastal sites in order to engage in overseas trade. Those who moved away from ancestral lands needed to re-establish claims to authority in a competitive environment where the display of wealth was becoming an important way to gain status. Furthermore, as the development of the Cypriote economy would have required mobilisations of labour extending beyond the capabilities of an individual kin-group, forms of supernatural authority that similarly extended beyond an individual kin-group's ancestors were also likely to become the focus of ritual observance. A new social order not focused on kinship ties would have prompted the recognition of new supernatural entities of a more 'public nature'. By the 12<sup>th</sup> century BCE, a reduction in Cypriote ancestor worship is suggested by the abandonment of ancestral chamber tombs in favour of simple shaft burials, with temple based religious institutions now apparently the primary source of social and supernatural authority.

Despite these significant social changes, the relationship between alcohol and opium-induced ASCs and religious ritual appears to continue. Indeed, the role and meaning of the consumption of these substances in mortuary ritual appears to have been adapted to fit into rites addressed to different aspects of the supernatural.

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<sup>1395</sup> Keswani (2004:51).

At the majority of LCII-LCIII cult sites, evidence for alcohol consumption during feasting suggests that alcohol's ability to promote conviviality may have been a significant factor in the adoption of earlier feasting practices into Late Cypriote cult activities. As discussed above, however, feasting conducted at certain monumental administrative buildings may have still been addressed to ancestral spirits, particularly at sites where a particular kin group achieved a privileged position in the settlement hierarchy.<sup>1396</sup> Such *marzēah*-like feasting may, therefore, represent an initial stage in the transformation of mortuary feasting addressed to ancestral spirits into cult feasting addressed to more public deities. In this context, it is interesting to note Hayden's suggestion that in such hierarchies, elites often portray themselves as the descendants of deified ancestors.<sup>1397</sup> Regardless of the variety of ritual contexts in which they were used, however, alcohol-induced ASCs seem to have been valued primarily for their ability to help foster group identity and negotiate or legitimise rights and status. It is this socio-political meaning that is emphasised in feasting.

The associations between opium-induced ASCs and Late Cypriote ritual practice, however, appear to have been somewhat more complex. At Athienou, for instance, opium appears to have been consumed by a relatively large number of ritual participants. This site appears to have been a focus for intra-community exchange during the 14<sup>th</sup> and 13<sup>th</sup> centuries BCE at a time when the Cypriote economy was becoming significantly more complex. The rituals conducted here also seem to represent an early stage in the Cypriote worship of intra-community (public) deities, rather than inter-community or kin-group ancestral spirits. Given the importance of personal 'spiritual' experience to the formation and maintenance of belief systems,<sup>1398</sup> the relatively widespread consumption of opium at Athienou may, therefore, be viewed as playing a central role in establishing beliefs relating to these relatively new public deities. Furthermore, opium-induced ritual experiences were also likely to have strengthened the intra-communal bonds between participants by heightening their emotional involvement in such ritual activity. The development of such close links between previously disparate kinship groups would have

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<sup>1396</sup> Perhaps characterising the regional administrative centres at which such buildings appear, Keswani (1996).

<sup>1397</sup> Hayden (2003:355).

<sup>1398</sup> Dornan (2004).

been particularly important in the development of the Late Cypriote economy and the establishment of coastal trading emporia populated by such a variety of groups.<sup>1399</sup> At the same time, it is also possible that emergent elites in positions of ritual authority assumed control over proceedings at Athienou to establish and legitimise a subordinate, productive role for the populations in the region, particularly given the evidence for such control in the LCIII period.

The meanings associated with opium-induced ASCs at Athienou can, therefore, be seen to encompass a significant degree of interrelationship between symbolic and socio-political meaning. This reflects the way in which changes in religious belief and ritual practice can be closely associated with historical and cultural developments,<sup>1400</sup> and how ritually used ASCs might have an important role in bringing about such changes. As embodied ritual experience and shared religious beliefs are discursively mediated through ritual,<sup>1401</sup> it is therefore unsurprising that ritual behaviour that induces emotionally charged experiences continued to be used through a period of flux, as a range of new religious beliefs became established. As such, it is unfortunate that the limited exposure of LCI-LCIIB remains at Cypriote sites<sup>1402</sup> means that an understanding of this process can currently only be derived from a handful of contexts. Interpretation of the details of diachronic changes across these periods should, therefore, be considered preliminary and subject to revision when more data becomes available.

In the LCIIC/LCIII periods, the worship of public deities in monumental temples at urban centres such as Enkomi, Kition and Kouklia appears to have been well established under the control of a religious elite.<sup>1403</sup> Social organisation had become increasingly hierarchical and religious ideology appears to have been associated with economic and political authority.<sup>1404</sup> Evidence for opium-induced ASCs from the Enkomi and Kition cult buildings again suggests the use of such states to access the supernatural, perhaps to conduct divination. In these cases, however, direct contact with the

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<sup>1399</sup> Hayden (2003:365-366) suggests that the formation of new social bonds was particularly important for displaced peoples of disparate origins, resulting in the formation of new types of religion in such urban centres.

<sup>1400</sup> Bell (1997:190).

<sup>1401</sup> Dornan (2004:27).

<sup>1402</sup> Cf. Webb (1999:284, 293).

<sup>1403</sup> Webb (1999:296).

<sup>1404</sup> Knapp (1988; 1993; 1996b).

supernatural appears to have become restricted to the privilege of ritual specialists.<sup>1405</sup> If the high status of such individuals was associated with their ability to interact with the supernatural, then restricted access to opium-induced ASCs may have been involved in strategies designed to maintain these positions of power.<sup>1406</sup> At regional cult centres such as those at Ayia Irini, Idalion and Myrtou-*Pighades*, further evidence for the restricted consumption of opium suggests that similar power strategies may also have been used in these contexts.<sup>1407</sup> Once again, the symbolic and socio-political meanings associated with ASCs can be seen as closely interrelated and with the wider historical and cultural context.

Despite the significant social, political and economic changes seen on Cyprus during the LCA, it appears that psychoactive substances such as alcohol and opium continued to be consumed during ritual practice. With the possible exception of the consumption of alcohol in non-mortuary ritual, the ASCs induced by these substances appear to have been understood as a direct personal interaction with the supernatural. While the socio-political meanings of these ASCs and the precise nature of the supernatural may have changed throughout the LCA, at a general level, the symbolic meanings associated with ASCs seem to have remained relatively constant. This appears to emphasise the conservative nature of ritual, even in the face of significant changes to other aspects of social life.<sup>1408</sup> Indeed, this phenomenon might suggest that culturally embedded ritual practices can actually be more resistant to change than the religious beliefs with which they were associated. If ritual practice is inscribed onto and guided by material culture, then it may in fact be more enduring than beliefs that rely on imperfect human memory for their reproduction in prehistoric periods.

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<sup>1405</sup> This appears to correspond with the conversion of the open courtyards attached to such buildings to walled *temene* that further restricted access to the ritual activity conducted at such locations, Webb (1999:296). Hayden (2003:210) argues for a similar restriction of ecstatic ritual to emergent elites in Neolithic communities.

<sup>1406</sup> At these sites, the association between alcohol induced ASCs and the supernatural may have also been diminished or disregarded.

<sup>1407</sup> Despite evidence suggesting a lesser restriction of other aspects of cult practice, Webb (1999:296).

<sup>1408</sup> Bell (1997:211, 251).

## Conclusion

This thesis has presented a detailed examination of the nature and meanings of ASCs within Late Cypriote society, demonstrating how such mental phenomena may have been meaningfully incorporated into culturally patterned practices such as religious ritual. This addresses a significant lack of concern for such anthological topics within the archaeological scholarship of Cyprus and the wider east Mediterranean. Of particular relevance to the Late Cypriote context, this thesis has also added significantly to an understanding of the complex developments in social organisation exhibited in this period, especially in relation to the important role of religious ritual. This was achieved by considering the way in which the symbolic and socio-political meanings associated with Late Cypriote ASCs changed with time, thereby demonstrating how such meanings can alter in response to wider social changes, and perhaps even help to facilitate them.

The contextual analysis conducted in this thesis has further demonstrated a method for interpreting complex aspects of human behaviour such as the ritual use of ASCs from archaeological remains. This process involved the incorporation of multiple strands of evidence into this interpretation, including organic residue evidence, qualitative and quantitative ceramic analysis, iconography, ethnographic and historical sources and neuro-psychological studies of the effects of relevant psychoactive substances. With the aid of this variety of contextually relevant evidence, it was possible to evaluate a number of rich archaeological contexts, which had been carefully excavated and published in detail, in order to interpret certain cognitive and symbolic aspects of past behaviour.

This thesis has also demonstrated how organic residue analysis of archaeological ceramics can be used to investigate past cognitive processes through the association of vessels with psychoactive substances such as alcohol and opium. Detailed consideration of vessels chemically linked with such substances has further shown how pottery can (and should) be considered an active and dynamic form of material culture closely associated with a range of human behaviours, rather than merely a passive reflection of style and a chronology.<sup>1409</sup>

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<sup>1409</sup> Last (2006).

In considering anthropological studies of ASCs, it was observed that such mental phenomena often played an important role in the ritual practices of a wide variety of cultures and frequently associated with the supernatural. Despite this observation, a review of archaeological approaches to the topic demonstrated that such phenomena have received little attention to date, particularly in the East Mediterranean region during the Bronze Age. The abundant iconographic, textual and artefactual evidence (including that from organic residues) from this context for the consumption of psychoactives such as alcohol and opium, suggested a significant lacuna in the archaeology of the region.

To approach this neglected topic in the context of LBA Cyprus a range of evidence potentially associated with the use of ASCs in this context was evaluated. This included LBA historical sources from Ugarit, Anatolia and Egypt, a number of Cypriote iconographic representations and a range of ceramics. In particular, certain Late Cypriote ceramic vessels were linked to the consumption of alcohol or opium on the basis of residue analysis results and/or stylistic qualities. The BR bilbil juglet (and perhaps earlier and later related forms) was connected to the consumption of a liquid solution of opium, while the crater, certain open shapes (the BR Y-shaped bowl, tankards and kylikes) and perhaps the Canaanite jar were associated with the consumption of alcohol.

The range of Late Cypriote contexts in which this evidence was discovered was subsequently analysed in detail in order to interpret the symbolic and socio-political meanings associated with the consumption of alcohol and opium, and the ASCs they induce, within Late Cypriote society. A contextual analysis of this evidence from within Late Cypriote tombs included the detailed consideration of six case studies and the evaluation of its distribution throughout the entire corpus of published tombs. This identified the consumption of alcohol as an important component of mortuary feasting and the provisioning of the deceased with both alcohol and opium during interment rituals. Opium may also have been consumed by the living during Late Cypriote mortuary ritual. Drunkenness and opium-induced ASCs experienced during these rituals were subsequently interpreted to have been symbolically linked to ritualised interaction with the underworld, suggesting that these mental phenomena possessed significant symbolic meaning. ASCs induced by alcohol consumed during mortuary feasting were also ascribed with socio-political meaning relating to their ability to promote the

development of group identity and the negotiation of individual rights and status. The capacity for opium and alcohol to reduce grief may also have meant that their consumption was of considerable psychological benefit to mourners, suggesting another socio-political meaning that can be associated with the ASCs induced during Late Cypriote mortuary ritual.

A comparable contextual analysis of evidence for ASCs from non-mortuary Late Cypriote contexts included the detailed consideration of three case study sites and the subsequent review of the entire corpus of sites. Alcohol consumption as a component of feasting was again identified; at extra- and intramural cult sites (including monumental temples), in monumental administrative buildings and within domestic settlement contexts. Once more, alcohol induced ASCs were attributed socio-political meaning associated with the convivial fostering of group identity and the negotiation of rights and status. In ritual contexts, however, drunkenness may still have been associated with the supernatural. Opium consumption at non-mortuary sites was identified in a limited number of contexts, all of which appear to have been linked with cult. This suggests a continued association between the supernatural and opium induced ASCs, emphasising that the symbolic meaning attributed to such phenomena continued. In a number of cult contexts, opium consumption appears to have been associated with divination rituals. With the exception of the case of Athienou, however, ritual opium consumption appears to have been restricted, suggesting that this activity had been incorporated into strategies involved with the ritualised legitimisation and maintenance of status and hierarchy. Opium induced ASCs therefore seem to have combined important symbolic and socio-political meanings towards the end of the LCA.

The meanings associated with ASCs in Late Cypriote society were, however, also observed to have varied in response to historical and cultural change. During the LCA, ritualised alcohol and opium consumption appears to have been adapted from mortuary rituals addressing kin-group ancestral spirits into rites associated with the worship of more public deities. Alcohol consumption as a component of feasting appears to have continued, while opium consumption seems to have been used liberally as new religions became established, but then subsequently restricted to the domain of a ritual elite in positions of political and economic dominance. This demonstrated how both the symbolic

and the socio-political meanings associated with ASCs were closely interrelated and linked to wider historical and cultural changes. Unfortunately, the limited exposure of LCI-LCIIB remains currently limits the amount of available evidence relevant to developing a detailed understanding of this important process. As such, hypotheses concerning details of these diachronic changes across these periods must be considered preliminary and subject to revision when more data becomes available.

This thesis has attempted a thorough review of the currently available evidence for the use of ASCs within Late Cypriote society and offered a detailed and nuanced interpretation of the range of meanings that can be associated with these phenomena. While this thesis has gone some way to addressing a lacuna in archaeological research concerning past cognitive processes and symbolic behaviour, it also raises a number of questions that might be addressed by future research.

Foremost amongst these is the identification of further evidence for the consumption of psychoactive substances as a means of archaeologically identifying past ASCs. In the context of the LCA, further analysis of BR bilbils may influence the confidence with which these vessels can be associated with opium consumption. Furthermore, future analysis on vessels identified on stylistic or contextual grounds as possible functional equivalents of the BR bilbil (particularly the WSh juglet, and Bucchero and BR jugs), may or may not substantiate this link. New residue evidence for other psychoactives, particularly alcohol, may also provide further insight into the range of contexts in which such substances were consumed.

As the scope of this thesis was restricted to a consideration of Late Cypriote evidence for ASCs, another obvious avenue for future research is the study of comparable evidence from other geographical and chronological contexts. In particular, as BR bilbils have been recovered from a number of other East Mediterranean contexts (particularly in Anatolia, the Levant and Egypt)<sup>1410</sup>, there is further potential to evaluate the use of opium induced ASCs in these areas. More detailed consideration of the ritual use of alcohol, for

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<sup>1410</sup> Åström (1972:143-161); Åström & Åström (1972:724-741); Bergoffen (1989; 1991; 2001; 2005); Maguire (2009); Merrillees (1974; 1983); Yon (1983).

which there is considerable evidence throughout this and other regions, may also prove insightful.

A final context in which future research may provide particularly valuable is the further investigation of the LCI-IIB periods, particularly in relation to cult practice. These periods are central to understanding processes leading to the development of the complex societies well attested at LCIIC/LCIII settlements, but are currently not well represented in the archaeological record, and thus poorly understood. The discovery and excavation of LCI-IIB settlements<sup>1411</sup> and cult sites, therefore, has the potential to further elucidate the development of complex societies on Cyprus, and the role of ritual, religion and perhaps even ASCs in such processes.

It is hoped that this thesis has also emphasised the value of anthropological approaches to East Mediterranean and Near Eastern archaeology. Ethnographic sources document a wide range of human behaviours that may not be obvious or 'rational' to most of those living in modern societies, including practices such as the use of ASCs to interact with the supernatural. Archaeologists need to be mindful that very few human societies privilege the (supposedly) rational in the way that modern culture does and that we severely limit our potential to develop plausible understandings of the past if we ignore the 'irrational' in our search for the 'rational'. Broadening the field of archaeological enquiry to incorporate knowledge and research from other disciplines, such as anthropology and neuro-psychology, can provide valuable insights into aspects of human behaviour often ignored by traditional archaeological approaches.

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<sup>1411</sup> Such as that currently being excavated at *Kissonerga-Skalia*, Crewe et.al.(2008)



## References

- Admiraal, S. L. (1982). "Late Bronze Age Tombs from Dromolaxia." *Report of the Department of Antiquities, Cyprus*: 39-59.
- Aldenderfer, M. (1993). "Ritual, Hierarchy, and Change in Foraging Societies." *Journal of Anthropological Archaeology* 12: 1-40.
- Ålin, P. (1978). "Idalion Pottery from the Excavations of the Swedish Cyprus Expedition." *Opuscula Atheniensi* 12(5): 91-109.
- Allen, S. J. (2005). "Pottery and Stone Vessels in the Reign of Hatshepsut and Thutmose III". In C. H. Roehrig (ed.) *Hatshepsut: From Queen to Pharaoh*. New York, Metropolitan Museum of Art.
- Al-Radi, S. M. S. (1983). *Phlamoudhi Vounari: A Sanctuary Site in Cyprus*. SIMA 65. Göteborg, Paul Åströms Förlag.
- Amiran, R. (1962). "The 'Arm-Shaped' Vessel and its Family." *Journal of Near Eastern Studies* 21: 161-174.
- Ammerman, A., Flourentzos, P., McCartney, C., Noller, J. & Sorabji, D. (2006). "Two New Early Sites on Cyprus." *Report of the Department of Antiquities, Cyprus*: 1-22.
- Andrews, C. (1994). *Amulets of Ancient Egypt*. London, British Museum Press.
- Aragón-Poce, F., Martínez-Fernández, E., Márquez-Espinós, C., Pérez, A., Mora, R. & Torres, L. M. (2002). "History of Opium." *International Congress 1242*: 19-21.

Armstrong, D. E. (1998). *Alcohol and Altered States in Ancestor Veneration Rituals of Zhou Dynasty China and Iron Age Palestine*. Lewinston, Queenston & Lampeter, The Edwin Mellen Press.

Arnott, R. (1996). "Healing and Medicine in the Aegean Bronze Age." *Journal of the Royal Society of Medicine* 89: 265-270.

Arnott, R. (1999). "Healing Cult in Minoan Crete". In P. P. Betancourt, V. Karageorghis, R. Laffineur and W.-D. Niemeier (ed.) *MELETEMATA, Studies in Aegean Archaeology Presented to Malcolm H. Wiener as he enters his 65th Year*. Liège & Austin, Université de Liège & University of Texas at Austin. 20: 1-6.

Arnott, R. (2001). "Resinated Wine Imported to Mycenae in Canaanite Jars". In Y. Tzedakis and H. Martlew (ed.) *Archaeology Meets Science, Minoans and Mycenaean, Flavours of their Time*. Athens, Ministry of Culture, Hellenic Cultural Heritage: 156-158.

Artzy, M., Perlman, I. & Asaro, F. (1981). "Cypriote Pottery Imports at Ras Shamra." *Israel Exploration Journal* 31(1-2): 37-47.

Askitopoulou, H., Ramoutsaki, I. A. & Konsolaki, E. (2002). "Archaeological evidence on the use of opium in the Minoan world." *International Congress* 1242: 23-29.

Åström, P. (1962). "Supplementary Material from Ayios Iakovos Tomb 8." *Opuscula Atheniensia* 4: 207-224.

Åström, P. (1966). *Excavations at Kalopsidha and Ayios Iakovos in Cyprus*. SIMA 2. Lund, Paul Åström.

Åström, P. (1969). "A Red Lustrous Wheel-made Spindle Bottle and its Contents." *Medelhavsmuseet Bulletin* 5: 16-21.

Åström, P. (1972a). *The Swedish Cyprus Expedition IV:1D. The Late Cypriote Bronze Age. Relative and Absolute Chronology, Foreign Relations and Historical Conclusions.* Lund, The Swedish Cyprus Expedition: 558-855.

Åström, P. (1972b). *The Swedish Cyprus Expedition IV:1B. The Middle Cypriote Bronze Age.* Lund, The Swedish Cyprus Expedition.

Åström, P. (1974). "Livadhia, "Kokotes, Tomb 1." *Report of the Department of Antiquities, Cyprus:* 51-59.

Åström, P. (1985). "The Sea Peoples in the Light of New Excavations." *Centre d'Études Chypriotes, Cahier 3:* 3-18.

Åström, P. (1986). "Hala Sultan Tekke- an International Harbour Town of the Late Cypriote Bronze Age." *Opuscula Atheniensia* 16(1): 7-17.

Åström, P. (1987). "Votive Deposits in the Late Cypriote Bronze Age". In T. Linders and G. Nordquist (ed.) *Gifts to the Gods: Proceedings of the Uppsala Symposium 1985.* Uppsala, Academia Ubsaliensis. *Boreas* 15: 177-179.

Åström, P. (1988). "A Cypriote Cult Scene." *Journal of Prehistoric Religion* 2: 5-11.

Åström, P. (1989). *Katydhata: A Bronze Age Site in Cyprus.* SIMA 86. Gothenburg, Paul Åströms Förlag.

Åström, P. (1996). "Hala Sultan Tekke - a Late Cypriote Harbour Town". In P. Åström and E. Herscher (ed.) *Late Bronze Age Settlement in Cyprus: Function and Relationship.* Jonsered, Paul Åströms Förlag. SIMA PB 126: 9-14.

Åström, P. (1997). "Aegean Imports to Hala Sultan Tekke". In D. Christou (ed.) *Proceedings of the International Archaeological Conference, Cyprus and the Aegean in Antiquity*. Nicosia, Department of Antiquities, Cyprus: 89-92.

Åström, P. (1998). "Ceramics: Influences East and West". In E. H. Cline and D. Harris-Cline (ed.) *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium, Cincinnati, 18-20 April 1997. Aegaeum 18*. Liège, Université de Liège, Histoire de l'art et archéologie de la Grèce antique: 257-263.

Åström, P. (1998a). *Hala Sultan Tekke 10: The Wells*. SIMA 45:10. Jonsered, Paul Åströms Förlag.

Åström, P. (1998b). "Continuity or Discontinuity: Indigenous and Foreign Elements in Cyprus around 1200 BCE". In S. Gitin, A. Mazar and E. Stern (ed.) *Mediterranean Peoples in Transition*. Jerusalem, Israel Exploration Society: 80-86.

Åström, P. (2001). *Hala Sultan Tekke 11*. SIMA 45:11. Jonsered, Paul Åströms Förlag.

Åström, P., Åström, E., Hatziantoniou, A., Niklasson, H. & Öbrink, U. (1983). *Hala Sultan Tekke 8*. SIMA 45:8. Göteborg, Paul Åströms Förlag.

Åström, P. & Åström, L. (1972). *The Swedish Cyprus Expedition IV:1C. The Late Cypriote Bronze Age. Architecture and Pottery. IV*. Lund, The Swedish Cyprus Expedition.

Åström, P., Bailey, D. M. & Karageorghis, V. (1976). *Hala Sultan Tekke 1: Excavations 1897-1971*. SIMA 45:1. Göteborg, Paul Åströms Förlag.

Åström, P., Hult, G. & Olofsson, M. S. (1977). *Hala Sultan Tekke 3: Excavations 1972*. SIMA 45:3. Göteborg, Paul Åströms Förlag.

Åström, P. & Nys, K. (2007). *Hala Sultan Tekke 12. Tomb 24, Stone Anchors, Faunal Remains and Pottery Provenance*. SIMA 45:12. Sävedalen, Paul Åströms Förlag.

Åström, P. & Wright, G. R. H. (1962). "Two Bronze Age Tombs at Dhenia in Cyprus." *Opuscula Atheniensia* 4: 225-276.

Åström, P. e. a. (1989). *Hala Sultan Tekke 9: Trenches 1972-87. Index for volumes 1-9*. SIMA 45:9. Göteborg, Paul Åströms Förlag.

Baas, J. (1980). "Ein Bedeutsamer Botanischer Fund der Gattung *Echium* Linné aus Kamid el-Loz". In R. Hachmann (ed.) *Kamid el-Loz 1968-70*. Bonn, Rudolf Habelt Verlag GMBH: 111-115.

Bailey, D. M. (1976). "The British Museum Excavations at Hala Sultan Tekke in 1897 and 1898". In P. Åström, D. M. Bailey and V. Karageorghis (ed.) *Hala Sultan Tekke 1: Excavations 1897-1971*. Göteborg, Paul Åströms Förlag. SIMA 45:1: 1-32.

Balls, A. K. (1927). "The Separation and Estimation of Morphine, Pseudomorphine, and Related Substances." *The Journal of Biological Chemistry* 71: 543-558.

Balthazar, J. W. (1990). *Copper and Bronze Working in Early through Middle Bronze Age Cyprus*. SIMA-PB 84. Göteborg, Paul Åströms förlag.

Bailey, I. & Yates, T. (1990). *Archaeology after structuralism: post-structuralism and the practice of archaeology*. London, Routledge.

Barber, E. J. W. (1991). *Prehistoric Textiles: The Development of Cloth in the Neolithic and Bronze Ages*. Princeton, Princeton University Press.

Bard, K. (1992). "Toward an Interpretation of the Role of Ideology in the

Evolution of Complex Society in Egypt." *Journal of Anthropological Archaeology* 11: 1-24.

Barnett, R. D. (1985). "Assurbanipal's Feast." *Eretz-Israel. Archaeological, Historical and Geographical Studies* 18: 1-6.

Barrett, J. C. (1987). "Contextual Archaeology." *Antiquity* 61: 468-473.

Barrett, J. C. (1994). *Fragments from Antiquity, An Archaeology of Social Life in Britain, 2900-1200 BC*. Oxford, Blackwell.

Barrett, J. C. (2000). "A thesis on agency". In M. Dobres and J. E. Robb (ed.) *Agency in Archaeology*. London & New York, Routledge: 61-68.

Barrett, J. C. (2001). "Agency, the Duality of Structure , and the Problem of the Archaeological Record". In I. Hodder (ed.) *Archaeological Theory Today*. Cambridge, Polity Press: 141-164.

Barrett, J. C. (2006). "Archaeology as the Investigation of the Contexts of Humanity". In D. Papaconstantinou (ed.) *Deconstructing Context: A Critical Approach to Archaeological Practice*. Oxford, Oxbow Books: 194-211.

Barušs, I. (2003). *Alterations of Consciousness: An Empirical Analysis for Social Scientists*. Washington, DC, American Psychological Association.

Basch, L. & Artzy, M. (1985). "Appendix II: Ship Graffiti at Kition". In V. Karageorghis and M. Demas (ed.) *Excavations at Kition 5. The Pre-Phoenician Levels, Part I*. Nicosia, Department of Antiquities, Cyprus: 322-336.

Bauer, B. S. (1996). "Legitimization of the State in Inca Myth and Ritual." *American Anthropologist* 98(2): 327-337.

- Baurain, C. (1984). *Chypre et la Mediterranee Orientale au Bronze Recent: Synthese historique*. Athens, Ecole Francaise d'Athenes.
- Baurain, C. & Darcque, P. (1983). "Un Triton en Pierre à Malia." *Bulletin de Correspondance Hellénique* 107(1): 3-73.
- Beck, C. W., Stout, E. C., Lee, K. C., Chase, A. A. & DeRosa, N. (2008). "Analysis of Organic Remains in the Fabric of Minoan and Mycenaean Pottery Sherds by Gas Chromatography-Mass Spectrometry". In Y. Tzedakis, H. Martlew and M. K. Jones (ed.) *Archaeology Meets Science: Biomolecular Investigations in Bronze Age Greece, The Primary Scientific Evidence 1997-2003*. Oxford, Oxbow: 12-47.
- Beck, C. W., Stout, E. C. & Wovkulich, K. M. (2004). "The Uses of Cypriote White-Slip Ware inferred from Organic Residue Analysis." *Ägypten und Levante* 14: 13-44.
- Behn, C. P. (1986). "The Use of Opium in the Bronze Age in the Eastern Mediterranean." *Listy Filologiké* 109(4): 193-197.
- Belgiorno, M. R. (2009). *Pyrgos-Mavrorachi: Short History of Excavation*, [http://www.pyrgos-mavroraki.net/pyrgos-mavroraki\\_000007.htm](http://www.pyrgos-mavroraki.net/pyrgos-mavroraki_000007.htm).
- Bell, C. (1992). *Ritual Theory, Ritual Practice*. Oxford, Oxford University Press.
- Bell, C. (1997). *Ritual: Perspectives and Dimensions*. Oxford, Oxford University Press.
- Bell, C. (2006). *The Evolution of Long Distance Trading Relationships across the LBA/Iron Age Transition on the Northern Levantine Coast: Crisis, Continuity and Change: A Study Based on Imported Ceramics, Bronze and its Constituent Metals*. Oxford, Archaeopress.

- Bell, C. (2007). "Response: Defining the Need for a Definition". In E. Kyriakides (ed.) *The Archaeology of Ritual*. Los Angeles, Cotsen Institute of Archaeology, University of California, Los Angeles: 277-288.
- Bell, J. (1992). "On capturing Agency theories about prehistory". In J.-C. Gardin and C. S. Peebles (ed.) *Representations in Archaeology*. Bloomington, Indiana University Press: 30-55.
- Benson, J. L. (1972). *Bamboula at Kourion, The Necropolis and the Finds*. Philadelphia, University of Pennsylvania Press.
- Bergoffen, C. (1989). *A Comparative Study of the Regional Distribution of Cypriote Pottery in Canaan and Egypt in the Late Bronze Age*, Unpublished Ph.D thesis submitted to New York University.
- Bergoffen, C. (1991). "Overland Trade in Northern Sinai: The Evidence of the Late Cypriot Pottery." *BASOR* 281: 59-76.
- Bergoffen, C. (2001). "The Base Ring Pottery from Tell el-'Ajjul". In P. Åström (ed.) *The Chronology of Base-ring Ware and Bichrome Wheel-made Ware. Proceedings of a Colloquium held in the Royal Academy of Letters, History and Antiquities, Stockholm, May 18-19 2000*. Stockholm, Kungl. Vitterhets Historie och Antikvitets Akademien: 31-50.
- Bergoffen, C. (2005). *The Cypriot Bronze Age Pottery from Sir Leonard Woolley's Excavations at Alalakh*. Wien, Verlag der Österreichischen Akademie der Wissenschaften.
- Berlant, S. R. (2005). "The Entheomycological Origin of Egyptian Crowns and the Esoteric Underpinnings of Egyptian Religion." *Journal of Ethnopharmacology* 102: 275-288.

Bernatzik, H. A. (1970). *Akha and Miao: Problems of Applied Ethnography in Farther India*. New Haven, Human Relations Area Files.

Biers, W. R. & McGovern, P. E. (1990). *Organic Contents of Ancient Vessels: Materials Analysis and Archaeological Investigation*. 7. Philadelphia, MASCA, The University Museum of Archaeology and Anthropology, University of Pennsylvania.

Binford, L. (1962). "Archaeology as anthropology." *American Antiquity* 28: 217-25.

Binford, L. (1967). "Smudge Pits and Hide Smoking: The Use of Analogy in Archaeological Reasoning." *American Antiquity* 32(1): 1-12.

Binford, L. (1972a). *An Archaeological Perspective*. London, Seminar Press.

Binford, L. (1972b). "Mortuary practices: Their Study and their Potential." *American Antiquity* 36: 6-29.

Binford, L. (1989). *Debating Archaeology*. New York, Academic Press.

Birckhead, J. (1997). "Reading "Snake Handling": Critical Reflections". In S. D. Glazier (ed.) *Anthropology of Religion: A Handbook*. Westport, Connecticut & London, Greenwood Press: 19-84.

Bisset, N., Bruhn, J. G., Curto, S., Holmstedt, B., Nyman, U. & Zenk, M. H. (1996b). "Was Opium Known in 18th Dynasty Ancient Egypt? An Examination of Materials from the Tomb of the Chief Royal Architect Kha." *Ägypten und Levante* 6: 199-201.

Bisset, N., Bruhn, J. G. & Zenk, M. H. (1996a). "The Presence of Opium in a 3.500 Year Old Cypriote Base-Ring Juglet." *Ägypten und Levante* 6: 203-204.

Bisset, N. G., Bruhn, J. G., Curto, S., Holmsted, B., Nymane, U. & Zenkf, M. H. (1994). "Was Opium Known in 18th Dynasty Ancient Egypt?"

An Examination of Materials from the Tomb of the Chief Royal Architect Kha."

Bittel, K. (1970). *Hattusha: Capital of the Hittites*. New York, Oxford University Press.

Bittel, K., Naumann, R., Beran, T., Hachmann, R. & Kurth, G. (1957). *Bogazköy III, Funde aus den Grabungen 1952-1955*. Berlin, Verlag Gebr. Mann.

Blake, E. (2005). "The Material Expression of Cult, Ritual, and Feasting". In E. Blake and A. B. Knapp (ed.) *The Archaeology of Mediterranean Prehistory*. Oxford, Blackwell Publishing: 102-129.

Blegen, C. W. (1937). *Prosymna: The Late Helladic Settlement Preceding the Argive Heraeum*. Cambridge, Cambridge University Press.

Bloch, M. (1971). *Placing the Dead: Tombs, Ancestral Villages, and Kinship Organization in Madagascar*. London, Seminar Press.

Bloch, M. (1992). *Prey into Hunter: The Politics of Religious Experience*. Cambridge, Cambridge University Press.

Bloch, M. & Parry, J. (1982). "Introduction: Death and the Regeneration of Life". In M. Bloch and J. Parry (ed.) *Death and the Regeneration of Life*. Cambridge, Cambridge University Press: 1-44.

Boardman, J. (2001). *Greek Gems and Finger Rings, Early Bronze Age to Late Classical*. London, Thames & Hudson.

Bolger, D. (1991). "Early Red Polished Ware and the Origins of the Cypriot Bronze Age". In J. A. Barlow, D. L. Bolger and B. Kling (ed.) *Cypriot Ceramics: Reading the Prehistoric Record*. Philadelphia, University of Pennsylvania: 29-36.

Bolger, D. (1996). "Figurines, Fertility, and the Emergence of Complex Society in Prehistoric Cyprus." *Current Anthropology* 37(2): 157-162.

Bolger, D. (2002). "Gender and Mortuary Ritual in Chalcolithic Cyprus". In D. Bolger and N. Serwint (ed.) *Engendering Aphrodite. Women and Society in Ancient Cyprus. CAARI Monographs Volume 3*. Boston, American Schools of Oriental Research: 67-86.

Bolger, D. (2003). *Gender in Ancient Cyprus: Narratives of Social Change on a Mediterranean Island*. Walnut Creek, California, AltaMira.

Bourdieu, P. (1977). *Outline of a theory of practice*. New York, Cambridge University Press.

Bourguignon, E. (1968). "World Distribution and Patterns of Possession States". In R. Prince (ed.) *Trance and Possession States. Proceedings of the Second Annual Conference of the R.M. Bucke Memorial Society, 4-6 March 1966, Montreal*. Montreal, R.M. Bucke Memorial Society: 3-34.

Bourguignon, E. (1973a). "Introduction: A Framework for the Comparative Study of Altered States of Consciousness". In E. Bourguignon (ed.) *Religion, Altered States of Consciousness, and Social Change*. Columbus, Ohio State University Press: 3-35.

Bourguignon, E. (1973b). "An Assessment of Some Comparisons and Implications". In E. Bourguignon (ed.) *Religion, Altered States of Consciousness, and Social Change*. Columbus, Ohio State University Press: 321-339.

Bourguignon, E. (1977). "Altered States of Consciousness, Myths, and Rituals". In B. M. Du Toit (ed.) *Drugs, Rituals and Altered States of Consciousness*. Rotterdam, Balkema.

Bourguignon, E. (1979). *Psychological Anthropology*. New York, Holt, Rinehart and Winston.

Boutin, A., Knapp, A. B., Banks, I., Given, M. & Horowitz, M. (2003). "Settlement and Cemetery in and around Katydhata Village." *Report of the Department of Antiquities, Cyprus*: 335-349.

Bowie, F. (2006). *The Anthropology of Religion: An Introduction. 2nd Edition*. Oxford, Blackwell.

Boyd, C. E. (1996). "Shamanic Journeys into the Otherworld of the Archaic Chichimec." *Latin American Antiquity* 7: 152–164.

Boyle, A. (2005). "Sex and Booze Figured in Egyptian Rites."  
<http://www.msnbc.msn.com/id/15475319/>.

Bradley, R. (2003). "A Life Less Ordinary: the Ritualization of the Domestic Sphere in Later Prehistoric Europe." *Cambridge Archaeological Journal* 13(1): 5-23.

Bradley, R. (2005). *Ritual and Domestic Life in Prehistoric Europe*. London & New York, Routledge.

Bradley, R. (2005). *Ritual and Domestic Life in Prehisotric Europe*. London & New York, Routledge.

- Braithwaite, M. (1984). "Ritual and Prestige in the prehistory of Wessex c. 2200-1400 BC: A New Dimension to the Archaeological Evidence". In D. Miller and C. Tilley (ed.) *Ideology, Power and Prehistory*. Cambridge, Cambridge University Press: 93-110.
- Braun, S. (1996). *Buzz: The Science and Lore of Alcohol and Caffeine*. New York, Oxford University Press.
- Bright, L. (1995). "Approaches to the Archaeological Study of Death with Particular Reference to Ancient Cyprus". In S. Campbell and A. Green (ed.) *The Archaeology of Death in the Ancient Near East. Oxbow Monograph 51*. Oxford, Oxbow Books: 62-74.
- Brown, J. A. (1997). "The Archaeology of Ancient Religion in the Eastern Woodlands." *Annual Review of Anthropology* 26: 464-485.
- Brunner, H. (1986). "Trunkenheit". In W. Wolfgang Helck, E. Otto and W. Westendorf (ed.) *Lexikon der Ägyptologie, Volume 6*. Wiesbaden, O. Harrassowitz,: Cols.773-777.
- Bruyère, B. (1937). *Rapport sur les Fouilles de Dier el Medineh (1934-1935). Deuxieme Partie: La Nécropole de l'Est*. Fouilles de l'Institut Français d'Archéologie Orientale du Caire XV. Le Caire, Imprimerie de l'Institut Français d'Archéologie Orientale.
- Bryan, B. (n.d.). "Just Say No." *Bulletin of the Egyptological Seminar festschrift to Dorothea Arnold*.
- Bryce, T. (2002). *Life and Society in the Hittite World*. Oxford, Oxford University Press.
- Buchholz, H.-G. (1999). *Ugarit, Zypern und Agais: Kulturbeziehungen im Zweiten Jahrtausend vor Christus*. Münster, Ugarit-Verlag.
- Buckland, P. C. & Panagiotakopulu, E. (2001). "Rameses II and the tobacco beetle." *Antiquity* 75(289): 549-556.

- Burkert, W. (1985). *Greek Religion*. Oxford, Blackwell.
- Cadogan, G. (1973). "Clay Tubes in Minoan Religion." *Ta pepragmena tu G' Diethnus Kritoloyiku Sinedriu (Rethymno, 18-23 Sept. 1971)* 1: 34-38.
- Cadogan, G. (1983). "Maroni I." *Report of the Department of Antiquities, Cyprus*: 153-162.
- Cadogan, G. (1986). "Maroni II." *Report of the Department of Antiquities, Cyprus*: 40-44.
- Cadogan, G. (1987). "Maroni III." *Report of the Department of Antiquities, Cyprus*: 81-84.
- Cadogan, G. (1988). "Maroni IV." *Report of the Department of Antiquities, Cyprus*: 229-231.
- Cadogan, G. (1989). "Maroni V." *Report of the Department of Antiquities, Cyprus*: 77-81.
- Cadogan, G. (1992). "Maroni VI." *Report of the Department of Antiquities, Cyprus*: 51-58.
- Callot, O. (1985). "Remarques sur l'Architecture Des Temples 1 et 2 a Kition". In V. Karageorghis and M. Demas (ed.) *Excavations at Kition 5. The Pre-Phoenician Levels, Part I*. Nicosia, Department of Antiquities, Cyprus: 165-239.
- Cameron, C. M. (2006). "Ethnoarchaeology and Contextual Studies". In D. Papaconstantinou (ed.) *Deconstructing Context: A Critical Approach to Archaeological Practice*. Oxford, Oxbow Books: 22-33.

- Caminos, R. A. (1954). *Late-Egyptian Miscellanies*. London, Oxford University Press.
- Carpenter, J. R. (1981). "Excavations at Phaneromeni, 1975-1978". In J. C. Biers and D. Soren (ed.) *Studies in Cypriote Archaeology*. Los Angeles, Institute of Archaeology, University of California, Los Angeles: 59-78.
- Carter, J. B. (1995). "Ancestor Cult and the Occasion of Homeric Performance". In J. B. Carter and S. P. Morris (ed.) *The Ages of Homer, A Tribute to Emily Townsend Vermeule*. Austin, University of Texas Press: 285-312.
- Catling, H. W. (1962). "Patterns of Settlement in Bronze Age Cyprus." *Opuscula Atheniensia* 4: 129-169.
- Catling, H. W. (1964). *Cypriot Bronzework in the Mycenaean World*. Oxford, Clarendon Press.
- Catling, H. W. (1968). "Kouklia : Evreti Tomb 8." *Bulletin de Correspondance Hellénique*, 92(1): 162-169.
- Catling, H. W. (1979). "The St. Andrews-Liverpool Museums Kouklia Tomb Excavations 1950-1954." *Report of the Department of Antiquities, Cyprus*: 270-275.
- Catling, H. W. (1994). "Cyprus in the 11th Century B.C.- An End or a Beginning?" In V. Karageorghis (ed.) *Cyprus in the 11th Century B.C.* Nicosia, A.G. Leventis Foundation: 133-141.
- Cavanagh, W. (1998). "Innovation, Conservatism and Variation in Mycenaean Funerary Ritual". In K. Branigan (ed.) *Cemetery and Society in the Aegean Bronze Age*. Sheffield, Sheffield Academic Press: 103-114.

Chidester, D. (1990). *Patterns of Transcendence: Religion, Death, and Dying*. Belmont, Wadsworth.

Childs, S. T. & Killick, D. (1993). "Indigenous African Metallurgy: Nature and Culture." *Annual Review of Anthropology* 22: 317-338.

Chippendale, C. (2000). "Visions of Dynamic Power; Archaic Rock-paintings, Altered States of Consciousness and 'Clever Men' in Western Arnhem Land (NT), Australia." *Cambridge Archaeological Journal* 10(1): 63-101.

Christou, D. (1989). "The Chalcolithic Cemetery at Souskiou-Vathyrkakas". In E. J. Peltenburg (ed.) *Early Society in Cyprus*. Edinburgh, Edinburgh University Press: 82-94.

Chryssoulaki, S. (1999). "A New Approach to Minoan Iconography - An Introduction: The Case of the Minoan Genii". In P. P. Betancourt, V. Karageorghis, R. Laffineur and W.-D. Niemeier (ed.) *MELETEMATA, Studies in Aegean Archaeology Presented to Malcolm H. Wiener as he enters his 65th Year*. Liège & Austin, Université de Liège & University of Texas at Austin. 20: 1-6.

Civil, M. (1964). "A Hymn to the Beer-goddess and a Drinking Song". In R. D. Biggs and J. A. Brinkman (ed.) *Studies presented to A. Leo Oppenheim, June 7, 1964*. Chicago, University of Chicago (Oriental Institute): 67-89.

Clarke, J. (2005). "Understanding the Importance of Methodology in Complex Archaeological Interpretation". In J. Clarke (ed.) *Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean*. Oxford, Oxbow: 9-11.

Clarke, M. J. (2001). "Akha Feasting: An Ethnoarchaeological Perspective". In M. Dietler and B. Hayden (ed.) *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics and Power*. Washington, Smithsonian Institute Press: 144-167.

Cline, E. H. (1994). *Sailing the Wine-dark Sea: International Trade and the Late Bronze Age Aegean*. BAR International Series 591. Oxford, Archaeopress.

Collard, D. (2008). *Function and Ethnicity: 'Bathtubs' from Late Bronze Age Cyprus*. SIMA-PB 171. Sävedalen, Paul Åströms förlag.

Conrad, J. R. (1959). *The Horn and the Sword: The History of the Bull as Symbol of Power and Fertility*. London, Dutton.

Copley, M. S., Berstan, R., Straker, V., Payne, S. & Evershed, R. P. (2005). "Dairying in antiquity. II. Evidence from absorbed lipid residue dating to the British Bronze Age." *Journal of Archaeological Science* 32: 505-521.

Couliano, I. P. (1991). *Out of this World: Otherworldly Journeys from Gilgamesh to Einstein*. Boston, Shabhala Publications.

Courtois, J.-C. (1971). "Le Sanctuaire du Dieu au Lingot d'Enkomi-Alasia". In C. F. A. Schaeffer (ed.) *Alasia I*. Paris, Klincksieck: 151-362.

Courtois, J.-C. (1973). "Le Sanctuaire du Dieu au Lingot d'Enkomi-Alasia (Chypre) et les Lieux de Culte Contemporains en Méditerranée Orientale." *Comptes-Rendus des Séances de l'Année - Académie des Inscriptions et Belles-Lettres* 117(2): 223-246.

Courtois, J.-C. (1981). *Alasia II: Les Tombes d'Enkomi: Le Mobilier Funéraire (Fouilles C.F.-A. Schaeffer 1947-1965)*. Paris, Mission Archéologique d'Alasia.

Courtois, J.-C. (1984). *Alasia III. Les Objects des Niveaux Stratifiés d'Enkomi*. III. Paris.

Courtois, J.-C. (1988). "La Céramique de la Tombe 501 d'Enkomi 1950 du Chypriote Récent IIIA." *Report of the Department of Antiquities, Cyprus*: 301-305.

Courtois, J.-C. (1992). "Une Baignoire Monolithe en Calcaire du Bronze Récent à Enkomi". In G. C. Ioannides (ed.) *Studies in Honour of Vassos Karageorghis*. Nicosia, Society of Cypriot Studies: 151-154.

Courtois, J.-C., Lagarce, J. & Lagarce, E. (1986). *Enkomi et le Bronze Récent à Chypre*. Nicosia, A.G. Leventis Foundation.

Cowgill, G. L. (2000). "'Rationality' and contexts in agency theory". In M. Dobres and J. E. Robb (ed.) *Agency in Archaeology*. London & New York, Routledge: 51-60.

Crawford, H. (2004). *Sumer and the Sumerians, Second Edition*. Cambridge, Cambridge University Press.

Crewe, L. (1998). *Spindle Whorls: A Study of Form, Function and Decoration in Prehistoric Bronze Age Cyprus*. SIMA-PB 149. Jonsered, Paul Åströms förlag.

Crewe, L. (2004). *Social Complexity and Ceramic Technology on Late Bronze Age Cyprus: The New Evidence from Enkomi*, Unpublished Ph.D thesis submitted to the University of Edinburgh.

Crewe, L. (2007). *Early Enkomi: Regionalism, Trade and Society at the Beginning of the Late Bronze Age on Cyprus*. BAR International Series 1706. Oxford, Archaeopress.

Crewe, L. (2009). "Feasting with the Dead? Tomb 66 at Enkomi". In T. Kiely (ed.) *Ancient Cyprus in the British Museum. Essays in Honour of Veronic Tatton-Brown*. London, The British Museum: 27-48.

- Crewe, L. (2010). "Rethinking Kalopsidha: From Specialisation to State Marginalisation". In D. Bolger and L. C. Maguire (ed.) *The Development of Pre-State Communities in the Ancient Near East*. Oxford and Oakville, Oxbow Books: 63-71.
- Crewe, L., Graham, L. & McCarthey, A. (2008). "First preliminary report of excavations at Kissonerga-Skalia, 2007." *Report of the Department of Antiquities, Cyprus*: 105-120.
- Crewe, L., Lorentz, K., Peltenburg, E. J. & Spanou, S. (2005). "Treatments of the Dead: Preliminary Report of Investigations at Souskiou-Laona Chalcolithic Cemetery, 2001-2004." *Report of the Department of Antiquities, Cyprus*: 41-67.
- Crewe, L., Peltenburg, E. J. & Spanou, S. (2002). "Contexts for cruciforms: the figurines of Chalcolithic Cyprus." *Antiquity* 76: 21-22.
- Dalton, M. (2007). "The Egkomi Mapping Project." *Report of the Department of Antiquities, Cyprus*: 157-173.
- Daniel, J. F. (1938). "Excavations and Kourion: The Late Bronze Age Settlement-Provisional Report." *American Journal of Archaeology* 42(2): 261-275.
- d'Aquili, E. G. & Newberg, A. B. (1998). "The neuropsychological basis of religions, or 'why God won't go away.'" *Zygon* 33(2): 187-202.
- Darnell, J. C. (1995). "Hathor Returns to Medamûd." *Studien zur Altägyptischen Kultur* 22: 47-94.
- David, R. (2002). *Religion and Magic in Ancient Egypt*. London, Penguin.
- Davies, D. J. (2002). *Death, Ritual and Belief: The Rhetoric of Funerary Rites, Second Edition*. London, Continuum.

Davies, P. (1997). "Mortuary Practices in Prehistoric Bronze Age Cyprus. Problems and Potential." *Report of the Department of Antiquities, Cyprus*: 11-26.

Day, P. M. & Wilson, D. E. (1998). "Consuming power: Kamares ware in protopalatial Knossos." *Antiquity* 72(276): 350-358.

de Waal Malefijt, A. (1968). *Religion and Culutre: An Introduction to Anthropology of Religion*. Macmillan, New York.

Defteros, G. (2007). "Tomb Looters of Deneia: The Past as Property". In D. Frankel and J. Webb, M. (ed.) *The Bronze Age Cemeteries at Deneia in Cyprus*. Sävedalen, Paul Åströms förlag: 5-12.

Demarest, A. A. (1989). "Ideology and Evolutionism in America Archaeology: Looking Beyond the Economic Base". In C. C. Lamberg-Karlovsky (ed.) *Archaeological thought in America*. Cambridge, Cambridge University Press: 89-102.

Demattè, P. (2004). "Beyond Shamanism: Landscape and Self-expression in the Petroglyphs of Inner Mongolia and Ningxia (China)." *Cambridge Archaeological Journal* 14(1): 5-23.

Depauw, M. & Smith, M. (2004). "Visions of Ecstasy: Cultic Revelry Before the Goddess Ai/Nehemanit". In F. Hoffmann and H. J. Thissen (ed.) *Res severa verum gaudium : Festschrift für Karl-Theodor Zauzich zum 65. Geburtstag am 8. Juni 2004*. Leuven, Peeters: 67-93.

Díaz-Andreu, M. & Lucy, S. (2005). "Introduction". In M. Díaz-Andreu, S. Lucy, S. Babic and D. N. Edwards (ed.) *The Archaeology of Identity: Approaches to Gender, Age, Status, Ethnicity and Religion*. London, Routledge: 1-12.

Dietler, M. (1990). "Driven by Drink: The Role of Drinking in the Political

Economy and the Case of Early Iron Age France." *Journal of Anthropological Archaeology* 9: 352-406.

Dietler, M. (2006). "Alcohol: Anthropological/Archaeological Perspectives." *Annual Review of Anthropology* 35: 229-249.

Dietler, M. (2007). "Concluding Discussion". In N. Laneri (ed.) *Performing Death: Social Analyses of Funerary Traditions in the Ancient Near East and Mediterranean*. Chicago, The University of Chicago: 309-317.

Dikaios, P. (1936). "An Iron Age Painted Amphora in the Cyprus Museum." *Annual of the British School at Athens* 37: 56-72.

Dikaios, P. (1938). "The Excavations at Vounous-Bellapais in Cyprus, 1931-2." *Archaeologia* 88: 1-174.

Dikaios, P. (1940). *Excavations at Vounous-Bellapais in Cyprus, 1931-1932*. Oxford, Society of Antiquaries of London.

Dikaios, P. (1946). "An Iron Age Painted Amphora in the Cyprus Museum." *Annual of the British School at Athens* 37: 56-72.

Dikaios, P. (1960). "A Conspectus of Architecture in Ancient Cyprus." *Kypriaka Spoudai* 24: 1-30.

Dikaios, P. (1969-1971). *Enkomi Excavations 1948-1958 I-II*. Mainz am Rhein, Verlag Philipp von Zabern.

Djarvoskin, S. (2003). "How Sereptie Djarvoskin of the Nganasans (Tavgi Samoyeds) Became a Shaman". In G. Harvey (ed.) *Shamanism: A Reader*. New York, Routledge: 31-40.

- Dobkin de Rios, M. & Smith, D. (1977). "Drug Use and Abuse in Cross-cultural Perspectives." *Human Organization* 34(1): 14-21.
- Dobres, M. & Robb, J. E. (2000). "Agency in archaeology: paradigm or platitude?" In M. Dobres and J. E. Robb (ed.) *Agency in Archaeology*. London & New York, Routledge: 3-17.
- Dornan, J. L. (2002). "Agency and Archaeology: Past, Present and Future Directions." *Journal of Archaeological Method and Theory* 9(4): 303-329.
- Dornan, J. L. (2004). "Beyond Belief: Religious Experience, Ritual, and Cultural Neurophenomenology in the Interpretation of Past Religious Systems." *Cambridge Archaeological Journal* 14(1): 25–36.
- Dothan, T. (1981). "The High Place of Athienou in Cyprus". In A. Biran (ed.) *Temples and High Places in Biblical Times. Proceedings of the Colloquium in Honor of the Centennial of the Hebrew Union College-Jewish Institute of Religion, Jerusalem 14-16th March, 1977*. Jerusalem: 91-95.
- Dothan, T. & Ben-Tor, A. (1983). *Excavations at Athienou, Cyprus 1971-1972*. Qedem 16. Jerusalem, The Hebrew University of Jerusalem.
- Douglas, M. (1966). *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London, Routledge & Kegan Hall.
- Dowson, T. A. & Porr, M. (2001). "Special Objects - Special Creatures: Shamansitic Imagery and the Aurignacian Art of South-west Germany". In N. S. Price (ed.) *The Archaeology of Shamanism*. London & New York, Routledge: 165-177.

Driessen, J. (2002). "'The King Must Die.' Some Observations on the Use of Minoan Court Compounds". In J. Driessen, I. Schoep and R. Laffineur (ed.) *Monuments of Minos. Rethinking the Minoan Palaces*. Liège & Austin, Université de Liège & University of Texas at Austin: 1-15.

du Plat Taylor, J. (1952). "A Late Bronze Age Settlement at Apliki, Cyprus." *The Antiquaries Journal* 32: 133-167.

du Plat Taylor, J. (1956). "Late Cypriote III in the Light of Recent Excavation." *Paletine Exploration Quarterly* 88: 22-37.

du Plat Taylor, J. (1957). *Myrtou Pighades: A Late Bronze Age Sanctuary in Cyprus*. Oxford, Ashmolean Museum.

Ducos, P. (1971). "Les Ossement D'Animaux du Sanctuaire D'Enkomi". In C. F. A. Schaeffer (ed.) *Alasia I*. Paris, Klincksieck: 363-366.

Dugay, L. (1996). "Specialized Pottery Production on Bronze Age Cyprus and Pottery Use-ware Analysis." *Journal of Mediterranean Archaeology* 9(2): 167-192.

Dunn-Vaturi (2003). *Vounous: C.F.A. Schaeffer's Excavations in 1933. Tombs 49-79*. SIMA 130. Jonsered, Paul Åströms Förlag.

Ecsedy, I. (1979). *The People of the Pit-grave Kurgans*. Budapest, Akademiai Kiado.

Eerkens, J. (2002). "The Preservations and Identification of Piñon Resin by GC-MS in Pottery from the Western Great Basin." *Archaeometry* 44: 95-105.

Eerkens, J. W. (2005). "GC-MS Analysis and Fatty Acid Ratios of Archaeological Potsherds from the Western Great Basin of North America." *Archaeometry* 47(1): 83-102.

Eliade, M. (1962). *The Forge and the Crucible*. London, Rider & Company.

Eliade, M. (1964). *Shamanism: Archaic Techniques of Ecstasy*. Princeton and Oxford, Princeton University Press.

Emboden, W. A. (1978). "The Sacred Narcotic Lily of the Nile: *Nymphaea Caerulea*." *Economic Botany* 32(4): 395-407.

Emboden, W. A. (1981). "Transcultural Use of Narcotic Water Lilies in Ancient Egypt and Maya Drug Ritual." *Journal of Ethnopharmacology* 3: 39–83.

Emboden, W. A. (1989). "The Sacred Journey in Dynastic Egypt: Shamanistic Trance in the Context of the Narcotic Water Lily and the Mandrake." *Journal of Psychoactive Drugs* 21: 61-75.

Eriksson, K. O. (1991). "Red Lustrous Wheelmade Ware: A Product of Late Bronze Age Cyprus". In J. A. Barlow, D. L. Bolger and B. Kling (ed.) *Cypriot Ceramics: Reading the Prehistoric Record*. Philadelphia, University of Pennsylvania: 81-96.

Eriksson, K. O. (1993). *Red Lustrous Wheel-made Ware*. SIMA 103. Jonsered, Paul Åströms Förlag.

Eriksson, K. O. (2007). *The Creative Independence of Late Bronze Age Cyprus: An Account of the Archaeological Importance of White Slip Ware*. Wien, Verlag der Österreichischen Akademie der Wissenschaften.

Eriksson, K. O. (2008). "Feasting as part of the Multiculturalism of LBA Cyprus". In L. A. Hitchcock, R. Laffineur and J. Crowley (ed.) *DAIS, The Aegean Feast, Proceedings of the 12th International Aegean Conference, 25-29 March 2008, The University of Melbourne*. Liège, Université de Liège. 29: 297-307.

Evans, A. J. (1928). *The Palace of Minos: A Comparative Account of the Successive Stages of the Early Cretan Civilization as Illustrated by the Discoveries at Knossos II*. London, Macmillan.

Evans, A. J. (1930). *The Palace of Minos: A Comparative Account of the Successive Stages of the Early Cretan Civilization as Illustrated by the Discoveries at Knossos III*. London, Macmillan.

Evans, A. J. (1935). *The Palace of Minos: A Comparative Account of the Successive Stages of the Early Cretan Civilization as Illustrated by the Discoveries at Knossos IV*. London, Macmillan.

Evans, H. (1989). *Alternate States of Consciousness: Unself, Otherself, and Superself*. Wellingborough, The Anitquarian Press.

Evans, J. (1989). "Report in Merrillees, R.S., Highs and Lows in the Holy Land: Opium in Biblical Times." *Eretz-Israel. Archaeological, Historical and Geographical Studies* 20: 153-154.

Evans, J. (1990). "Come Back King Alfred, All is Forgiven". In W. R. Biers and P. E. McGovern (ed.) *Organic Contents of Ancient Vessels: Materials Analysis and Archaeological Investigation*. Philadelphia, MASCA, The University Museum of Archaeology and Anthropology, University of Pennsylvania. 7: 7-9.

Evershed, R. P. (2008). "Organic Residue Analysis in Archaeology: The Biomarker Revolution." *Archaeometry* 50(6): 895–924.

Evershed, R. P., Dudd, S. N., Lockheart, M. J. & Jim, S. (2001). "Lipids in Archaeology". In D. R. Brothwell and A. M. Pollard (ed.) *Handbook of Archaeological Sciences*. Chichester, New York, John Wiley & Sons: 331-349.

Evershed, R. P., Vaughan, S. J., Dudd, S. N. & Soles, J. S. (1999). "Organic Residue, Petrographic and Typological Analyses of Minoan Lamps and Conical Cups from Excavations at Mochlos in East Crete". In S. J. Vaughan and D. E. Coulson (ed.) *Palaeodiet in the Aegean*. Oxford, Oxbow Books: 37-54.

Fagles, R. (1996). *Homer: The Odyssey*. Bath, The Bath Press.

Fappas, I. (2010). *Well-scented, Perfume-Oil: Perfumed Oils and Practices of Use in Mycenaean Greece and the Ancient Near East (14th-13th cent. BC)*. Chania, Historical, Laographic and Archaeological Society of Crete.

Feldman, M. H. (2002). "Luxurious Forms: Redefining a Mediterranean "International Style," 1400-1200 B.C.E." *The Art Bulletin* 84(1): 6-29.

Firth (1996). *Religion: A Humanist Interpretation*. London, Routledge.

Flattery, D. S. & Schwartz, M. (1989). *Haoma and Harmaline: The Botanical Identity of the Indo-Iranian Sacred Hallucinogen "Soma" and its Legacy in Religion, Language, and Middle Eastern Folklore*. Berkeley, University of California Press.

Flourentzos, P. (1988). "Tomb Discoveries from the Necropolis of Ayia Paraskevi, Nicosia." *Report of the Department of Antiquities, Cyprus*: 121-125.

Flourentzos, P. (1999). "A Unique Jug with a Scenic Composition from Pyrgos (Limassol District)." *Journal of Prehistoric Religion* 13: 5-10.

Flourentzos, P. (2001). "Recent Rare Finds Related to the Cult and Everyday Life in Early/Middle Bronze Age Cyprus". In G. Buchholz (ed.) *Kreta & Cypern: Religion & Schrift*. Altenberg, Verlag für Kultur und Wissenschaft: 159-165.

Fogelin, L. (2007a). "The Archaeology of Religious Ritual." *Annual Review of Anthropology* 36: 55-71.

Fogelin, L. (2007b). "History, Ethnography, and Essentialism: The Archaeology of Religion and Ritual in South Asia". In E. Kyriakides (ed.) *The Archaeology of Ritual*. Los Angeles, Cotsen Institute of Archaeology, University of California, Los Angeles: 23-42.

Formenti, F. & Duthel, J. M. (1996). "The Analysis of Wine and Other Organics Inside Amphoras of the Roman Period". In P. E. McGovern, S. J. Flemming and S. H. Katz (ed.) *The Origins and Ancient History of Wine*. Amsterdam, Gordon and Breach Publishers: 79-85.

Fortin, M. (1995). "A cluster of MCIII-LCI fortified sites at Ayios Sozemenos". In C. Morris (ed.) *Klados: Essays in Honour of J.N. Coldstream*.

Frankel, D. (2000). "Migration and Ethnicity in Prehistoric Cyprus: Technology as Habitus." *European Journal of Archaeology* 3(2): 167-187.

Frankel, D. & Tamvaki (1973). "Cypriot Shrine Models and Decorated Tombs." *The Australian Journal of Biblical Archaeology* 2: 39-44.

Frankel, D. & Webb, J., M. (2006). "Deneia-Kafkalla 2004 Field Report." *Report of the Department of Antiquities, Cyprus*: 107-126.

Frankel, D. & Webb, J., M. (2007). *The Bronze Age Cemeteries at Deneia in Cyprus*. Sävedalen, Paul Åströms förlag.

Friedel, D. A., Schele, L. & Parker, J. (1993). *Maya Cosmos: Three Thousand Years on the Shaman's Path*. New York, William Morrow.

Furst, P. (ed.) (1972). *Flesh of the Gods: The Ritual Use of Hallucinogens*. Prospect Heights, Illinois, Waveland.

Furumark, A. (1941). *Mycenaean Pottery I: Analysis and Classification*. Stockholm, Kungl. Vitterhets, historie och antikvitets akademien.

Furumark, A. (1965). "The Excavations at Sinda: Some Historical Conclusions." *Opuscula Atheniensa* 6: 99-117.

Furumark, A. & Adelman, C. M. (2003). *Swedish Excavations at Sinda, Cyprus: Excavations conducted by Arne Furumark 1947-198*. Stockholm, Skrifter utgivna av Svenska Institutet i Athen.

Gabra, S. (1956). "Papaver Species and Opium through the Ages." *Bulletin de l'Institut d'Egypte* 37: 39-56.

Gargett, R. A. (1989). "Grave Shortcomings: The Evidence for Neandertal Burial." *Current Anthropology* 30(2): 157-190.

Geddes, W. R. (1976). *Migrants of the Mountains, The Cultural Ecology of the Blue Miao (Hmong Njua) of Thailand*. Oxford, Clarendon Press.

Geertz, C. (1973). *The Interpretation of Cultures*. London, Hutchison & Co.

Gejvall, N.-G. (1966). "Appendix IV: Osteological Investigation of Human and Animal Bone Fragments from Kalopsidha". In P. Åström (ed.) *Excavations at Kalopsidha and Ayios Iakovos in Cyprus*. Lund, Paul Åström. SIMA 2: 128-132.

Gellner, E. (1992). *Postmodernism, Reason and Religion*. London & New York, Routledge.

Georgiou, H. (1979b). "Relations between Cyprus and the Near East in the Middle and Late Bronze Age." *Levant* 11: 84-100.

Georgiou, H. S. (1979a). "Late Minoan Incense Burners." *American Journal of Archaeology* 83(4): 427-435.

Gerhardt, K. O., Searles, S. & Biers, W. R. (1990). "Corinthian Figure Vases: Non-Destructive Extraction and Gas Chromatography-Mass Spectrometry". In W. R. Biers and P. E. McGovern (ed.) *Organic Contents of Ancient Vessels: Materials Analysis and Archaeological Investigation*. Philadelphia, MASCA, The University Museum of Archaeology and Anthropology, University of Pennsylvania. 7: 41-50.

Germer, R. (1985). *Flora des Pharaonischen Ägypten*. Mainz, Phillip von Zabern.

Gernaey, A. M., Waite, E. R., Collins, M. J., Craig, O. E. & Sokol, R. J. (2001). "Survival and Interpretation of Archaeological Proteins". In D. R. Brothwell and A. M. Pollard (ed.) *Handbook of Archaeological Sciences*. Chichester, New York, John Wiley & Sons: 323-329.

Gero, J. M. (2000). "Troubled travels in agency and feminism". In M. Dobres and J. E. Robb (ed.) *Agency in Archaeology*. London & New York, Routledge: 34-39.

Gesell, G. C. (1976). "The Minoan Snake Tube: A Survey and Catalogue." *American Journal of Archaeology* 80(3): 247-259.

Gesell, G. C. (1985). *Town, Palace, and House Cult in Minoan Crete*. LXVII. Göteborg, Paul Åströms Förlag.

Gesell, G. C. (1987). "The Minoan Palace and Public Cult". In R. Hägg and N. Marinatos (ed.) *The Function of the Minoan Palaces : Proceedings of the Fourth International*

*Symposium at the Swedish Institute in Athens, 10-16 June, 1984.* Stockholm, Svenska Institutet i Athen: 123-128.

Gibson, M. (2010). "The Dead Hand of Deimel". In R. A. Carter and G. Phillip (ed.) *Beyond the Ubaid: Transformation and Integration in the Late Prehistoric Societies of the Middle East.* Chicago, University of Chicago: 85-92.

Giddens, A. (1979). *Central Problems in Social Theory.* London, Macmillan.

Giddens, A. (1984). *The Constitution of Society, Outline of the Theory of Structuration.* Berkeley and Los Angeles, University of California Press.

Gitin, S., Mazar, A. & Stern, E. (eds.) (1998). *Mediterranean Peoples in Transition.* Jerusalem, Israel Exploration Society.

Gjerstad, E. (1926). *Studies on Prehistoric Cyprus.* Uppsala, Uppsala Universitets Årsskrift.

Gjerstad, E. (1980). *Ages and Days in Cyprus.* SIMA PB 12. Göteborg, Paul Åströms Förlag.

Gjerstad, E., Lindros, J., Sjöqvist, E. & Westholm, A. (1934). *The Swedish Cyprus Expedition I. Finds and Results of the Excavations in Cyprus 1927-1931.* I. Stockholm, The Swedish Cyprus Expedition.

Gjerstad, E., Lindros, J., Sjöqvist, E. & Westholm, A. (1935). *The Swedish Cyprus Expedition II. Finds and Results of the Excavations in Cyprus 1927-1931.* II. Stockholm, The Swedish Cyprus Expedition.

Glazier, S. D. (1997). "Introduction". In S. D. Glazier (ed.) *Anthropology of Religion: A Handbook.* Wesport, Connecticut & London, Greenwood Press: 1-15.

- Godwin, H. (1967). "The Ancient Cultivation of Hemp." *Antiquity* 41: 42-49.
- Goodman, F. D. (1986). "Body Posture and the Religious Altered State of Consciousness: An Experimental Investigation." *Journal of Humanistic Psychology* 26(3): 81-118.
- Goody, J. (1962). *Death, Property and the Ancestors: A Study of the Mortuary Customs of the LoDagaa of West Africa*. London, Tavistock Publications.
- Goring, E. (1989). "Death in Everyday Life: Aspects of Burial Practice in the Late Bronze Age". In E. J. Peltenburg (ed.) *Early Society in Cyprus*. Edinburgh, Edinburgh University Press: 95-105.
- Gorny (1995). "Viticulture in Ancient Anatolia". In P. E. McGovern, S. J. Flemming and S. H. Katz (ed.) *The Origins and Ancient History of Wine*. Amsterdam, Gordon and Breach Publishers: 133-174.
- Gray, D. H. F. (1957). "The Sanctuary". In J. du Plat Taylor (ed.) *Myrtou Pighades: A Late Bronze Age Sanctuary in Cyprus*. Oxford, Ashmolean Museum: 103-111.
- Gregg, M. W., Banning, E. B., Gibbs, K. & Slater, G. F. (2009). "Subsistence Practices and Pottery Use in Neolithic Jordan: Molecular and Isotopic Evidence." *Journal of Archaeological Science* 36: 937–946.
- Guasch-Jané, M. R. (2008). *Wine in Ancient Egypt: A Cultural and Analytical Study*. BAR International Series 1851. Oxford, Archaeopress.
- Guasch-Jané, M. R., Andrés-Lacueva, C., Jáuregui, O. & Lamuela-Raventós, R. M. (2006). "The origin of the ancient Egyptian drink *Shedeh* revealed using LC/MS/MS." *Journal of Archaeological Science* 33: 98-101.

- Haas, V. (1994). *Geschichte de Hethitischen Religion*. Leiden, Brill.
- Hadjicosti, M. (1991). "The Late Bronze Age Tomb 2 from Mathiatis." *Report of the Department of Antiquities, Cyprus*: 75-91.
- Hadjisavvas, S. (1985). "A Late Cypriote II Tomb from Dhenia." *Report of the Department of Antiquities, Cyprus*: 133-136.
- Hadjisavvas, S. (1986). "Alassa. A New Late Cypriote Site." *Report of the Department of Antiquities, Cyprus*: 62-67.
- Hadjisavvas, S. (1989). "A Late Cypriot Community at Alassa". In E. J. Peltenburg (ed.) *Early Society in Cyprus*. Edinburgh, Edinburgh University Press: 32-42.
- Hadjisavvas, S. (1991). "LCIIC to LCIII A without Intruders: The Case of Alassa-Pano Mandilaris". In J. A. Barlow, D. L. Bolger and B. Kling (ed.) *Cypriot Ceramics: Reading the Prehistoric Record*. Philadelphia, University of Pennsylvania: 173-180.
- Hadjisavvas, S. (1992). "Olive Oil Production and Divine Protection". In P. Åström (ed.) *Acta Cypria 3: Acts of an International Congress on Cypriote Archaeology held in Göteborg on 22-24 August, 1991*. Jonsered, Paul Åströms förlag. 3: 233-249.
- Hadjisavvas, S. (1994). "Alassa Archaeological Project 1991-1993." *Report of the Department of Antiquities, Cyprus*: 107-114.
- Hadjisavvas, S. (1996). "Alassa: A Regional Center of Alasia?" In P. Aström and E. Herscher (ed.) *Late Bronze Age Settlement in Cyprus: Function and Relationship*. Jonsered, Paul Aströms Förlag. SIMA PB 126: 23-38.

Hadjisavvas, S. (2000). "Ashlar Buildings and their Role in Late Bronze Age Cyprus". In A. G. Ioannides and S. Hadjistryllis (ed.) *Praktika A', Third International Congress of Cypriot Studies, 16-20 April 1996*. Nicosia, Society of Cypriot Studies: 387-398.

Hadjisavvas, S. (2001a). "Crete and Cyprus: Religion and Script, The Case of Alassa". In H.-G. Buchholz (ed.) *Kreta & Cypern: Religion & Schrift*. Altenberg, Verlag für Kultur und Wissenschaft: 205-231.

Hadjisavvas, S. (2001b). "Seal Impressed Pithos Fragments from Alassa: Some Preliminary Thoughts". In P. M. Fischer (ed.) *Contributions to the Archaeology and History of the Bronze and Iron Ages in the Eastern Mediterranean. Studies in Honour of Paul Åström*. Vienna, Österreichisches Archäologisches Institut: 61-67.

Hadjisavvas, S. (2001c). "The Destruction of the Archaeological Heritage of Cyprus". In N. Brodie, J. Doole and C. Renfrew (ed.) *Trade in Illicit Antiquities: The Destruction of the World's Archaeological Heritage*. Cambridge, McDonald Institute for Archaeological Research: 133-139.

Hadjisavvas, S. (2003). *From Ishtar to Aphrodite: 3200 Years of Cypriot Hellenism*. New York, Alexander S. Onassis Public Benefit Foundation (USA).

Hadjisavvas, S. (2006). "Aspects of Late Bronze Age Trade as seen from Alassa-Pano Mandilaris". In C. E., H. I., H. H., M. D. and S. A. (ed.) *Timelines. Studies in Honour of Manfred Bietak, Vol II*. Leuven, Peeters: 449-453.

Hadjisavvas, S. & Hadjisavva, I. (1997). "Aegean Influence at Alassa". In D. Christou (ed.) *Proceedings of the International Archaeological Conference, Cyprus and the Aegean in Antiquity*. Nicosia, Department of Antiquities, Cyprus: 143-148.

Hägg, R. & Marinatos, N. (1981). *Sanctuaries and Cults in the Aegean Bronze Age, Proceedings of the First International Symposium at the Swedish Institute in Athens, 12-13 May, 1980*. Stockholm, Svenska Institutet i Athen.

Halifax, J. (1982). *Shaman: The Wounded Healer*. London, Thames and Hudson.

Hamilakis, Y. (1998). "Eating the Dead: Mortuary Feasting and the Politics of Memory in the Aegean Bronze Age Societies". In K. Branigan (ed.) *Cemetery and Society in the Aegean Bronze Age*. Sheffield, Sheffield Academic Press: 115-132.

Hamilakis, Y. (1999). "Food technologies/technologies of the body: the social context of wine and oil production and consumption in Bronze Age Crete." *World Archeology* 31(1): 38-54.

Hamilakis, Y. (2000). "The Anthropology of Food and Drink Consumption and Aegean Archaeology". In S. J. Vaughan and D. E. Coulson (ed.) *Palaeodiet in the Aegean*. Oxford, Oxbow Books: 55-63.

Hamilakis, Y. (2002). "Too Many Chiefs?: Factional Competition in Neopalatial Crete". In J. Driessen, I. Schoep and R. Laffineur (ed.) *Monuments of Minos: Rethinking the Minoan Palaces, Aegaeum 23*. Liège, Université de Liège & University of Texas at Austin: 179-199.

Hamilakis, Y. (2008). "From Feasting to an Archaeology of Eating and Drinking". In L. A. Hitchcock, R. Laffineur and J. Crowley (ed.) *DAIS, The Aegean Feast, Proceedings of the 12th International Aegean Conference, 25-29 March 2008, The University of Melbourne*. Liège, Université de Liège. 29: 3-19.

Hansen, J. (1989). "Botanical Remains". In A. K. South, P. Russell and P. S. Keswani (ed.) *Vasilikos Valley Project 3: Kalavassos-Ayios Dhimitrios 2. Ceramics Objects, Tombs, Specialist Studies*. Göteborg, Paul Åströms Förlag. SIMA 71:3.: 82-93.

Harner, M. (2003). "Discovering the Way". In G. Harvey (ed.) *Shamanism: A Reader*. New York, Routledge: 41-56.

Harper, N. K. & Fox, S. C. (2008). "Recent Research in Cypriot Bioarchaeology." *Bioarchaeology of the Near East 2*: 1-38.

Harvey, G. (2003). "General Introduction". In G. Harvey (ed.) *Shamanism: A Reader*. New York, Routledge: 1-23.

Haviland, W. A. (2002). "Culture and the Supernatural". (ed.) *Cultural Anthropology, 10th Edition*. Orlando, Harcourt Brace and Company: 360-380.

Hawkes, C. (1954). "Archaeological theory and method: some suggestions from the Old World." *American Anthropologist 56*: 155-168.

Hayden, B. (2001). "Fabulous Feasts: A Prolegomenon to the Importance of Feasting". In M. Dietler and B. Hayden (ed.) *Feasts: Archaeological and Ethnographic Perspectives on Food, Politics, and Power*. Washington and London, Smithsonian Institution Press: 23-64.

Hayden, B. (2003). *Shamans, Sorcerers and Saints*. Washington, Smithsonian Books.

Hayter, A. (1968). *Opium and the Romantic Imagination*. London, Faber and Faber.

Healy, J. F. (1995). "Death in West Semitic Texts: Ugarit and Nabataea". In S. Campbell and A. Green (ed.) *The Archaeology of Death in the Ancient Near East. Oxbow Monograph 51*. Oxford, Oxbow Books: 188-191.

Helms, M. W. (1993). *Craft & the Kingly Ideal. Art, Trade and Power*. Austin., University of Texas Press.

Helvenston, P. & Bahn, P. G. (2003). "Testing the 'Three Stages of Trance' Model." *Cambridge Archaeological Journal* 13(2): 213-224.

Helwing, B. (2003). "Feasts as a Social Dynamic in Prehistoric Western Asia - Three Case Studies from Syria and Anatolia." *Paléorient* 29(2): 63-86.

Hennessy, J. B. (1964). *Stephania: A middle and Late Bronze-Age Cemetery in Cyprus*. London, Bernard Quaritch Ltd.

Herscher, E. (1978). *The Bronze Age Cemetery at Lapithos, Vrysi Tou Barba, Cyprus; Results of the University of Pennsylvania Museum Excavation, 1931. Unpublished Phd Dissertation, University of Pennsylvania*.

Herscher, E. (1981). "Southern Cyprus, The Disappearing Early Bronze Age, and the Evidence from Phaneromeni". In J. C. Biers and D. Soren (ed.) *"Studies in Cypriote Archaeology"*. Los Angeles, Institute of Archaeology, University of California, Los Angeles: 79-85.

Herscher, E. (1984). "The Pottery of Maroni and Regionalism in Late Bronze Age Cyprus". In V. Karageorghis and J. D. Muhly (ed.) *Cyprus at the Close of the Late Bronze Age*. Nicosia, A.G. Leventis Foundation: 23-28.

Herscher, E. (1997). "Representational Relief on Early and Middle Cypriot Pottery". In V. Karageorghis, R. Laffineur and F. Vandenabeele (ed.) *Four Thousand Years of Images on Cypriote Pottery, Proceedings fo the Third International Conference of Cypriote Studies, Nicosia, 3-4 May, 1996*. Brussels - Liège - Nicosia, Leventis Foundation: 25-36.

Herscher, E. (1998). "The Origins of Base-Ring Ware: A Response to Bryant, French, Hoffman and Robinson." *Report of the Department of Antiquities, Cyprus*: 101.

Herscher, E. (2001). "Early Base Ring Ware from Phaneromeni and Maroni". In P. Åström (ed.) *The Chronology of Base-ring Ware and Bichrome Wheel-made Ware. Proceedings of a Colloquium held in the Royal Academy of Letters, History and Antiquities, Stockholm, May 18-19 2000*. Stockholm, Kungl. Vitterhets Historie och Antikvitets Akademien: 11-21.

Hertz, R. (1960). *A Contribution to the Study of the Collective Representation of Death. in Death and the Right Hand, Translated by R. Needham & C. Needham*. New York, Free Press.

Hesse, M. (2002). *Alkaloids: Nature's Curse or Blessing?* Zurich & Weinheim, Verlag Helvetica Chimica Acta & Wiley-VCH.

Hill, J. D. (1995). *Ritual and rubbish in the Iron Age of Wessex: a study on the formation of a specific archaeological record*. Oxford, Tempus Reparatum.

Hitchcock, L. A. (1999). "Cult(ural) Continuity and Regional Diversity: The Encoding of Aegean Form and Function in Late Bronze Age Cypriote Architecture." *Journal of Prehistoric Religion* 13: 10-21.

Hitchcock, L. A. (2000). *Minoan architecture, a contextual analysis*. Jonsered, Paul Åströms förlag.

Hitchcock, L. A. (2003). "'And above were costly stones, hewn according to measurement...': Documentation of Pre-Classical Ashlar Masonry in the East Mediterranean". In K. P. Foster and R. Laffineur (ed.) *Metron, Measuring the Aegean Bronze Age. Proceedings of the 9th International Aegean Conference, Aegaeum 24*. Liège & Austin, Université de Liège & University of Texas at Austin.

Hitchcock, L. A. (2004). *Mystifying Metal: Power and Identity at Late Bronze Age Enkomi*. Unpublished Paper presented at the American Schools of Oriental Research Annual Meeting, San Antonio, Texas, 18-20 November 2004.

Hitchcock, L. A. (2005). *Building domination: encoding Aegean ethnic identity in Cypriot archaeology*. Unpublished Paper presented at the American Schools of Oriental Research Annual Meeting, Philadelphia, Pennsylvania, 16-19 November 2005.

Hitchcock, L. A. (2009). "Knossos is Burning: Gender Bending the Minoan Genius". In K. Kopaka (ed.) *FYLO. Engendering Prehistoric 'Stratigraphies' in the Aegean and the Mediterranean*. *Aegaeum* 30. Liège & Austin, Université de Liège & University of Texas at Austin: 97-102.

Hnila, P. (2002). "Some Remarks on the Opium Poppy in Ancient Anatolia". In A. Rüstem, S. Blum, G. Kastl, F. Schweizer and D. Thumm (ed.) *Mauerschau: Festschrift für Manfred Korfmann*. Remshalden-Grunbach, Verlag Bernhard Albert Greiner 1: 315-328.

Hodder, I. (1982). *The Present Past*. London, Batsford.

Hodder, I. (1987). *The archaeology of contextual meanings*. Cambridge and New York, Cambridge University Press.

Hodder, I. (1987). "The contextual analysis of symbolic meaning". In I. Hodder (ed.) *The archaeology of contextual meanings*. Cambridge and New York, Cambridge University Press: 1-19.

Hodder, I. (1989). "Post-modernism, post-structuralism and post-processual archaeology". In I. Hodder (ed.) *The Meanings of things : material culture and symbolic expression*. London and Boston, Unwin Hyman: 64-78.

- Hodder, I. (1999). *The Archaeological Process : An Introduction*. Malden, Massachusetts, Blackwell.
- Hodder, I. (2000). "Agency and individual in long-term processes". In M. Dobres and J. E. Robb (ed.) *Agency in Archaeology*. London & New York, Routledge: 21-33.
- Hodder, I. (ed.) (2010). *Religion in the Emergence of Civilization: Çatalhöyük as a Case Study*. Cambridge, Cambridge University Press.
- Hodder, I. & Hutson, S. (2003). *Reading the Past, Current Approaches to Interpretation in Archaeology*. Cambridge, Cambridge University Press.
- Hodgson, B. (1999). *Opium, A portrait of the Heavenly Demon*. Vancouver, Greystone.
- Hodgson, D. (2006). "Altered States of Consciousness and Palaeoart: An Alternative Neurovisual Explanation." *Cambridge Archaeological Journal* 16(1): 27-37.
- Hoffner, H. A. J. (1974). *Alimenta Hethaeorum, Food Production in Hittite Asia Minor*. New Haven, American Oriental Society.
- Hood, S. (1987). "The Magico-Religious Background of the Minoan Villa". In R. Hägg and N. Marinatos (ed.) *The Function of the Minoan Palaces: Proceedings of the Fourth International Symposium at the Swedish Institute in Athens, 10-16 June, 1984*. Stockholm, Swedish Institute in Athens: 105-116.
- Horowitz, M. (2008). "Phlamoudhi-Vounari: A Multi-Function Site in Cyprus". In J. S. Smith (ed.) *Views from Phlamoudhi, Cyprus*. Boston, American Schools of Oriental Research: 69-85.
- Huckell, L. W. & VanPool, C. S. (2006). "Toloatzin and Shamanic Journeys: Exploring the

Ritual Role of Sacred Datura". In C. S. VanPool, T. L. VanPool and D. A. Phillips (ed.) *Religion of the Prehispanic Southwest*. Walnut Creek, AltaMira: 147–164.

Hughes-Brock, H. (1999). "Mycenaean Beads: Gender and Social Contexts." *Oxford Journal of Archaeology* 18(3): 277-296.

Hult, G. (1981). *Hala Sultan Tekke 7: Excavations in Area 8 in 1977*. SIMA 45:7. Göteborg, Paul Åströms Förlag.

Hult, G. (1992). "Nitovikla Reconsidered."

Hult, G. & McCaslin, D. (1978). *Hala Sultan Tekke 4: Excavations in Area 8 1974-75*. SIMA 45:4. Göteborg, Paul Åströms Förlag.

Iacovou, M. (1988). *The Pictorial Pottery of Eleventh Century B.C. Cyprus*. SIMA 78. Göteborg, Paul Åströms Förlag.

Iacovou, M. (1989). "Society and Settlements in Late Cypriot III". In E. J. Peltenburg (ed.) *Early Society in Cyprus*. Edinburgh, Edinburgh University Press: 52-58.

Iacovou, M. (1994). "The Topography of 11th Century B.C. Cyprus". In V. Karageorghis (ed.) *Cyprus in the 11th Century B.C.* Nicosia, A.G. Leventis Foundation: 149-165.

Iacovou, M. (2007). "Advocating Cyprocentrism: An Indigenous Model for the Emergence of State Formation on Cyprus". In S. White Crawford (ed.) *Up to the Gates of Ekron: Essays on the Archaeology and History of the Eastern Mediterranean in Honor of Seymour Gitin*. Jerusalem, W. F. Albright Institute of Archaeological Research/Israel Exploration Society: 461-471.

- Iacovou, M. (2008). "'The Palaepaphos Urban Landscape Project': Theoretical Background and Preliminary Report 2006-2007." *Report of the Department of Antiquities, Cyprus*: 263-289.
- Immerwahr, S. A. (1989). "The Pomegranate Vase: Its Origins and Continuity." *Hesperia* 58(4): 397-410.
- Insoll, T. (2004). *Archaeology, Ritual, Religion*. London & New York, Routledge.
- Insoll, T. (2007). "Introduction: Configuring Identities in Archaeology". In T. Insoll (ed.) *The Archaeology of Identities*. London, Routledge: 1-18.
- Ionas, I. (1984). "Stratigraphies of Enkomi." *Report of the Department of Antiquities, Cyprus*: 50-65.
- Jacobsson, I. (1989). "Appendix III: Two Alabaster Vessels and a Fragmentary Glass Vessel from Kazaphani". In I. Nicolaou and K. Nicolaou (ed.) *Kazaphani: A Middle/Late Cypriot Tomb at Kazaphani-Ayios Andronikos: T.2A, B*. Nicosia, Department of Antiquities, Cyprus: 111-112.
- Joffe, A. H. (1998). "Alcohol and Social Complexity in Ancient Western Asia." *Current Anthropology* 39(3): 297-322.
- Johnson, J. (1980). *Maroni de Chypre*. SIMA 59. Göteborg, Paul Åströms Förlag.
- Johnson, M. (1999). *Archaeological Theory, An Introduction*. Oxford, Blackwell.
- Johnstone, W. (1971). "A Late Bronze Age Tholos Tomb at Enkomi". In C. F. A. Schaeffer (ed.) *Alasia I*. Paris, Klincksieck: 51-122.
- Jones, S. (1997). *The Archaeology of Ethnicity*. London & New York, Routledge.

Julien, R. M. (2008). *A Primer of Drug Action: A Comprehensive Guide to the Actions, Uses, and Side Effects of Psychoactive Drugs*. New York, Worth Publishers.

Jung, R. (2009). "Pirates of the Aegean: Italy - the East Aegean - Cyprus at the end of the Second Millennium BC". In V. Karageorghis and O. Kouka (ed.) *Cyprus and the East Aegean, Intercultural Contacts from 3000 to 500 BC. An International Archaeological Symposium held at Pythagoreion, Samos, October 17th - 18th 2008*. Nicosia, A.G. Leventis Foundation: 72-93.

Kaplan, M. F. (1980). *The Origin and Distribution of Tell el Yahudiyeh Ware*. Göteborg, Paul Åströms Förlag.

Kaplan, M. F., Harbottle, G. & Sayre, E. V. (1984). "Tell El Yahudiyeh Ware: A Re-evaluation". In P. M. Rice (ed.) *Pots and Potters: Current Approaches in Ceramic Archaeology*. Los Angeles, Institute of Archaeology, UCLA: 227-241.

Kapoor, L. D. (1995). *Opium Poppy: Botany, Chemistry, and Pharmacology*. New York, Food Products Press.

Karageorghis, V. (1959). "Un Cylindre de Chypre." *Syria* 36(1-2): 111-118.

Karageorghis, V. (1960a). "Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1959." *Bulletin de Correspondance Hellénique*, 84(1): 242-299.

Karageorghis, V. (1960b). "Fouilles de Kition 1959." *Bulletin de Correspondance Hellénique*, 84(2): 504-588.

Karageorghis, V. (1961). "Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1960." *Bulletin de Correspondance Hellénique*, 85(1): 256-315.

Karageorghis, V. (1964a). "A Late Cypriote Tomb at Angastina." *Report of the Department of Antiquities, Cyprus*: 1-22.

Karageorghis, V. (1964b). "Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1963." *Bulletin de Correspondance Hellénique*, 88(1): 289-379.

Karageorghis, V. (1965a). *Nouveaux Documents pour l'Étude du Bronze Récent a Chypre*. Paris, En Dépôt aux Éditions E. De Boccard.

Karageorghis, V. (1965b). "A Late Cypriote Tomb at Tamassos." *Report of the Department of Antiquities, Cyprus*: 11-29.

Karageorghis, V. (1968). "Notes on a Late Cypriote Settlement and Necropolis Site Near the Larnaca Salt Lake." *Report of the Department of Antiquities, Cyprus*: 1-11.

Karageorghis, V. (1970a). "Two Religious Documents of the Early Cypriote Bronze Age." *Report of the Department of Antiquities, Cyprus*: 10-13.

Karageorghis, V. (1970b). "Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1969." *Bulletin de Correspondance Hellénique*, 94(1): 191-300.

Karageorghis, V. (1971). "Notes on Some Cypriote Priests Wearing Bull-Masks." *The Harvard Theological Review*, 64(2/3): 261-270.

Karageorghis, V. (1972). "Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1971." *Bulletin de Correspondance Hellénique*, 96(2): 1005-1088.

Karageorghis, V. (1974). *Excavations at Kition I. The Tombs*. Nicosia, Department of Antiquities, Cyprus.

Karageorghis, V. (1976a). "A twelfth-century BC opium pipe from Kition." *Antiquity* 50: 125-129.

Karageorghis, V. (1976b). *Kition: Mycenaean and Phoenician Discoveries in Cyprus*. London, Thames & Hudson.

Karageorghis, V. (1976c). "Two Late Bronze Age Tombs from Hala Sultan Tekke". In P. Åström, D. M. Bailey and V. Karageorghis (ed.) *Hala Sultan Tekke 1:Excavations 1897-1971*. Göteborg, Paul Åströms Förlag. SIMA 45:1: 70-89.

Karageorghis, V. (1976d). "Kypriaka III." *Report of the Department of Antiquities, Cyprus: 75-83*.

Karageorghis, V. (1976e). "Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1975." *Bulletin de Correspondance Hellénique*, 100(2): 839-906.

Karageorghis, V. (1981). "The Sacred Area of Kition". In, A. Biran, I. Pommerantz and H. Katzenstein (ed.) *Temples and High Places in Biblical Times*. Jerusalem, Nelson Glueck School of Biblical Archaeology of Hebrew Union College-Jewish Institute of Religion: 82-90.

Karageorghis, V. (1982). "Chronique des Fouilles et Découvertes Archéologiques à Chypre en 1981." *Bulletin de Correspondance Hellénique*, 106(2): 685-744.

Karageorghis, V. (1985). *Excavations at Kition 5. The Pre-Phoenician Levels, Part II*. Nicosia, Department of Antiquities, Cyprus.

Karageorghis, V. (1987). "Western Cyprus at the Close of the Bronze Age". In D. W. Rupp (ed.) *Western Cyprus: Connections*. Göteborg, Paul Åströms Förlag. SIMA 77.: 115-119.

Karageorghis, V. (1987b). "Kypriaka X." *Report of the Department of Antiquities, Cyprus*: 97-100.

Karageorghis, V. (1990). *Tombs at Palaepaphos*. Nicosia, A.G. Leventis Foundation.

Karageorghis, V. (1991). *The Coroplastic Art of Ancient Cyprus, Vol. 1. Chalcolithic-Late Cypriote I*. Cyprus ;, A. G. Leventis Foundation.

Karageorghis, V. (1992). " The Crisis Years, Cyprus". In W. A. Ward and M. S. Joukowsky (ed.) *The Crisis Years. The 12th Century BC from beyond the Danube to the Tigris*. Dubuque. 79-86.

Karageorghis, V. (1993). *The Coroplastic Art of Ancient Cyprus II. Late Cypriote II - Cypro-Geometric III*. Nicosia, A.G. Leventis Foundation.

Karageorghis, V. (1998a). "Hearths and Bathtubs in Cyprus: A "Sea Peoples" Innovation?" In S. Gitin, Mazar, A. & Stern, E. (ed.) *Mediterranean Peoples in Transition*. Jerusalem, Israel Exploration Society: 276-282.

Karageorghis, V. (1998b). "Mycenaean 'Acropoleis' in the Aegean and Cyprus: Some Comparisons". In E. H. Cline and D. Harris-Cline (ed.) *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium, Cincinnati, 18-20 April 1997*. *Aegaeum 18*. Cincinnati: 127-136.

Karageorghis, V. (2000a). "Cultural Innovations in Cyprus Relating to the Sea Peoples". In E. D. Oren (ed.) *The Sea Peoples and Their World: A Reassessment*. Philadelphia, The University Museum, University of Pennsylvania: 255-280.

Karageorghis, V. (2000b). *Ancient Art from Cyprus. The Cesnola Collection in The Metropolitan Museum of Art*. New York, The Metropolitan Museum of Art.

Karageorghis, V. (2002). *Early Cyprus*. Los Angeles, Getty Publishers.

Karageorghis, V. & Demas, M. (1984). *Pyla-Kokkinokremos, A Late 13th-Century B.C. Fortified Settlement in Cyprus*. Nicosia, Department of Antiquities, Cyprus.

Karageorghis, V. & Demas, M. (1985). *Excavations at Kition 5. The Pre-Phoenician Levels, Part I*. Nicosia, Department of Antiquities, Cyprus.

Karageorghis, V. & Demas, M. (1988). *Excavations at Maa-Palaeokastro 1979-1986*. Nicosia, Department of Antiquities, Cyprus.

Karageorghis, V. & Des Gagniers, J. (1974). *La céramique chypriote de style figuré: âge du fer (1050-500 av. J.-C.)*. Rome, Istituto per gli studi micenei ed egeo-anatolici.

Karageorghis, V. & Merrillees, R. S. (2007). "Imitations of Late Cypriote Pottery Found in Egypt." *Report of the Department of Antiquities, Cyprus*: 145-155.

Katz, R. (1976). "Education for Trancendence: !Kia-Healing with the Kalahari !Kung". In R. B. Lee and I. DeVore (ed.) *Kalahari Hunter-Gatherers: Studies of the !Kung San and their Neighbors*. Cambridge, Massachusetts, Harvard Unviersity Press: 279-301.

Katz, S. H. & Voigt, M. (1986). "Bread and Beer: The Early Use of Cereals in the Human Diet." *Expedition* 28(2): 23-34.

Kay, F. W. & Pictet, A. (1913). "Experiments on the Synthesis of apoMorphine." *Journal of the Chemical Society, Transactions* 103: 947 - 958.

Kehoe, A. B. (2000). *Shamans and Religion: An Anthropological Exploration in Critical Thinking*. Long Grove, Illinois, Waveland.

Kemp, B. H. (1992). "Old Kingdom, Middle Kingdom and Second Intermediate Period c.2686-1552 BC". In B. Trigger, B. H. Kemp, D. O'Connor and A. Lloyd (ed.) *Ancient Egypt: A Social History*. Cambridge, Cambridge University Press: 71-182.

Kenna, V. G. E. (1967a). "The Seal Use of Cyprus in the Bronze Age." *Bulletin de Correspondance Hellénique* 91(1): 255-268.

Kenna, V. G. E. (1967b). "The Seal Use of Cyprus in the Bronze Age, II." *Bulletin de Correspondance Hellénique* 91(2): 552-577.

Kenna, V. G. E. (1967c). "An Unpublished Cypriote Cylinder." *Bulletin de Correspondance Hellénique* 91(1): 251-254.

Kenna, V. G. E. (1968). "The Seal Use of Cyprus in the Bronze Age, III." *Bulletin de Correspondance Hellénique* 92(1): 142-153.

Kenna, V. G. E. (1972). "Glyptic". In P. Åström (ed.) *The Swedish Cyprus Expedition IV:1D. The Late Cypriote Bronze Age. Relative and Absolute Chronology, Foreign Relations and Historical Conclusions*. Lund, The Swedish Cyprus Expedition. IV: 623-674.

Kenyon, K. (1957). *Digging up Jericho*. London, Ernest Benn.

Keswani, P. S. (1989). "Dimensions of Social Hierarchy in Late Bronze Age Cyprus: an Analysis of the Mortuary Data from Enkomi." *Journal of Mediterranean Archaeology* 2(1): 49-86.

Keswani, P. S. (1993). "Models of Local Exchange in Late Bronze Age Cyprus." *Bulletin of the American School of Oriental Research* 292: 73-83.

Keswani, P. S. (1994). "The Social Context of Animal Husbandry in Early Agricultural Societies: Ethnographic Insights and an Archaeological Example from Cyprus." *Journal of Anthropological Archaeology* 13: 255-277.

Keswani, P. S. (1996). "Hierarchies, Heterarchies, and Urbanization Processes: The View from Bronze Age Cyprus." *Journal of Mediterranean Archaeology* 9(2): 211-250.

Keswani, P. S. (2004). *Mortuary Ritual and Society in Bronze Age Cyprus*. London, Equinox.

Keswani, P. S. (2005). "Death, Prestige, and Copper in Bronze Age Cyprus." *American Journal of Archaeology* 109: 341-401.

Keswani, P. S. & Knapp, A. B. (2003). "Bronze Age Boundaries and Social Exchange in North-West Cyprus." *Oxford Journal of Archaeology* 22(3): 213-223.

Kiely, T. (n.d.). *Ancient Cyprus in the British Museum*, [http://www.britishmuseum.org/system\\_pages/holding\\_area/ancient\\_cyprus\\_british\\_museum.aspx](http://www.britishmuseum.org/system_pages/holding_area/ancient_cyprus_british_museum.aspx), Trustees of the British Museum.

Kiev, A. (1968). "The Psychotherapeutic Value of Spirit-Possession in Haiti". In R. Prince (ed.) *Trance and Possession States. Proceedings of the Second Annual Conference of the R.M. Bucke Memorial Society, 4-6 March 1966, Montreal*. Montreal, R.M. Bucke Memorial Society: 143-148.

Kling, B. (1984). "Mycenaean IIC:1b Pottery in Cyprus: Principle Characteristics and Historical Context". In V. Karageorghis and J. D. Muhly (ed.) *Cyprus at the Close of the Late Bronze Age*. Nicosia, A.G. Leventis Foundation: 29-38.

Kling, B. (1987). "Pottery Classification and Relative Chronology of the LC IIC - LC IIIA Periods". In D. W. Rupp (ed.) *Western Cyprus: Connections*. Göteborg, Paul Åströms Förlag. SIMA 77.: 97-111.

Kling, B. (1989). *Mycenaean IIIC:1b and Related Pottery in Cyprus*. SIMA 87. Göteborg, Paul Åströms Förlag.

Kling, B. (1991). "A Terminology for the Matte-painted, Wheelmade Pottery of the Late Cypriote IIC-III A". In J. A. Barlow, D. L. Bolger and B. Kling (ed.) *Cypriot Ceramics: Reading the Prehistoric Record*. Philadelphia, University of Pennsylvania: 181-184.

Kling, B. (2000). "Mycenaean IIIC:1b and Related Pottery in Cyprus: Comments on the Current State of Research". In E. D. Oren (ed.) *The Sea Peoples and Their World: A Reassessment*. Philadelphia, The University Museum, University of Pennsylvania: 281-295.

Knapp, A. B. (1986). *Copper Production and Divine Protection: Archaeology, Ideology and Social Complexity on Bronze Age Cyprus*. SIMA-PB 42. Göteborg, Paul Åströms Förlag.

Knapp, A. B. (1988). "Ideology, Archaeology and Polity." *Man* 23: 133-163.

Knapp, A. B. (1989). "Spice, Drugs, Grain and Grog: Organic Goods in Bronze Age East Mediterranean Trade". In N. H. Gale (ed.) *Bronze Age Trade in the Mediterranean*. Jonsered, Paul Åströms Förlag: 21-68.

Knapp, A. B. (1990). "Production, Location and Integration in Bronze Age Cyprus." *Current Anthropology* 31: 147-76.

Knapp, A. B. (1993). "Power and Ideology on Prehistoric Cyprus". In P. Hellström and B. Alroth (ed.) *Religion and Power in the ancient Greek world: proceedings of the Uppsala Symposium 1993*. Uppsala, Ubalensis S. Academiae: 9-25.

Knapp, A. B. (1996a). "Settlement and Society on Late Bronze Age Cyprus: Dynamics and Development". In P. Åström and E. Herscher (ed.) *Late Bronze Age Settlement in Cyprus: Function and Relationship*. Jonsered, Paul Åströms Förlag. SIMA PB 126.

Knapp, A. B. (1996b). "The Bronze Age Economy of Cyprus: Ritual, Ideology, and the Sacred Landscape". In V. Karageorghis and D. Michaelides (ed.) *The Development of the Cypriot Economy from the Prehistoric Period to the Present Day*. Nicosia, University of Cyprus & the Bank of Cyprus: 71-106.

Knapp, A. B. (1997). *The Archaeology of Late Bronze Age Cypriot Society : The Study of Settlement, Survey and Landscape*. Glasgow, University of Glasgow.

Knapp, A. B. (2008). *Prehistoric and Protohistoric Cyprus: Identity, Insularity, and Connectivity*. Oxford, Oxford University Press.

Knapp, A. B. & Blake, E. (2005). "Prehistory in the Mediterranean: The Connecting and Corrupting Sea". In E. Blake and A. B. Knapp (ed.) *The Archaeology of Mediterranean Prehistory*. Oxford, Blackwell Publishing: 1-23.

Knapp, A. B., Donnelly, M. & Kassianidou, V. (1998). "Excavations at Politiko Phorades." *Report of the Department of Antiquities, Cyprus*: 247-268.

Knapp, A. B., Held, S. O. & Manning, S. (1994). "The Prehistory of Cyprus: Problems and Perspectives." *Journal of World Prehistory* 8(4): 377-453.

Knapp, A. B., Kassianidou, V. & Donnelly, M. (1999). "Excavations at Politiko Phorades." *Report of the Department of Antiquities, Cyprus*: 125-146.

- Knappett, C. (2005). "Pottery". In H. D. G. Maschner and C. Chippendale (ed.) *Handbook of Archaeological Methods*. Lanham, Alta Mira Press: 673-714.
- Koehl, R. (1981). "The Function of Aegean Bronze Age Rhyta". In R. Hägg and N. Marinatos (ed.) *Sanctuaries and cults in the Aegean Bronze Age : Proceedings of the First International Symposium at the Swedish Institute in Athens, 12-13 May, 1980*. Athens, Svenska Institutet i Athen: 179-187.
- Koschel, K. (1996). "Opium Alkaloids in a Cypriote Base Ring I Vessel (Bilbil) of the Middle Bronze Age from Egypt." *Ägypten und Levante* 6: 159-166.
- Krikorian, A. D. (1975). "Were the Opium Poppy and Opium Known in the Ancient Near East?" *Journal of the History of Botany* 8(1): 95-114.
- Kritikos, P. G. & Papadaki, S. P. (1967). "The history of the poppy and of opium and their expansion in antiquity in the eastern Mediterranean area." *Bulletin on Narcotics* 19(3): 17-38.
- Kroll, H. J. (1981). "Thessalische Kulturpflanzen." *Zeitschrift fuer Archäologie* 15: 97-103.
- Kroll, H. J. (1982). "Kulturpflanzen von Tiryns." *Archäologischer Anzeiger*: 467-485.
- Kroll, H. J. (1983). *Kastanas: Ausgrabungen in einem Siedlungshügel der Bronze- und Eisenzeit Makedoniens, 1975-1979: Die pflanzenfunde*. Prähistorische Archäologie in Südosteuropa Vol.2. Berlin, Verlag Volker Spiess.
- Kromholz, S. F. (1982). *The Bronze Age Necropolis at Ayia Paraskevi (Nicosia): Unpublished Tombs in the Cyprus Museum*. SIMA-PB 17. Göteborg, Paul Åströms Förlag.

Kyriakides, E. (2001). "The Economies of Potnia: storage in "Temples" of Prehistoric Greece". In R. Laffineur and R. Hägg (ed.) *Potnia, Deities and Religion in the Aegean Bronze Age, Aegaeum 22*. Liege, Université de Liège & University of Texas at Austin: 123-129.

Kyriakides, E. (ed.) (2007). *The Archaeology of Ritual*. Los Angeles, Cotsen Institute of Archaeology, University of California, Los Angeles.

Kyriakides, E. (2007a). "In Search of Ritual". In E. Kyriakides (ed.) *The Archaeology of Ritual*. Los Angeles, Cotsen Institute of Archaeology, University of California, Los Angeles: 1-8.

Kyriakides, E. (2007b). "Finding Ritual: Calibrating the Evidence". In E. Kyriakides (ed.) *The Archaeology of Ritual*. Los Angeles, Cotsen Institute of Archaeology, University of California, Los Angeles: 9-22.

La Barre, W. (1975). *The Peyote Cult*. Hamden, Connecticut, Archon Books.

Lagarce, J. & Lagarce, E. (1985). *Alasia IV: Deux Tombes du Chypriote Récent d'Enkomi (Chypre) Tombes 1851 et 1907*. Paris, Éditions Recherche sur les Civilisations.

Lamb, J. & Loy, T. (2005). "Seeing red: the use of Congo Red dye to identify cooked and damaged starch grains in archaeological residues." *Journal of Archaeological Science* 32: 1433-1440.

Lambert, J. B. (2005). "Archaeological Chemistry". In H. D. G. Maschner and C. Chippendale (ed.) *Handbook of Archaeological Methods*. Lanham, Alta Mira Press: 478-500.

Last, J. (2006). "Potted Histories: Towards an Understanding of Potsherds and their Contexts". In D. Papaconstantinou (ed.) *Deconstructing Context: A Critical Approach to Archaeological Practice*. Oxford, Oxbow Books: 120-137.

Lee, P. (2006). *Opium Culture: The Art and Ritual of the Chinese Tradition*. Rochester, Park Street Press.

Lee, R. B. (1968). "The Sociology of !Kung Bushman Trance Performances". In R. Prince (ed.) *Trance and Possession States. Proceedings of the Second Annual Conference of the R.M. Bucke Memorial Society, 4-6 March 1966, Montreal*. Montreal, R.M. Bucke Memorial Society: 35-54.

Lentini, A. & Scala, G. (2004). "Fragrants Substance and Therapeutic Compounds". In M. R. Belgiorno (ed.) *Pyrgos-Mavroraki: Advanced Technology in Bronze Age Cyprus*. Nicosia, Nicosia Archaeology Museum: 45-47.

Leonard Jr., A. (1995). "'Canaanite Jars' and the Late Bronze Age Aegeo-Levantine Wine Trade". In P. E. McGovern, S. J. Flemming and S. H. Katz (ed.) *The Origins and Ancient History of Wine*. Amsterdam, Gordon and Breach Publishers: 233-254.

Leone, M. P., Potter Jr., P. B. & Schackel, P. A. (1987). "Towards a Critical Archaeology." *Current Anthropology* 28(3): 283-302.

Leriu, A. (2007). "The Hellenisation of Cyprus: Tracing Its Beginnings". In M. Celka and J.-C. David (ed.) *Patrimoines culturels en Méditerranée orientale : recherche scientifique et enjeux identitaires. 1er atelier (29 novembre 2007): Chypre, une stratigraphie de l'identité*. Lyon, Maison de l'Orient et de la Méditerranée.  
[http://www.mom.fr/IMG/pdf/Leriu\\_ed-2.pdf](http://www.mom.fr/IMG/pdf/Leriu_ed-2.pdf): 1-33.

Leroi-Gourhan, A. (1975). "The Flowers Found with Shanidar IV, A Neandethal Burial in Iraq." *Science* 190(4214): 562-564.

- Lévi-Strauss, C. (1963). *Structural Anthropology*. New York, Basic Books.
- Lewis, G. (1980). *Day of Shining Red*. Cambridge, Cambridge University Press.
- Lewis, I. M. (1971). *Ecstatic Religion: An Anthropological Study of Spirit Possession and Shamanism*. Harmondsworth, Penguin Books.
- Lewis, T. J. (1996). "Toward A Literary Translation of the Rapiuma Texts,". In N. Wyatt, W. G. E. Watson and J. B. Lloyd (ed.) *Ugarit, Religion and Culture. Proceedings of the International Colloquium on Ugarit, Religion and Culture. Edinburgh, July 1994. Essays Presented in Honour of Professor John C. L. Gibson*. Münster, Ugarit -Verlag: 115-149.
- Lewis-Williams, J. D. (1999). "Wrestling with Analogy: A Methodological Dilemma in Upper Palaeolithic Art Research". In D. S. Whitley (ed.) *Reader in Archaeological Theory: Post-processual and Cognitive Approaches*. London and New York, Routledge: 157-175.
- Lewis-Williams, J. D. (2001). "Southern African Shamanistic Rock Art in its Social and Cognitive Contexts". In N. S. Price (ed.) *The Archaeology of Shamanism*. London & New York, Routledge: 17-39.
- Lewis-Williams, J. D. & Dowson, T. A. (1988). "The Signs of All Times: Entoptic Phenomena in Upper Palaeolithic Art." *Current Anthropology* 29(2): 201-245.
- Lo Schiavo, F., Macnamara, E. & Vagnetti, L. (1985). "Late Cypriot Exports to Italy and Their Influence on Local Bronzework." *Papers of the British School at Rome* LIII: 1-71.
- Loud, G. (1939). *The Megiddo Ivories*. Chicago, University of Chicago Press.

Loulloupis, M. C. (1979). "The Position of the Bull in the Prehistoric Religions of Crete and Cyprus". (ed.) *Acts of the International Archaeological Symposium, "The Relations Between Cyprus and Crete, ca. 2000-500 B.C."* Nicosia, Department of Antiquities, Cyprus: 215-222.

Ludwig, A. M. (1968). "Altered States of Consciousness". In R. Prince (ed.) *Trance and Possession States. Proceedings of the Second Annual Conference of the R.M. Bucke Memorial Society, 4-6 March 1966, Montreal.* Montreal, R.M. Bucke Memorial Society: 69-95.

Maddin, R., Muhly, J. D. & Wheeler, T. S. (1983). "Metal Working". In T. Dothan and A. Ben-Tor (ed.) *Excavations at Athienou, Cyprus 1971-1972.* Jerusalem, The Hebrew University of Jerusalem. Qedem 16: 132-138.

Maguire, L. C. (2009). *Tell El-Dab'a XXI, The Cypriote Pottery and its Circulation in the Levant.* Wien, Verlag der Österreichischen Akademie der Wissenschaften.

Maier, F. G. (1967). "Excavations at Kouklia (Palaepaphos) Site A, Preliminary Report on the Seasons 1952-1955 and 1966." *Report of the Department of Antiquities, Cyprus:* 30-49.

Maier, F. G. (1969). "Excavations at Kouklia (Palaepaphos). Third Preliminary Report: Season 1969." *Report of the Department of Antiquities, Cyprus:* 33-42.

Maier, F. G. (1974). "Excavations at Kouklia (Palaepaphos). Seventh Preliminary Report: Season 1973." *Report of the Department of Antiquities, Cyprus:* 132-146.

Maier, F. G. (1975). "The Temple of Aphrodite at Old Paphos." *Report of the Department of Antiquities, Cyprus:* 69-80.

Maier, F. G. (1976). "Excavations at Kouklia (Palaepaphos). Eighth Preliminary Report: Season 1975." *Report of the Department of Antiquities, Cyprus*: 92-97.

Maier, F. G. (1977). "Excavations at Kouklia (Palaepaphos). Ninth Preliminary Report: Season 1976." *Report of the Department of Antiquities, Cyprus*: 133-140.

Maier, F. G. (1978). "The Paphian Shrine of Aphrodite and Crete". (ed.) *Acts of the International Archaeological Symposium, "The Relations Between Cyprus and Crete, ca. 2000-500 B.C."* Nicosia, Department of Antiquities, Cyprus: 228-234.

Maier, F. G. (1979). "Excavations at Kouklia (Palaepaphos). Tenth Preliminary Report: Season 1977 and 1978." *Report of the Department of Antiquities, Cyprus*: 168-176.

Maier, F. G. & Karageorghis, V. (1984). *Paphos. History and Archaeology*. Nicosia, A.G. Leventis Foundation.

Maier, F. G. & Wartburg, M.-L. v. (1985). "Excavations at Kouklia (Palaepaphos). Thirteenth Preliminary Report: Season 1983 and 1984." *Report of the Department of Antiquities, Cyprus*: 100-125.

Malmgren, K. (2003). *Klavdhia-Tremithos: A Middle and Late Cypriote Bronze Age Site*. SIMA-PB 159. Jonsered, Paul Åströms Förlag.

Manniche, L. (1997). "Reflections on the Banquet Scene". In R. Tefnin (ed.) *La Peinture Égyptienne Ancienne, Nonumenta Aegyptica* 7. Bruxelles, Fondation Égyptologique Reine Élisabeth: 29-36.

Manning, S. (1993). "Prestige, Distinction, and Competition: The Anatomy of Socioeconomic Complexity in Fourth to Second Millennium B.C.E." *Bulletin of the American School of Oriental Research* 292: 35-58.

Manning, S. (1998a). "Changing Pasts and Socio-political Cognition in Late Bronze Age Cyprus." *World Archaeology* 30(1): 39-58.

Manning, S. (1998b). "Tsaroukkas, Mycenaens and Trade Project: Preliminary Report on the 1996-1997 Seasons." *Report of the Department of Antiquities, Cyprus*: 39-54.

Manning, S., Collon, D., Conwell, D. H., Jansen, H.-G., Sewell, D., Steel, L. & Swinton, A. (1994). "Tsaroukkas, Mycenaens and Trade Project: Preliminary Report on the 1993 Season." *Report of the Department of Antiquities, Cyprus*: 83-106.

Manning, S., Crewe, L. & Sewell, D. (2006). "Further Light on Early LCI Connections at Maroni". In C. E., H. I., H. H., M. D. and S. A. (ed.) *Timelines. Studies in Honour of Manfred Bietak, Vol II*. Leuven, Peeters: 471-488.

Manning, S. & Monks, S. J. (1998). "Late Cypriote Tombs at Maroni Tsaroukkas, Cyprus." *Annual of the British School at Athens* 93: 297-351.

Manning, S., Sewell, D. & Herscher, E. (2002). "Late Cypriote IA Maritime Trade in Action: Underwater Survey at Maroni Tsaroukkas and the Contemporary East Mediterranean Trading System." *Annual of the British School at Athens* 97: 97-162.

Marcus, J. (2007). "Rethinking Ritual". In E. Kyriakides (ed.) *The Archaeology of Ritual*. Los Angeles, Cotsen Institute of Archaeology, University of California, Los Angeles: 43-76.

Marcus, J. & Flannery, K. V. (2004). "The Coevolution of Ritual and Society: New 14C Dates from Ancient Mexico." *Anthropology* 101(52): 18257-18261.

Marinatos, N. (1986). *Minoan Sacrificial Ritual. Cult Practice and Symbolism*. Stockholm., Paul Åströms Förlag.

Marinatos, S. (1937). "Αι Μινωικαί Θησαυροὶ τῶν Γάζι." *Αρχαιολογική Εφημερίς*: 278-291.

Markides, M. (1916). *Annual Report of the Curator of Antiquities, 1915*. Cyprus Government Printing Office, Nicosia.

Masson, O. (1964). "Kypriaka I. Recherches sur les antiquités de Tamassos." *Bulletin de Correspondance Hellénique* 88(1): 199-238.

McCartney, C. (2010). "Outside the Corridor? The Neolithisation of Cyprus". In D. Bolger and L. C. Maguire (ed.) *The Development of Pre-State Communities in the Ancient Near East. Studies in Honour of Edgar Peltenburg*. Oxford, Oxbow Books: 185-196.

McClenon, J. (1997). "Shamanic Healing, Human Evolution and the Origin of Religion." *Journal for the Scientific Study of Religion* 36(3): 345-354.

McDonald, J. A. (2002). "Botanical Determination of the Middle Eastern Tree of Life." *Economic Botany* 56(2): 113-129.

McGovern, P. E. (1980). *Ornamental and Amuletic Jewelry Pendants of Late Bronze Age Palestine : An Archaeological Study*, Unpublished Ph.D. Thesis - University of Pennsylvania.

McGovern, P. E. (1997). "Wine of Egypt's Golden Age: An Archaeochemical Perspective." *Journal of Egyptian Archaeology* 86: 69-108.

McGovern, P. E. (2003). *Ancient Wine: The Search for the Origins of Viniculture*. Princeton, Princeton University Press.

- McGovern, P. E. (2004). "Fermented Beverages of Pre- and Proto-Historic China." *Proceedings of the National Academy of Sciences* 101(51): 17593-98.
- McGovern, P. E., Glusker, D. L., Exner, L. J. & Hall, G. R. (2008). "The Chemical Identification of Wine and Fermented Beverages in Bronze Age Pottery Vessels". In Y. Tzedakis, H. Martlew and M. K. Jones (ed.) *Archaeology Meets Science: Biomolecular Investigations in Bronze Age Greece, The Primary Scientific Evidence 1997-2003*. Oxford, Oxbow: 169-218.
- McGovern, P. E. & Michel, R. H. (1996). "The Analytical and Archaeological Challenge of Detecting Ancient Wine: Two Case Studies from the Ancient Near East". In P. E. McGovern, S. J. Flemming and S. H. Katz (ed.) *The Origins and Ancient History of Wine*. Amsterdam, Gordon and Breach Publishers: 57-65.
- McGovern, P. E., Mirzoian, A. & Hall, G. R. (2009). "Ancient Egyptian Herbal Wines." *Proceedings of the National Academy of Sciences* 106: 7361-7366.
- McGowan, E. (2006). "Experiencing and experimenting with embodied archaeology: Re-embodiment of the sacred gestures of Neopalatial Minoan Crete." *Archaeological Review from Cambridge* 21(2): 32-57.
- McLaughlin, J. L. (2001). *The Marzeah in the Prophetic Literature, References and Allusions in Light of the Extra-Biblical Evidence*. Leiden, Brill.
- Mee, C. & Steel, L. (1998). *Corpus of Cypriote Antiquities: The Cypriote Collections in the University of Liverpool and the Williamson Art Gallery and Museum*. SIMA 20:17. Jonsered, Paul Åströms Förlag.
- Megaloudhi, F. (2005). "Wild and Cultivated Vegetables, Herbs and Spices in Greek Antiquity (900 B.C. to 400 B.C.)." *Environmental Archaeology* 10: 73-82.

- Merlin, M. D. (1984). *On the Trail of the Ancient Opium Poppy*, Associated University Press.
- Merlin, M. D. (2003). "Archaeological Evidence for the Tradition of Psychoactive Plant Use in the Old World." *Economic Botany* 57(3): 295-323.
- Merrillees, R. S. (1962). "Opium Trade in the Bronze Age Levant." *Antiquity* 36: 287-292.
- Merrillees, R. S. (1965). "Reflections on the Late Bronze Age in Cyprus." *Opuscula Atheniensia* 6: 139-148.
- Merrillees, R. S. (1968). *The Cypriote Bronze Age Pottery Found in Egypt*, Lund.
- Merrillees, R. S. (1971). "The Early History of Late Cypriote I." *Levant* 3: 56-79.
- Merrillees, R. S. (1974). *Trade and Transcendence in the Bronze Age Levant*. Göteborg, P. Åström.
- Merrillees, R. S. (1979). "Opium Again in Antiquity." *Levant* 11: 167-171.
- Merrillees, R. S. (1982). "Metal Vases of Cypriot Type from the 16th to 13th Centuries B.C." In J. D. Muhly, R. Maddin and V. Karageorghis (ed.) *Early Metallurgy in Cyprus*. Nicosia, Pierides Foundation: 233-250.
- Merrillees, R. S. (1983). "Late Cypriote Pottery from Byblos "Nécropole K"." *Report of the Department of Antiquities, Cyprus*: 181-192.
- Merrillees, R. S. (1985). "A Late Cypriote Bronze Age Tomb and its Asiatic Connections". In J. N. Tubb (ed.) *Palestine in the Bronze and Iron Ages: Papers in honour of Olga Tufnell*. London, Institute of Archaeology: 114-120.

Merrillees, R. S. (1986). "A 16th Century B.C. Tomb Group from Central Cyprus with Links Both East and West". In V. Karageorghis (ed.) *Acts of the International Archaeological Symposium "Cyprus between the Orient and the Occident," Nicosia, 8-14 September 1985*. Nicosia, Department of Antiquities, Cyprus: 114-148.

Merrillees, R. S. (1988). "Mother and Child: A Late Cypriote Variation on an Eternal Theme." *Mediterranean Archaeology* 1: 42-56.

Merrillees, R. S. (1989). "Highs and Lows in the Holy Land: Opium in Biblical Times." *Eretz-Israel. Archaeological, Historical and Geographical Studies* 20: 148-154.

Merrillees, R. S. (1989). "Appendix II: Incised Base-Ring I Ware from Kazaphani Ayios Andronikos". In I. Nicolaou and K. Nicolaou (ed.) *Kazaphani: A Middle/Late Cypriot Tomb at Kazaphani-Ayios Andronikos: T.2A, B*. Nicosia, Department of Antiquities, Cyprus: 109-110.

Merrillees, R. S. (1992). "The Government of Cyprus in the Late Bronze Age". In P. Åström (ed.) *Acta Cypria 3: Acts of an International Congress on Cypriote Archaeology held in Göteborg on 22-24 August, 1991*. Jonsered, Paul Åströms förlag. 3: 310-329.

Merrillees, R. S. (2007). "Not Quite "Stoned in the Stone Age": A Unique White Slip I "Opium" Juglet from Cyprus". In S. White Crawford, A. Ben-Tor, J. P. Deselet al (ed.) *"Up to the Gates of Ekron": Essays on the Archaeology and History of the Eastern Mediterranean in Honour of Seymour Gitin*. Jerusalem, Israel Exploration Society: 484-487.

Metcalf, P. & Huntington, R. (1991). *Celebrations of Death: The Anthropology of Mortuary Ritual, Second Edition*. Cambridge, Cambridge University Press.

Meyer, J. S. & Quenzer, L. F. (2005). *Psychopharmacology: Drugs, the Brain, and Behavior*. Sunderland, Massachusetts, Sinauer Associates.

Michalowski, P. (1994). "The Drinking Gods: Alcohol in Mesopotamian Ritual and Mythology". In L. Milano (ed.) *Drinking in Ancient Societies: History and Culture of Drinks in the Ancient Near East, Papers of a Symposium held in Rome, May 17-19 1990*. Padova, Sargon: 27-44.

Milano, L. (1989). "Food and Diet in Pre-Classical Syria". In C. Zaccagnii (ed.) *Production and Consumption in the Ancient Near East*. Budapest, Egyptological Department, University of Budapest: 201-271.

Milano, L. (ed.) (1994). *Drinking in Ancient Societies: History and Culture of Drinks in the Ancient Near East, Papers of a Symposium held in Rome, May 17-19 1990*. Padova, Sargon.

Miller, D. & Tilley, C. (eds.) (1984). *Ideology, Power and Prehistory*. Cambridge, Cambridge University Press.

Modarressi, T. (1968). "The Zar Cult in South Iran". In R. Prince (ed.) *Trance and Possession States. Proceedings of the Second Annual Conference of the R.M. Bucke Memorial Society, 4-6 March 1966, Montreal*. Montreal, R.M. Bucke Memorial Society: 149-155.

Moffat, A. C., Osselton, M.-D. & Widdop, B. (2004). *Clarke's Analysis of Drugs and Poisons. 3rd ed.* London, Pharmaceutical Press.

Morris, B. (2006). *Religion and Anthropology: A Critical Introduction*. Cambridge, Cambridge University Press.

Morris, C. (2001). "The Language of Gesture in Minoan Religion". In R. Laffineur and R. Hägg (ed.) *Potnia, Deities and Religion in the Aegean Bronze Age, Aegaeum 22*. Liege, Université de Liège & University of Texas at Austin: 245-251.

Morris, C. & Peatfield, A. (2002). "Feeling through the Body: Gesture in Cretan Bronze Age Religion". In Y. Hamilakis, M. Pluciennik and S. Tarlow (ed.) *Thinking through the Body: Archaeologies of Corporeality*. New York, Kluwer Academic & Plenum Publishers: 105-120.

Morris, C. & Peatfield, A. (2004). "Experiencing Ritual: Shamanic Elements in Minoan Ritual". In M. Wedde (ed.) *Celebrations: Selected Papers and Discussions from the Tenth Anniversary Symposium of the Norwegian Institute at Athens, 12-16 May 1999*. Bergen, Norwegian Institute at Athens: 35-59.

Morris, C. E. & Peatfield, A. A. D. (1995). "Pottery from the peak sanctuary of Atsipadhes Korakias, Ay. Vasiliou, Rethymnon." In N. E. Papadogiannakis (ed.) *Pepragmena tou Z' Diethnous Kritologikou Synedriou, Vol. A2: Tmima Archaiologiko*. Rethymno, Iera Mitropolis Rethymnis & Aulopotamou: 643-647.

Morris, D. (1985). *The Art of Ancient Cyprus*. Oxford, Phaidon.

Morris, I. (1987). *Burial and Ancient Society, the Rise of the Greek City-State*. Cambridge, Cambridge University Press.

Mountjoy, P. A. (2001). *Mycenaen Pottery: An Introduction*. Oxford, Oxford University School of Archaeology.

Muhly, J. D. (1982). "The Nature of Trade in the LBA East Mediterranean: The Organization of the Metals' Trade and the Role of Cyprus". In J. D. Muhly, R. Maddin and V. Karageorghis (ed.) *Early Metallurgy in Cyprus*. Nicosia, Pierides Foundation: 251-268.

Muhly, J. D. (1984). "The Role of the Sea Peoples in Cyprus during the LCIII Period". In V. Karageorghis and J. D. Muhly (ed.) *Cyprus at the Close of the Late Bronze Age*. Nicosia, A.G. Leventis Foundation.

Muhly, J. D. (1986). "The Role of Cyprus in the Economy of the Eastern Mediterranean During the Second Millenium B.C." In V. Karageorghis (ed.) *Acts of the International Archaeological Symposium "Cyprus between the Orient and the Occident," Nicosia, 8-14 September 1985*. Nicosia, Depttment of Antiquities, Cyprus: 45-62.

Muhly, J. D. (1989). "The Organisation of the Copper Industry in Late Bronze Age Cyprus". In E. J. Peltenburg (ed.) *Early Society in Cyprus*. Edinburgh, Edinburgh University Press: 298-314.

Murray, A. S., Smith, A. H. & Walters, H. B. (1900). *Excavations in Cyprus*. London, The British Museum.

Murray, M. A. (2000). "Viticulture and Wine Production". In P. T. Nicholson and I. Shaw (ed.) *Ancient Egyptian Materials and Technology*. Cambridge, Cambridge University Press.

Myers, J. L. (1897). "Excavations in Cyprus in 1894." *The Journal of Hellenic Studies* 17: 134-173.

Myers, J. L. (1940-1945). "Excavations in Cyprus, 1913: A Bronze Age Cemetery at Lapithos." *Annual of the British School at Athens* 41(78-85).

Myers, J. L. & Ohnefalsch-Richter, M. (1899). *A Catalogue of the Cyprus Museum*. Oxford, Clarendon Press.

- Negbi, O. (1976). *Canaanite Gods in Metal, An Archaeological Study of Ancient Syro-Palestinian Figurines*. Tel Aviv, Tel Aviv Univeristy, Institute of Archaeology.
- Negbi, O. (1978). "Cypriote Imitations of Tell el-Yahudiyeh Ware from Toumba tou Skourou." *American Journal of Archaeology* 82(2): 137-149.
- Negbi, O. (1986). "The Climax of Urban Development in Bronze Age Cyprus." *Report of the Department of Antiquities, Cyprus*: 97-121.
- Neher, A. (1962). "A Physiological Explanation of Unusual Behaviour in Ceremonies Involving Drums." *Human Biology* 34: 151-160.
- Nencini, P. (2002). "The Shaman and the Rave Party: Social Pharmacology of Ecstasy." *Substance Use and Misuse* 37(8-10): 923–939.
- Nicgorski, A. M. (1999). "Polypus and the Poppy: Two Unusual Rhyta from the Mycenaean Cemetary at Mochlos". In P. P. Betancourt (ed.) *Meletemata : studies in Aegean archaeology presented to Malcolm H. Wiener as he enters his 65th year, Aegaeum 20*. Liège, Université de Liège: 538-541.
- Nicolaou, I. & Nicolaou, K. (1988). "The Dhenia "Kafkalla" and "Mali" Tombs." *Report of the Department of Antiquities, Cyprus*: 71-120.
- Nicolaou, I. & Nicolaou, K. (1989). *Kazaphani: A Middle/Late Cypriot Tomb at Kazaphani-Ayios Andronikos: T.2A, B*. Nicosia, Department of Antiquities, Cyprus.
- Nicolaou, K. (1972). "A Late Cypriote Necropolis at Ankastina in the Mesaoria." *Report of the Department of Antiquities, Cyprus*: 58-105.
- Nicolaou, K. (1983). "A Late Cypriote Necropolis at Yeroskipou, Paphos." *Report of the Department of Antiquities, Cyprus*: 142-152.

Niemeier, W.-D. (ed.) (1981). *Corpus der Minoischen und Mykenischen Siegel, V.I.* Berlin, Mann.

Niklasson, K. (1991). *Early Prehistoric Burials in Cyprus*. Jonsered, Paul Åströms Förlag.

Niklasson-Sönnerby, K. (1987). "Late Cypriote III Shaft Graves: Burial Customs of the Last Phase of the Bronze Age". In R. Laffineur (ed.) *Thanatos: Les coutumes funéraires en Egée à l'âge du Bronze*. Liege, Université de Liège & University of Texas at Austin.

Öbrink, U. (1979a). *Hala Sultan Teke 5: Excavations in Area 22*. SIMA 45:5. Göteborg, Paul Åströms Förlag.

Öbrink, U. (1979b). *Hala Sultan Teke 6: A Sherd Deposit in Area 22*. SIMA 45:6. Göteborg, Paul Åströms Förlag.

O'Connor, D. (2000). "The Sea Peoples and the Egyptian Sources". In E. D. Oren (ed.) *The Sea Peoples and Their World: A Reassessment*. Philadelphia, The University Museum, University of Pennsylvania: 85-102.

Ogalde, J. P., Arriaza, B. T. & Soto, E. C. (2009). "Identification of Psychoactive Alkaloids in Ancient Andean Human Hair by Gas Chromatography/Mass Spectrometry." *Journal of Archaeological Science* 36: 467–472.

Oren, E. D. (ed.) (2000). *The Sea Peoples and Their World: A Reassessment*. Philadelphia, The University Museum, University of Pennsylvania.

Osborne, R. (2004). "Hoards, votives offerings: the archaeology of the dedicated object." *World Archeology* 36(1): 1-10.

Oustric-Mendes, A.-C., Huart, B., Le Hoang, M.-D., Perrin-Rosset, M., Pailler, F.-M., Darbord, J.-C., Prognon, P., Gard, C. & Pradeau, D. (1997). "Study Protocol: Stability of Morphine Injected Without Preservative, Delivered with a Disposable Infusion Device." *Journal of Clinical Pharmacy and Therapeutics* 22: 283–290.

Overbeck, J. C. & Swiny, S. (1972). *Two Cypriote Bronze Age Sites at Kafkallia (Dhali)*. SIMA 33. Göteborg, Paul Åströms Förlag.

Oxenham, M. F., Locher, C., Nguyen, L. C. & Nguyen, K. T. (2002). "Identification of *Areca catechu* (Betel Nut) Residues on the Dentitions of Bronze Age Inhabitants of Nui Nap, Northern Vietnam." *Journal of Archaeological Science* 29: 909-915.

Özgüç, T. (1966). *Masat Höyük II*. Ankara, Türk Tarih Kurumu Basimevi.

Özgüç, T. (1986). *Kültepe-Kanis II*. Ankara, Türk Tarih Kurumu Basimevi.

Özgüç, T. (1988). *Inandiktepe: An Important Cult Centre in the Old Hittite Period*. Ankara, Türk Tarih Kurumu Basim Evi.

Pader, E.-J. (1982). *Symbolism, Social Relations and the Interpretation of Mortuary Remains*. Oxford, B.A.R.

Pararas, Y. (2008). *Immovable Offertory Installations in Late Bronze Age Cyprus*. SIMA-PB 174. Sävedalen, Paul Åströms förlag.

Pardee, D. (1996). "Marzihu, Kispu, and the Ugaritic Funerary Cult: A Minimalist View". In N. Wyatt, W. G. E. Watson and J. B. Lloyd (ed.) *Ugarit, Religion and Culture. Proceedings of the International Colloquium on Ugarit, Religion and Culture. Edinburgh, July 1994. Essays Presented in Honour of Professor John C. L. Gibson*. Münster, Ugarit -Verlag: 273-287.

- Pardee, D. (2002). *Ritual and Cult at Ugarit*. Atlanta, Society of Biblical Literature.
- Park, R. (2007). *Introduction of Syrian drug plants in Egypt during the 18th Dynasty. Unpublished Paper Presented at the British Association for Near Eastern Archaeology Annual Conference, "Drugs, Bugs, and Health in the Ancient Near East", The Medical School, University of Birmingham, 1-2 April 2007.*
- Parker Pearson, M. (1984a). "Economic and Ideological Change: Cyclical Growth in the Pre-State Societies of Jutland". In D. Miller and C. Tilley (ed.) *Ideology, Power and Prehistory*. Cambridge, Cambridge University Press: 69-92.
- Parker Pearson, M. (1984b). "Social Change, Ideology and the Archaeological Record". In M. Spriggs (ed.) *Marxist Perspectives in Archaeology*. Cambridge, Cambridge University Press: 59-71.
- Parker Pearson, M. (1999). *The Archaeology of Death and Burial*. College Station, Texas A&M University Press.
- Parker, R. (1983). *Miasma, Pollution and Purification in Early Greek Religion*. Oxford, Oxford University Press.
- Parker, S. B. E. (1997). *Ugaritic Narrative Poetry*. Atlanta, Scholars Press.
- Pászthory, E. (1996). "Opium im alten Ägypten." *Chemie in Unserer Zeit* 30(2): 96-102.
- Patch, D. C. (2005). "Jewelry in the Early Eighteenth Dynasty". In C. H. Roehrig (ed.) *Hatshepsut: From Queen to Pharaoh*. New York, Metropolitan Museum of Art.
- Pearlman, D. (1985). "Kalavassos Village Tomb 51: Tomb of an Unknown Soldier." *Report of the Department of Antiquities, Cyprus*: 164-179.

- Pearson, J. L. (2002). *Shamanism and the Ancient Mind: A Cognitive Approach to Archaeology*. Walnut Creek, AltaMira Press.
- Peatfield, A. (1981). "Review of Karageorghis, J. (1997) *La grande déesse de Chypre et son culte, à travers l'iconographie, de l'époque néolithique au VIème s. a.C.*" *Journal of Hellenic Studies* 101: 185.
- Peatfield, A. A. D. (1990). "Minoan Peak Sanctuaries: History and Society." *Opuscula Atheniensia* XVIII(8): 117-131.
- Peatfield, A. A. D. (1992). "Rural ritual in Bronze Age Crete: the Peak Sanctuary at Atsipadhes." *Cambridge Archaeological Journal* 2(1): 59-87.
- Peatfield, A. A. D. (1994). "The Atsipadhes Korakias Peak Sanctuary Project." *Classics Ireland* 1: 90-95.
- Peatfield, A. A. D. (2001). "Divinity and Performance on Minoan Peak Sanctuaries". In R. Laffineur and R. Hägg (ed.) *Potnia, Deities and Religion in the Aegean Bronze Age, Aegaeum* 22. Liege, Université de Liège & University of Texas at Austin: 51-55.
- Pecorella, P. E. (1976). "Alcune Note sulla Ceramica della Necropoli di Ayia Irini, in Località "Paleokastro"." *Report of the Department of Antiquities, Cyprus*: 57-65.
- Pecorella, P. E. (1977). *Le Tombe dell'Età del Bronzo Tardo della Necropoli a Mare di Ayia Irini*. Rome, Consiglio Nazionale delle Ricerche Istituto per gli Studi Micenei ed Egeo-Anatolici.
- Pedley (2005). *Sanctuaries and the Sacred in the Ancient Greek World*. Cambridge, Cambridge University Press.

Peltenburg, E. J. (ed.) (1985). *Lemba Archaeological Project I. Excavations at Lemba-Lakkous, 1976-1983*. SIMA 70:1. Göteborg, Paul Åströms Förlag.

Peltenburg, E. J. (1986a). "Ramesside Egypt and Cyprus". In V. Karageorghis (ed.) *Acts of the International Archaeological Symposium "Cyprus between the Orient and the Occident," Nicosia, 8-14 September 1985*. Nicosia, Department of Antiquities, Cyprus: 149-179.

Peltenburg, E. J. (1986b). "Review of T. Dothan and A. Ben-Tor, Excavations at Athienou, Cyprus 1971-1972, Qedem 16 (1983)." *Paletine Exploration Quarterly* 157.

Peltenburg, E. J. (1989). "The Beginnings of Religion in Cyprus". In E. J. Peltenburg (ed.) *Early Society in Cyprus*. Edinburgh, Edinburgh University Press: 108-124.

Peltenburg, E. J. (ed.) (1991). *Lemba Archaeological Project. Vol. II.2. A Ceremonial Area at Kissonerga*. SIMA 70:3. Göteborg, Paul Åströms Förlag.

Peltenburg, E. J. (1993). "Settlement Discontinuity and Resistance to Complexity in Cyprus, ca. 4500-2500 B. C. E." *Bulletin of the American School of Oriental Research* 292: 9-23.

Peltenburg, E. J. (1994). "Constructing Authority: The Vounous Enclosure Model." *Opuscula Atheniensia* XX(10): 157-162.

Peltenburg, E. J. (1996). "From Isolation to State Formation in Cyprus, c. 3500-1500 B.C." In V. Karageorghis and D. Michaelides (ed.) *The Development of the Cypriot Economy from the Prehistoric Period to the Present Day*. Nicosia, University of Cyprus: 17-43.

Peltenburg, E. J. (ed.) (1998a). *Lemba Archaeological Project. Vol. II.1A*.

*Excavations at Kissonerga-Mosphilia, 1979-1992*. SIMA 70:2. Göteborg, Paul Åströms Förlag.

Peltenburg, E. J. (ed.) (1998b). *Lemba Archaeological Project. Vol. II.1B. Excavations at Kissonerga-Mosphilia, 1979-1992*. Available online at <http://www.arcl.ed.ac.uk/arch/publications/cyprus/kissonerga/dir.htm>, University of Edinburgh.

Peltenburg, E. J. (ed.) (2006). *The Chalcolithic Cemetery of Souskiou-Vathyrkakas, Cyprus. Investigations of Four Missions from 1950 to 1997*. Nicosia, Department of Antiquities, Cyprus.

Peltenburg, E. J., Colledge, S., Croft, P., Jackson, A., McCartney, C. & Murray, M. (2000). "Agro-pastoralist Colonization of Cyprus in the 10th Millennium BP: Initial Assessments." *Antiquity* 74: 844-853.

Peridou, A. (1966). "A Tomb-group from Lapithos "Ayia Anastasia"." *Report of the Department of Antiquities, Cyprus*: 1-12.

Pilides, D. (1996). "Storage Jars as Evidence of the Economy of Cyprus in the Late Bronze Age". In V. Karageorghis and D. Michaelides (ed.) *The Development of the Cypriot Economy from the Prehistoric Period to the Present Day*. Nicosia, University of Cyprus & the Bank of Cyprus: 107-121.

Pilides, D. (2000a). *Pithoi of the Late Bronze Age in Cyprus*. Nicosia, The Department of Antiquities, Cyprus.

Pilides, D. (2000b). "The Role of Storage Jars in the Study of Late Bronze and Post-Bronze Age Societies". In A. G. Ioannides and S. Hadjistryllis (ed.) *Praktika A', Third International Congress of Cypriot Studies, 16-20 April 1996*. Nicosia, Society of Cypriot Studies: 365-377.

- Pilides, D. (2008). "'Welcome , Sir, to Cyprus", The Local Reaction to American Archaeological Research." *Near Eastern Archaeology* 71(1-2): 6-15.
- Pinnock, F. (1994). "Considerations on the "Banquet Theme" in the Figurative Art of Mesopotamia and Syria". In L. Milano (ed.) *Drinking in Ancient Societies: History and Culture of Drinks in the Ancient Near East, Papers of a Symposium held in Rome, May 17-19 1990*. Padova, Sargon: 15-26.
- Pitard, W. T. (1992). "A New Edition of the "Rapi'uma" Texts: KTU 1.20-22." *Bulletin of the American School of Oriental Research* 285: 33-77.
- Pitard, W. T. (1994). "The "Libation Installations" of the Tombs at Ugarit." *The Biblical Archaeologist* 57(1): 20-37.
- Platon, N. (1983). "The Minoan Palaces: Centres of Organisation of a Theocratic Social and Political System". In O. Krzyszkowska and L. Nixon (ed.) *Minoan Society. Proceedings of the Cambridge Colloquium 1981*. Bristol, Bristol Classical Press: 273-276.
- Pollard, M., Batt, C., Stern, B. & Young, S. M. M. (2007). *Analytical Chemistry in Archaeology*. Cambridge, Cambridge University Press.
- Poo, M.-C. (1995). *Wine and Wine Offering in the Religion of Ancient Egypt*. London and New York, Kegan Paul International.
- Pope, M. H. (1972). "A Divine Banquet at Ugarit". In J. M. Efrid (ed.) *The Use of the Old Testament in the New and Other Essays. Studies in Honour of Franklin Stinespring*. Durham, Duke University Press: 170-203.

- Pope, M. H. (1981). "The Cult of the Dead at Ugarit". In G. D. Young (ed.) *Ugarit in Retrospect: 50 Years of Ugarit and Ugaritic*. Winona Lake, Eisenbrauns: 159-179.
- Porada, E. (1948). "The Cylinder Seals of the Late Cypriote Bronze Age." *American Journal of Archaeology* 52(1): 178-198.
- Porada, E. (1986). "Late Cypriote Cylinder Seals Between East and West". In V. Karageorghis (ed.) *Acts of the International Archaeological Symposium "Cyprus between the Orient and the Occident," Nicosia, 8-14 September 1985*. Nicosia, Department of Antiquities, Cyprus: 289-299.
- Porada, E. (1992). "Remarks on Cypriote Cylinders". In P. Åström (ed.) *Acta Cypria : Acts of an International Congress on Cypriote Archaeology held in Göteborg on 22-24 August, 1991*. Jonsered, Paul Åströms förlag. SIMA-PB 120: 360-381.
- Powell, B. (2007). *Inside the Afghan Drug War*. *Time Magazine*. February 19: 20-27.
- Powell, M. A. (1993). "Drugs and Pharmaceuticals in Ancient Mesopotamia". In I. Jacob and W. Jacob (ed.) *The Healing Past: Pharmaceuticals in the Biblical and Rabbinic World*. Leiden, E.J. Brill: 47-67.
- Preziosi, D. & Hitchcock, L. A. (1999). *Aegean Art and Architecture*. Oxford, Oxford University Press.
- Price, N. S. (2001). "An Archaeology of Altered States: Shamanism and Material Culture Studies". In N. S. Price (ed.) *The Archaeology of Shamanism*. London & New York, Routledge: 3-16.
- Prince, R. (1968). "Preface". In R. Prince (ed.) *Trance and Possession States. Proceedings of the Second Annual Conference of the R.M. Bucke Memorial Society, 4-6 March 1966, Montreal*. Montreal, R.M. Bucke Memorial Society: v-vii.

- Prioreschi, P. & Babin, D. (1993). "“Ancient use of Cannabis.”." *Nature* 364: 680.
- Quilici, L. (1990). *La Tomba dell'età del Bronzo Tardo dall'Abitato di Paleokastro presso Ayia Irini*. Roma, Istituto per gli Studi Micenei ed Egeo-Anatolici.
- Rafferty, S. M. (2002). "Identification of Nicotine by Gas Chromatography/Mass Spectroscopy Analysis of Smoking Pipe Residue." *Journal of Archaeological Science* 29: 897-907.
- Rafferty, S. M. (2006). "Evidence of early tobacco in Northeastern North America." *Journal of Archaeological Science* 33: 453-458.
- Rakita, G. F. M. (2009). *Ancestors and Elites: Emergent Complexity and Ritual Practices in the Casas Grandes Polity*. New York, AltaMira.
- Rappaport, R. A. (1999). *Ritual and Religion in the Making of Humanity*. Cambridge, Cambridge University Press.
- Rätsch, C. (2005). *The Encyclopedia of Psychoactive Plants: Ethnopharmacology and its Applications*. Rochester, Park Street Press.
- Reber, E. A. & Evershed, R. P. (2004). "How did Mississippians Prepare Maize? The Application of Compound-Specific Carbon Isotope Analysis to Adsorbed Pottery Residues from Several Mississippi Valley Sites." *Archaeometry* 46(1): 19-33.
- Reese, D. S. (2007). "Faunal Remains from Hala Sultan Tekke". In P. Åström and K. Nys (ed.) *Hala Sultan Tekke 12. Tomb 24, Stone Anchors, Faunal Remains and Pottery Provenance*. Sävedalen, Paul Åströms Förlag. SIMA 45:12: 50-52.

Rehak, P. (1987). "The Role of Religious Painting in the Function of the Minoan Villa: The Case of Ayia Triadha". In R. Hägg and N. Marinatos (ed.) *The Function of the Minoan Palaces: Proceedings of the Fourth International Symposium at the Swedish Institute in Athens, 10-16 June, 1984*. Stockholm, Swedish Institute in Athens: 163-175.

Rehak, P. (1995a). "The 'Genius' in Late Bronze Age Glyptic: The Later Evolution of an Aegean Cultic Figure". In W. Müller (ed.) *Sceaux Minoens et Mycéniens: 4e Symposium International, 10-12 Septembre 1992, Clermont-Ferrand*. Berlin, Mann: 215-231.

Rehak, P. (ed.) (1995b). *The Role of the Ruler in the Prehistoric Aegean*. Liège & Austin, Université de Liège & University of Texas at Austin.

Rehak, P. (1995c). "The Use and Destruction of Minoan Bull's Head Rhyta". In R. Laffineur and W.-D. Niemeier (ed.) *Politeia. Society and State in the Aegean Bronze Age, Proceedings of the 5th International Aegean Conference, University of Heidelberg, Archäologisches Institut, 10-13 April 1994*. Liège, Université de Liège: 435-460.

Reid, A. & MacLean, R. (1995). "Symbolism and the Social Contexts of Iron Production in Karagwe." *World Archaeology* 27(1): 144-161.

Renfrew, C. (1985). *The Archaeology of Cult: The Sanctuary at Phylakopi*. Athens, The British School of Archaeology at Athens.

Renfrew, C. (1989). "Comments on 'Archaeology into the 1990s'." *Norwegian Archaeological Review* 22: 33-41.

Renfrew, C. (1994). "Towards a Cognitive Archaeology". In C. Renfrew and E. B. W. Zubrow (ed.) *The Ancient Mind: Elements of Cognitive Archaeology*. Cambridge, Cambridge University Press: 3-12.

- Renfrew, C. (2007). "The Archaeology of Ritual, of Cult, and of Religion". In E. Kyriakides (ed.) *The Archaeology of Ritual*. Los Angeles, Cotsen Institute of Archaeology, University of California, Los Angeles: 109-122.
- Renfrew, C. & Bahn, P. (1996). *Archaeology: Theories, Methods and Practice. Second Edition*. London, Thames & Hudson.
- Richards, C. & Thomas, J. (1984). "Ritual Practice and Structured Deposition in Later Neolithic Wessex". In R. Bradley and J. Gardiner (ed.) *Neolithic Studies: A Review of some Current Research*. Oxford, British Archaeological Reports. 133: 189-218.
- Riddle, J. M. (1993). "Introduction". In I. Jacob and W. Jacob (ed.) *The Healing Past: Pharmaceuticals in the Biblical and Rabbinic World*. Leiden, E.J. Brill: xi-xv.
- Ripinsky-Naxon, M. (1993). *The Nature of Shamanism: Substance and Function of a Religious Metaphor*. Albany, State University of New York Press.
- Robb, J. E. (1998). "The Archeology of Symbols." *Annual Review of Anthropology* 27: 329-346.
- Robb, J. E. (2007). "Burial Treatment as Transformations of Bodily Ideology". In N. Laneri (ed.) *Performing Death: Social Analyses of Funerary Traditions in the Ancient Near East and Mediterranean*. Chicago, The University of Chicago: 287-297.
- Roberts, M. F. & Wink, M. (1998). *Alkaloids: Biochemistry, Ecology, and Medicinal Applications*. New York & London, Plenum Press.
- Romanus, K., Baeten, J., Poblome, J., Accardo, S., Degryse, P., Jacobs, P., De Vos, D. & Waelkens, M. (2009). "Wine and Olive Oil Permeation in Pitched and Non-pitched Ceramics: Relation with Results from Archaeological Amphorae from Sagalassos, Turkey." *Journal of Archaeological Science* 36(3): 900-909.

Rottländer, R. C. A. (1990). "Lipid Analysis in the Identification of Vessel Contents". In W. R. Biers and P. E. McGovern (ed.) *Organic Contents of Ancient Vessels: Materials Analysis and Archaeological Investigation*. Philadelphia, MASCA, The University Museum of Archaeology and Anthropology, University of Pennsylvania. 7: 37-40.

Rudenko, S. I. (1970). *Frozen Tombs of Siberia*, University of California Press.

Rudgley, R. (1993). *The Alchemy of Culture: Intoxicants in Society*. London, British Museum Press.

Rudgley, R. (1995). "The Archaic use of Hallucinogens in Europe: an Archaeology of Altered States." *Addiction* 90(2): 163-164.

Rudgley, R. (1998). *Encyclopaedia of Psychoactive Substances*, St. Martin's Press.

Rutkowski, B. (1978). "Religious Architecture in Cyprus and Crete in the Late Bronze Age". (ed.) *Acts of the International Archaeological Symposium, "The Relations Between Cyprus and Crete, ca. 2000-500 B.C."* Nicosia, Department of Antiquities, Cyprus: 223-227.

Rutkowski, B. (1986). *The Cult Places of the Aegean*. New Haven & London, Yale University Press.

Sackett, J. R. (1985). "Style and Ethnicity in the Kalahari: A Reply to Wiessner." *American Antiquity* 50(1): 154-159.

Sagona, A. & Zimansky, P. (2009). *Ancient Turkey*. London & New York, Routledge.

Sakellarakis, J. A. & Sapouna-Sakellarakis, E. (1991). *Archanes*. Athens, Ekdotike Athenon S.A.

Samuelsson, G. (1999). *Drugs of Natural Origin: A Textbook of Pharmacognosy, 4th Ed.* Stockholm, Swedish Pharmaceutical Press.

Sarianidi, V. (1994). "Temples of Bronze Age Margiana: Traditions of Ritual Architecture." *Antiquity* 68: 388-397.

Saxe, A. A. (1970). *Social Dimensions of Mortuary Practices*, Unpublished Ph.D. thesis, University of Michigan.

Schachner, G. (2001). "Ritual Control and Transformation in Middle-Range Societies: An Example from the American Southwest." *Journal of Anthropological Archaeology* 20: 168-194.

Schaeffer, C. F. A. (1936). *Missions en Chypre 1932-1935*. Paris, Geuthner.

Schaeffer, C. F. A. (1939). *The Cuneiform Texts of Ras Shamra- Ugarit, Schweich Lectures*. London, Published for the British Academy by Oxford University Press.

Schaeffer, C. F. A. (1952). *Enkomi-Alasia I, Nouvelles missions en Chypre 1946-1950*. Paris.

Schaeffer, C. F. A. (1971). "Les Peuples de la Mer et Leurs Sanctuaires a Enkomi-Alsia aux XIIe-XIe S. AV. N. È." In C. F. A. Schaeffer (ed.) *Alasia I*. Paris, Klincksieck: 505-564.

Schiaparelli, R. (1927). *La tomba intatta dell' achitetto Cha*. Torino, R. Museo di Antichità.

Schirmer, W. (1998). "Havara on Cyprus - A Surficial Calcareous Deposit." *Eiszeitalter und Gegenwart* 48: 110-117.

- Schmidt, P. R. & Mapunda, B. B. (1997). "Ideology and the Archaeological Record in Africa: Interpreting Symbolism in Iron Smelting Technology." *Journal of Anthropological Archaeology* 16: 73-102.
- Schoop, U.-D. (2011). "Hittite Pottery- A Summary." In H. Genz and D. P. Mielke (ed.) *Insights into Hittite History and Archaeology*. Leuven, Peeters: 241-274.
- Schott, S. (1953). *Das schöne Fest vom Wüstentale, Festbräuche einer Totenstadt* ö. Wiesbaden, Akademie der Wissenschaften und der Literatur.
- Shanks, M. & Hodder, I. (1998). "Processual, Postprocessual and Interpretive Archaeologies". In D. S. Whitley (ed.) *Reader in Archaeological Theory, Post-Processual and Cognitive Approaches*. London and New York, Routledge: 69-95.
- Shanks, M. & Tilley, C. (1982). "Ideology, Symbolic Power and Ritual Communication". In I. Hodder (ed.) *Symbolic and Structural Archaeology*. Cambridge, Cambridge University Press: 129-154.
- Shanks, M. & Tilley, C. (1987a). *Social Theory and Archaeology*. Cambridge, Polity Press.
- Shanks, M. & Tilley, C. (1987b). *Re-Constructing Archaeology*. Cambridge, Cambridge University Press.
- Shennan, S. (1982). "Ideology, Change and the European Bronze Age". In I. Hodder (ed.) *Symbolic and Structural Archaeology*. Cambridge, Cambridge University Press: 155-161.
- Sherratt, A. (1991). "Sacred and Profane Substances: The Ritual Use of Narcotics in Later Neolithic Europe". In P. Garwood, D. Jennings, R. Skeates and J. Toms (ed.)

*Sacred and Profane: Proceedings of a Conference on Archaeology, Ritual and Religion.* Oxford, Oxford University Committee for Archeology. 32: 50-64.

Sherratt, A. (1995). "Alcohol and its Alternatives: Symbol and substance in pre-industrial cultures". In J. Goodman, P. E. Lovejoy and A. Sherratt (ed.) *Consuming Habits: Drugs in History and Anthropology*. London & New York, Routledge: 11-46.

Sherratt, A. (1997 [1987]). "Cups that Cheered: The Introduction of Alcohol to Prehistoric Europe". In A. Sherratt (ed.) *Economy and Society in Prehistoric Europe: Changing Perspectives*. Princeton, Princeton University Press: 376-402.

Sherratt, E. S. (1991). "Cypriot Pottery of Aegean Type in LCII-III: Problems of Classification, Chronology and Interpretation". In J. A. Barlow, D. Bolger and B. Kling (ed.) *Cypriot Ceramics: Reading the Prehistoric Record*. Philadelphia, University of Pennsylvania: 185-198.

Sherratt, E. S. (1992). "Immigration and Archaeology: Some Indirect Reflections". In P. Åström (ed.) *Acta Cyprica : Acts of an International Congress on Cypriote Archaeology held in Göteborg on 22-24 August, 1991*. Jonsered, Paul Åströms förlag. SIMA-PB 120: 316-347.

Sherratt, E. S. (1998). "'Sea Peoples" and the Economic Structure of the Late Second Millennium in the Eastern Mediterranean". In S. Gitin, A. Mazar and E. Stern (ed.) *Mediterranean Peoples in Transition*. Jerusalem, Isreal Exploration Society: 292-313.

Sherratt, E. S. (2004). "Feasting in Homeric Epic". In J. C. Wright (ed.) *The Mycenaean Feast*. Princeton, American School of Classical Studies at Athens: 181-217.

Siikala, A.-L. & Hoppál, M. (1992). *Studies on Shamanism*. Helsinki & Budapest, Finnish Anthropological Society & Akadémiai Kiadó.

Simmons, A. H. & Mandel, R. D. (2007). "How Old Is the Human Presence on Cyprus?" *Science* 317(5845): 1679.

Singleton, V. L. (1996). "An Enologist's Commentary on Ancient Wines". In P. E. McGovern, S. J. Flemming and S. H. Katz (ed.) *The Origins and Ancient History of Wine*. Amsterdam, Gordon and Breach Publishers: 67-77.

Sjöqvist, E. (1940). *Problems of the Late Cypriote Bronze Age*. Stockholm, The Swedish Cyprus Expedition.

Smith, H. (2000). *Cleansing the Doors of Perception: The Religious Significance of Entheogenic Plants and Chemicals*. Boulder Colorado, Sentient Publications.

Smith, J. S. (2001). "Bone Weaving Tools of the Late Bronze Age". In P. M. Fischer (ed.) *Contributions to the Archaeology and History of the Bronze and Iron Ages in the Eastern Mediterranean. Studies in Honour of Paul Åström*. Vienna, Österreichisches Archäologisches Institut: 83-90.

Smith, J. S. (2002). "Changes in the Workplace: Women and Textile Production on Late Bronze Age Cyprus". In D. Bolger and N. Serwint (ed.) *Engendering Aphrodite. Women and Society in Ancient Cyprus. CAARI Monographs Volume 3*. Boston, American Schools of Oriental Research: 281-312.

Smith, J. S. (2003a). "Writing Styles in Clay of the Eastern Mediterranean Late Bronze Age". In N. Stampolidis and V. Karageorghis (ed.) *PLEOS... Sea Routes... Interconnections in the Mediterranean: 16th-6th c. B.C.* Nicosia, A.G. Leventis: 277-289.

Smith, J. S. (2003b). "International Style in Mediterranean Late Bronze Age Seals". In N. Stampolidis and V. Karageorghis (ed.) *PLEOS... Sea Routes... Interconnections in the Mediterranean: 16th-6th c. B.C.* Nicosia, A.G. Leventis: 291-304.

Smith, J. S. (2008a). "From Expedition to Exhibition". In J. S. Smith (ed.) *Views from Phlamoudhi, Cyprus*. Boston, American Schools of Oriental Research: 1-24.

Smith, J. S. (2008b). "Settlement to Sanctuary at Phlamoudhi-Melissa". In J. S. Smith (ed.) *Views from Phlamoudhi, Cyprus*. Boston, American Schools of Oriental Research: 45-68.

Smith, J. S. (2009). *Art and Society in Cyprus from the Bronze Age into the Iron Age*. Cambridge, Cambridge University Press.

Solecki, R. S. (1971). *Shanidar: The First Flower People*. New York, Knopf.

South, A. K. (1980). "Kalavassos-Ayios Dhimitrios 1979: A Summary Report." *Report of the Department of Antiquities, Cyprus*: 22-53.

South, A. K. (1982). "Kalavassos-Ayios Dhimitrios 1980-1981." *Report of the Department of Antiquities, Cyprus*: 60-68.

South, A. K. (1983). "Kalavassos-Ayios Dhimitrios 1982." *Report of the Department of Antiquities, Cyprus*: 92-116.

South, A. K. (1984a). "Kalavassos-Ayios Dhimitrios 1984." *Report of the Department of Antiquities, Cyprus*: 14-41.

South, A. K. (1984b). "Kalavassos-Ayios Dhimitrios and the Late Bronze Age of Cyprus". In V. Karageorghis and J. D. Muhly (ed.) *Cyprus at the Close of the Late Bronze Age*. Nicosia, A.G. Leventis Foundation: 11-18.

South, A. K. (1987). "Contacts and Contrasts in Late Bronze Age Cyprus: The Vasilikos Valley and the West". In D. W. Rupp (ed.) *Western Cyprus: Connections*. Göteborg, Paul Åströms Förlag. SIMA 77.: 83-95.

South, A. K. (1988). "Kalavassos-Ayios Dhimitrios 1987: An Important Ceramic Group from Building X." *Report of the Department of Antiquities, Cyprus*.

South, A. K. (1989). "From Copper to Kingship: Aspects of Bronze Age Society Viewed from the Vasilikos Valley". In E. J. Peltenburg (ed.) *Early Society in Cyprus*. Edinburgh, Edinburgh University Press: 315-324.

South, A. K. (1991). "Kalavassos-Ayios Dhimitrios 1990." *Report of the Department of Antiquities, Cyprus*: 131-139.

South, A. K. (1992). "Kalavassos-Ayios Dhimitrios 1991." *Report of the Department of Antiquities, Cyprus*: 133-146.

South, A. K. (1995). "Urbanism and Trade in the Vasilikos Valley in the Late Bronze Age". In S. Bourke and J.-P. Descoedres (ed.) *Trade, Contact, and the Movement of People in the Mediterranean*. Sydney, Meditarch: 187-197.

South, A. K. (1996). "Kalavassos-Ayios Dhimitrios and the Organisation of Late Bronze Age Cyprus". In P. Åström and E. Herscher (ed.) *Late Bronze Age Settlement in Cyprus: Function and Relationship*. Jonsered, Paul Åströms Förlag. SIMA-PB 126: 39-49.

South, A. K. (1997). "Kalavassos-Ayios Dhimitrios 1992-1996." *Report of the Department of Antiquities, Cyprus*: 151-175.

South, A. K. (2000). "Late Bronze Age Burials at Kalavassos-Ayios Dhimitrios". In G. Ioannides and S. Hadjistyllis (ed.) *Praktika. Third International Congress of Cypriot Studies, 16-20 April 1996*. Nicosia, Society of Cypriot Studies: 345-364.

South, A. K. (2003). "Tomb 11 at Kalavassos-Ayios Dimitrios". In S. Hadjisavvas (ed.) *From Ishtar to Aphrodite: 3200 Years of Cypriot Hellenism*. New York, Alexander S. Onassis Public Benefit Foundation (USA): 26-30.

South, A. K. (2008). "Feasting in Cyprus: A View from Kalavassos". In L. A. Hitchcock, R. Laffineur and J. Crowley (ed.) *DAIS, The Aegean Feast, Proceedings of the 12th International Aegean Conference, 25-29 March 2008, The University of Melbourne*. Liège, Université de Liège. 29: 309-315.

South, A. K., Russell, P. & Keswani, P. S. (1989). *Vasilikos Valley Project 3: Kalavassos-Ayios Dhimitrios 2. Ceramics Objects, Tombs, Specialist Studies*. SIMA 71:3. Göteborg, Paul Åströms Förlag.

South, A. K. & Todd, I. A. (1985). "In Quest of the Cypriote Copper Traders: Excavations at *Ayios Dhimitrios*." *Archaeology* 38: 40-47.

South, A. K. & Todd, I. A. (1997). "The Vasilikos Valley and the Aegean from the Neolithic to the Late Bronze Age". In D. Christou (ed.) *Proceedings of the International Archaeological Conference, Cyprus and the Aegean in Antiquity*. Nicosia, Department of Antiquities, Cyprus: 71-76.

Spangenberg, J. E., Jacomet, S. & Schibler, J. (2006). "Chemical analyses of organic residues in archaeological pottery from Arbon Bleiche 3, Switzerland - evidence for dairying in the late Neolithic." *Journal of Archaeological Science* 33: 1-13.

Spiro, M. E. (1987). *Culture and Human Nature*. Chicago, Chicago University Press.

Staal, F. (2001). "How a Psychoactive Substance Becomes a Ritual: The Case of Soma." *Social Research* 68(3): 745-778.

- Steadman, L. B., Palmer, C. T. & Tilley, C. F. (1996). "The Universality of Ancestor Worship." *Ethnology* 35(1): 63-76.
- Steel, L. (1998). "The Social Impact of Mycenaean Imported Pottery in Cyprus." *BSA* 93: 285-296.
- Steel, L. (2002). "Wine, Women and Song: Drinking Ritual in Cyprus in the Late Bronze and Early Iron Ages". In D. Bolger and N. Serwint (ed.) *Engendering Aphrodite: Women and Society in Ancient Cyprus*,. Boston, American Schools of Oriental Research: 105-119.
- Steel, L. (2004a). *Cyprus Before History*. London, Duckworth.
- Steel, L. (2004b). "A Goodly Feast ... A Cup of Mellow Wine: Feasting in Bronze Age Cyprus". In J. C. Wright (ed.) *The Mycenaean Feast*. Princeton, American School of Classical Studies at Athens: 161-180.
- Steel, L. (2005). "The British Museum and the Invention of the Cypriote Late Bronze Age". In V. Tatton-Brown (ed.) *Cyprus in the 19th Century AD: Fact, Fancy and Fiction. Papers of the 22nd British Museum Colloquium Decemeber 1998*. Oxford, Oxbow Books: 160-167.
- Steel, L. (2008). "Creation and Expression of Identity in Cyprus at the End of the Late Bronze Age". In C. Gallou, M. Georgiadis and G. M. Muskett (ed.) *Dioskouroi, Studies Presented to W.G. Cavanagh and C.B. Mee on the Anniversary of Their 30-year joint contribution to Aegean Archaeology*. Oxford, Archaeopress. 1889.
- Steel, L. (2010). "Late Cypriote Ceramic Production: Heterarchy or Hierarchy". In D. Bolger and L. C. Maguire (ed.) *The Development of Pre-State Communities in the Ancient Near East*. Oxford and Oakville, Oxbow Books: 106-116.

Steele, V. J., Stern, B. & Knappett, C. (2007). "Organic Residue Analysis of Red Lustrous Wheelmade Ware from Five Sites in the Eastern Mediterranean". In I. Hein (ed.) *The Lustrous Wares of Late Bronze Age Cyprus and the Eastern Mediterranean, Papers at a Conference, Vienna 5th-6th of November 2004*. Wien, Verlag der Österreichischen Akademie der Wissenschaften: 191-196.

Steele, V. J., Stern, B. & Stott, A. W. (2009). *Olive Oil or Lard: Distinguishing Plant Oils from Animal Fats in the Archaeological Record using GC-C-IRMS. Poster presented at the UK Archaeological Sciences 2009 Biennial Conference, 8-10 September, British Geological Survey, Keyworth, Nottingham.*

Stein, D. (2006). "Palaeolithic Iconography on Bronze Age Seals from the Mesopotamian Periphery?" In P. Taylor (ed.) *The Iconography of Cylinder Seals, Warburg Institute Colloquia 9*. London, The Warburg Institute: 19-34.

Stein, D. (2009). "Winged Disks and Sacred Trees at Nuzi: An Altered Perspective on Two Imperial Motifs." *Studies on the Civilization and culture of Nuzi and the Hurrians* 18: 573-603.

Stern, B., Heron, C., Corr, L., Serpico, M. & Bourriau, J. (2003). "Compositional Variations in Aged and Heated Pistacia Resin Found in Late Bronze Age Canaanite Amphora and Bowls from Amarna, Egypt." *Archaeometry* 45(3): 457-469.

Stern, B., Heron, C., Serpico, M. & Bourriau, J. (2000). "A Comparison of Methods for Establishing Fatty Acid Concentration Gradients Across Potsherds: A Case Study Using Late Bronze Age Canaanite Amphora." *Archaeometry* 42(2): 399-414.

Stern, B., Heron, C., Tellefsen, T. & Serpico, M. (2008). "New Investigations into the Uluburun Resin Cargo." *Journal of Archaeological Science* 35: 2188-2203.

Stewart, E. & Stewart, J. R. (1950). *Vounous 1937-1938. Field Report on the Excavations Sponsored by the British School of Archaeology at Athens*. Lund, Gleerup.

Stewart, J. R. (1960). "Review of du Plat Taylor, J. (1957). Myrtou Pighades: A Late Bronze Age Sanctuary in Cyprus." *American Journal of Archaeology* 64: 290-292.

Strouhal, E. (1973). "Five Plastered Skulls from Pre-Pottery Neolithic B Jericho : Anthropological Study." *Paléorient* 1(2).

Swiny, S. (1989). "From Round House to Duplex: A Reassessment of Prehistoric Cypriot Bronze Age Society." In E. J. Peltenburg (ed.) *Early Society in Cyprus*. Edinburgh, Edinburgh University Press: 14-28.

Swiny, S. (2008). "Of Cows, Copper, Comers, and Cult: The Emergence of the Cypriot Bronze Age." *Near Eastern Archaeology* 71(1-2): 41-51.

Symeonoglou, S. (1975). "Excavations at Phlamoudhi and the Form of the Sanctuary in Bronze Age Cyprus". In N. Robertson (ed.) *The Archaeology of Cyprus, Recent Developments*. Park Ridge, New Jersey, Noyes.

Symons, D. (1984). *Corpus of Cypriote Antiquities: Cypriote Antiquities in Wolverhampton Art Gallery and Museums*. SIMA 20:10. Gothenburg, Paul Åströms Förlag.

Szabó, C. (2006). "The Effects of Listening to Monotonous Drumming on Subjective Experiences". In D. Aldridge and J. Fachner (ed.) *Music and Altered States: Consciousness, Trancendence, Therapy and Addiction*. London & Philadelphia, Jessica Kingsley Publishers.

Tart, C. T. (1972). "States of Consciousness and State-Specific Sciences." *Science* 176(4040): 1203-1210.

Taylor, J. H. (2001). *Death and the Afterlife in Ancient Egypt*. London, The British Museum Press.

Teissier, B. (1984). *Ancient Near Eastern Cylinder Seals from the Marcopoli Collection*. Berkeley and Los Angeles, University of California Press.

Thomas, J. (1991). *Rethinking the Neolithic*. Cambridge, Cambridge University Press.

Thompson, R. C. (1949). *A Dictionary of Assyrian Botany*. London, The British Academy.

Tilley, C. (1990). "Claude Lévi-Strauss: Structuralism and Beyond". In C. Tilley (ed.) *Reading Material Culture*. Oxford, Basil Blackwell: 3-81.

Tilley, C. (1990). "Michael Foucault: Towards an Archaeology of Archaeology". In C. Tilley (ed.) *Reading Material Culture*. Oxford, Basil Blackwell: 281-347.

Todd, I. A. (ed.) (1986). *Vasilikos Valley Project 1: The Bronze Age Cemetery in Kalavassos Village*. Göteborg, Paul Åströms Förlag.

Todd, I. A. (1988). "Kalavassos-Mangia: Rescue Excavations at a Late Bronze Age Cemetery." *Report of the Department of Antiquities, Cyprus*: 201-222.

Todd, I. A. & Hadjicosti, M. (1991). "Excavations at Sanidha 1990." *Report of the Department of Antiquities, Cyprus*: 37-74.

Todd, I. A. & Pilides, D. (1993). "Excavations at Sanidha 1992." *Report of the Department of Antiquities, Cyprus*: 97-146.

Todd, I. A. & Pilides, D. (2001). "The Archaeology of White Slip Production". In V. Karageorghis (ed.) *The White Slip Ware of Late Bronze Age Cyprus*. Wien, Verlag der Osterreichischen Akademie der Wissenschaften: 27-43.

Todd, I. A., Pilides, D., Hadjicosti, M. & Smith, J. S. (1992). "Excavations at Sanidha 1991." *Report of the Department of Antiquities, Cyprus*: 75-112.

Todd, I. A. & South, A. K. (1992). "The Late Bronze Age in the Vasilikos Valley: Recent Research". In A. G. Ioannides (ed.) *Studies in Honour of Vassos Karageorghis*. Nicosia, A.G. Levntis Foundation: 191-204.

Trigger, B. (1990). "Monumental Architecture: A Thermodynamic Explanation of Symbolic Behaviour." *World Archaeology* 22(2): 119-132.

Trigger, B. (2003). *Understanding Early Civilizations: A Comparative Study*. Cambridge, Cambridge University Press.

Tsukimoto, A. (1985). *Untersuchungen zur Totenpflege (kispum) im alten Mesopotamien*, Kevelaer: Butzon & Bercker; Neukirchen-Vluyn: Neukirchener Verlag,.

Tyree, E. L. (1999). "Using Phytoliths to Identify Plant Remains from Archaeological Sites: A Phytolith Analysis of Modern Olive Oil and Wine Sediment". In S. J. Vaughan and D. E. Coulson (ed.) *Palaeodiet in the Aegean*. Oxford, Oxbow Books: 29-36.

Tyree, L. (2001). "Diachronic Changes in Minoan Cave Cult". In R. Laffineur and R. Hägg (ed.) *Potnia. Deities and Religion in the Aegean Bronze Age, Aegaeum 22*. Liege, Université de Liège & University of Texas at Austin: 39-50.

Tzedakis, Y. & Martlew, H. (eds.) (2001). *Archaeology Meets Science: Minoans and Mycenaeans, Flavors if their Time*. Athens, Ministry of Culture, Kapon Editions.

Tzedakis, Y., Martlew, H. & Jones, M. K. (eds.) (2008). *Archaeology Meets Science: Biomolecular Investigations in Bronze Age Greece, The Primary Scientific Evidence 1997-2003*. Oxford, Oxbow.

Vagnetti, L. (2001). "Some Observations on Late Cypriot Pottery from the Central Mediterranean". In L. Bonfante and V. Karageorghis (ed.) *Italy and Cyprus in Antiquity: 1500-450 BC. Proceedings of an International Symposium held at the Italian Academy for Advanced Studies in America at Columbia University, November 16-18, 2000*. Nicosia, The Costakis and Leto Severis Foundation: 77-96.

Valamoti, S.-M. (2007). "Traditional Foods and Culinary Novelties in Neolithic and Bronze Age Northern Greece: An Overview of the Archaeobotanical Evidence". In C. Mee and J. Renard (ed.) *Cooking up the Past: Food and Culinary Practices in the Neolithic and Bronze Age Aegean*. Oxford, Oxbow: 89-108.

van der Walde, P. H. (1968). "Trance States and Ego Psychology". In R. Prince (ed.) *Trance and Possession States. Proceedings of the Second Annual Conference of the R.M. Bucke Memorial Society, 4-6 March 1966, Montreal*. Montreal, R.M. Bucke Memorial Society: 57-68.

van Gennep, A. (1960). *The Rites of Passage*. Chicago, University of Chicago Press.

VanPool, C. S. (2003). "The Shaman–Priest of the Casas Grandes Region, Chihuahua." *American Antiquity* 14: 696–717.

VanPool, C. S. (2009). "The Signs of the Sacred: Identifying Shamans Using Archaeological Evidence." *Journal of Anthropological Archaeology* 28: 177-190.

VanPool, C. S. & VanPool, T. L. (2007). *Signs of the Casas Grandes Shamansm*. Salt Lake City, University of Utah Press.

Vaughan, S. J. (1987). *A Fabric Analysis of Late Cypriot Base Ring Ware: Studies in Ceramic Technology, Petrology, Geochemistry and Mineralogy*, Unpublished PhD Thesis submitted to University College, London.

Vaughan, S. J. (1989). "Petrographic and Microprobe Analyses of Base Ring Ware". In A. K. South, P. Russell and P. S. Keswani (ed.) *Vasilikos Valley Project 3: Kalavassos-Ayios Dhimitrios 2. Ceramics Objects, Tombs, Specialist Studies*. Göteborg, Paul Åströms Förlag. SIMA 71:3.: 78-81.

Vaughan, S. J. (1991). "Material and Technical Characterization of Base Ring Ware: A New Fabric Typology". In J. A. Barlow, D. L. Bolger and B. Kling (ed.) *Cypriot Ceramics: Reading the Prehistoric Record*. Philadelphia, University of Pennsylvania: 119-128.

Vaughan, S. J. (1994). "Base Ring Ware: A Regional Study in Cyprus". In A. B. Knapp and J. F. Cherry (ed.) *Provenience Studies and Bronze Age Cyprus: Production, Exchange and Politico-Economic Change*. Madison, Wisconsin, Prehistory Press: 86-92.

Vaughan, S. J. (1997). "Late Cypriot Base Ring Ware: Studies in Raw Materials and Technology". In A. Middleton and I. Freestone (ed.) *Recent Developments in Ceramic Petrology, British Museum Occasional Paper 81*. London, British Museum: 337-368.

Ventris, M. & Chadwick, J. (1973). *Documents in Mycenaean Greek, 2nd Edition*. Cambridge, Cambridge University Press.

Verhoeven, M. (2002). "Ritual and Ideology in the Pre-Pottery Neolithic B of the Levant and Southeast Anatolia." *Cambridge Archaeological Journal* 12(2): 233-258.

Verlinden, C. (1984). *Les Statuettes Anthropomorphes Crétoises en Bronze et en Plomb, du IIIe Millénaire au VIIe siècle av. J.-C.* Louvain-la-Neuve, L'Université Catholique de Louvain.

Vermeule, E. D. T. (1974). *Toumba tou Skourou: The Mound of Darkness, A Bronze Age Town on Morphou Bay in Cyprus.* Boston, Harvard University-Museum of Fine Arts, Boston Cyprus Expedition.

Vermeule, E. D. T. (1996). "Toumba Tou Skourou". In P. Åström and E. Herscher (ed.) *Late Bronze Age Settlement in Cyprus: Function and Relationship.* Jonsered, Paul Åströms Förlag. SIMA-PB 126: 50-53.

Vermeule, E. D. T. & Karageorghis, V. (1982). *Mycenaean Pictorial Vase Painting.* Cambridge, Harvard University Press.

Vermeule, E. D. T. & Wolsky, F. Z. (1978). "New Aegean Relations with Cyprus: The Minoan and Mycenaean Pottery from Toumba tou Skourou, Morphou." *Proceedings of the American Philological Society* 122(5): 294-317.

Vermeule, E. D. T. & Wolsky, F. Z. (1990). *Toumba tou Skourou: a Bronze Age Potter's Quarter on Morphou Bay in Cyprus.* Cambridge, Harvard University-Museum of Fine Arts, Boston Cyprus Expedition.

Vincentelli, I. (1976). "Alasia: per una storia di Cipro nell'Età de Bronzo." *Studi Ciprioti e Rapporti di Scavo* 2.

Voskos, I. & Knapp, A. B. (2008). "Cyprus at the End of the Late Bronze Age: Crisis and Colonization or Continuity and Hybridization?" *American Journal of Archaeology* 112(4): 659-684.

Walters, H. B. (1926). *Catalogue of the Engraved Gems and Cameos Greek Etruscan and Roman in the British Museum*. Oxford, Oxford University Press.

Ward, C. (2003). "Pomegranates in eastern Mediterranean contexts during the Late Bronze Age." *World Archaeology* 34(3): 529-541.

Warren, P. (1981). "Minoan Crete and Ecstatic Religion: Preliminary Observations on the 1979 Excavations at Knossos". In R. Hägg and N. Marinatos (ed.) *Sanctuaries and Cults in the Aegean Bronze Age, Proceedings of the First International Symposium at the Swedish Institute in Athens, 12-13 May, 1980*. Stockholm, Svenska Institutet i Athen: 155-167.

Warren, P. (1988). *Minoan Religion as Ritual Action*. Gothenburg, Gothenburg University.

Warren, P. (1990). "Of Baetyls." *Opuscula Atheniensia* 18(14): 193-206.

Washbourne, R. (2000). *Out of the Mouth of Pots, Towards and Interpretation of the Symbolic meaning of Cypriot Bronze Age Funerary Artefacts Including Examples in the University of Canterbury's Logie Collection*. 158. Jonsered, Paul Åströms Förlag.

Wasilewaska, E. (1994). "The Search for the Impossible: The Archaeology of Religion of Prehistoric Societies as an Anthropological Discipline." *Journal of Prehistoric Religion* 8: 62-75.

Wasson, R. G., Kramrisch, S., Ott, J. & Ruck, C. A. P. (1986). *Persephone's Quest: Entheogens and the Origins of Religion*. New Haven, Yale University Press.

Watkins, T. F. (1966). "Metal Finds". In P. Åström (ed.) *Excavations at Kalopsidha and Ayios Iakovos in Cyprus*. Lund, Paul Åström. SIMA 2: 113-115.

Watrous, L. V. (1996). *The cave sanctuary of Zeus at Psychro: a study of extra-urban sanctuaries in Minoan and early Iron Age Crete, Aegaeum 15*. Liège & Austin, Université de Liège, Histoire de l'art et archéologie de la Grèce antique & University of Texas at Austin, Program in Aegean Scripts and Prehistory.

Webb, J. M. (1977). "Late Cypriote Altars and Offering Structures." *Report of the Department of Antiquities, Cyprus*: 113-132.

Webb, J. M. (1985). "The Incised Scapulae". In V. Karageorghis and M. Demas (ed.) *Excavations at Kition 5. The Pre-Phoenician Levels, Part I*. Nicosia, Department of Antiquities, Cyprus: 314-328.

Webb, J. M. (1992a). "Funerary Ideology in Bronze Age Cyprus: Toward the Recognition and Analysis of Cypriote Ritual Data". In A. G. Ioannides (ed.) *Studies in Honour of Vassos Karageorghis*. Nicosia, A.G. Leventis Foundation: 87-99.

Webb, J. M. (1992b). "Cypriote Bronze Age Glyptic: Style, Function and Social Context". In R. Laffineur and J. L. Crowley (ed.) *EIKON : Aegean Bronze Age Iconography : Shaping a Methodology. Proceedings of the 4th International Aegean Conference, Aegaeum 8*. Liège, Histoire de l'art et archéologie de la Grèce antique: 113-121.

Webb, J. M. (1999). *Ritual Architecture, Iconography and Practice in the Late Cypriot Bronze Age*. SIMA PB 75. Jonsered, Paul Åströms Förlag.

Webb, J. M. (2001). "The Sanctuary of the Ingot God at Enkomi: A New Reading of its Construction, Use and Abandonment". In P. M. Fischer (ed.) *Contributions to the Archaeology and History of the Bronze and Iron Ages in the Eastern Mediterranean. Studies in Honour of Paul Åström*. Vienna, Österreichisches Archäologisches Institut: 69-82.

Webb, J. M. (2002). "Device, Image and Coercion: The Role of Glyptic in the Political Economy of Late Bronze Age Cyprus". In J. Smith (ed.) *Script and Seal Use on Cyprus in the Bronze and Iron Ages*. Boston, Archaeological Institute of America: 111-154.

Webb, J. M. (2005). "Ideology, Iconography and Identity. the Role of Foreign Goods and Images in the Establishment of Social Hierarchy in Late Bronze Age Cyprus". In J. Clarke (ed.) *Archaeological Perspectives on the Transmission and Transformation of Culture in the Eastern Mediterranean*. Oxford, Oxbow: 176-182.

Webb, J. M. (2006). "Material Culture and the Value of Context: A Case Study from Marki, Cyprus". In D. Papaconstantinou (ed.) *Deconstructing Context: A Critical Approach to Archaeological Practice*. Oxford, Oxbow Books: 98-119.

Webb, J. M. & Frankel, D. (1994). "Making an Impression: Storage and Surplus Finance in Late Bronze Age Cyprus." *Journal of Mediterranean Archaeology* 7(1): 5-26.

Webb, J. M. & Frankel, D. (1999). "Characterizing the Philia Facies: Material Culture, Chronology, and the Origins of the Bronze Age in Cyprus." *American Journal of Archaeology* 103: 3-43.

Webb, J. M. & Frankel, D. (2008). "Fine Ware Ceramics, Consumption and Commensality: Mechanisms of Horizontal and Vertical Integration in Early Bronze Age Cyprus". In L. A. Hitchcock, R. Laffineur and J. Crowley (ed.) *DAIS, The Aegean Feast, Proceedings of the 12th International Aegean Conference, 25-29 March 2008, The University of Melbourne*. Liège, Université de Liège. 29: 287-295.

Webb, J. M. & Frankel, D. (2009). "Exploiting a Damaged and Diminishing Resource: Survey, Sampling and Society at a Bronze Age Cemetery Complex in Cyprus." *Antiquity* 83: 54-68.

Weinberg, S. S. (1956). "Exploring the Early Bronze Age in Cyprus." *Archaeology* 9: 113-121.

Weinberg, S. S. (1983). *Bamboula at Kourion: The Architecture*. Philadelphia, The University Museum, University of Pennsylvania.

Weingarten, J. (1991). *The Transformation of Egyptian Taweret into the Minoan Genius: A Study in Cultural Transmission in the Middle Bronze Age*. SIMA 88. Partille, Paul Åströms Förlag.

Weisgerber, G. (2005). "Biertrinker an Bord? Ein seltener Fund aus Blei!" In Ü. Yalçın, C. Pulak and R. Slotka (ed.) *Das Schiff von Uluburun. Welthandel vor 3000 Jahren. Katalog der Ausstellung des Deutschen Bergbau-Museums Bochum vom 15. Juli 2005 bis 16. Juli 2006*. Bochum, Deutschen Bergbau-Museums Bochum: 157-165.

Wengrow, D. (2008). "Prehistories of Commodity Branding." *Current Anthropology* 49(1): 7-34.

Westholm, A. (1939). "Some Late Cypriote Tombs at Milia." *Quarterly of the Department of Antiquities in Palestine* 8: 1-20.

Whitley, D. S. (1998). "Reader in Archaeological Theory, Post-Processual and Cognitive Approaches". London and New York, Routledge.

Whitley, D. S. (1998). "New Approaches to Old Problems: Archaeology in Search of an Ever Elusive Past". In D. S. Whitley (ed.) *Reader in Archaeological Theory, Post-Processual and Cognitive Approaches*. London and New York, Routledge: 1-28.

Whitley, D. S. (2008). "Cognition, Emotion, and Belief: First Steps in an Archaeology of Religion". In D. S. Whitley and K. Hays-Gilpin (ed.) *Belief in the Past: Theoretical*

*Approaches to the Archaeology of Religion*. Walnut Creek, California, Left Coast Press: 85-103.

Whitley, D. S. & Hays-Gilpin, K. (eds.) (2008). *Belief in the Past: Theoretical Approaches to the Archaeology of Religion*. Walnut Creek, California, Left Coast Press.

Whittaker, H. (1997). *Mycenaean Cult Buildings*. Bergen, The Norwegian Institute at Athens.

Wiersma, C. W. (2007). "Groups of Notables and Ritual Practices. The Role of Minoan Palaces on Minoan Ritual Practices." *Journal of Prehistoric Religion* 21: 33-52.

Winkelman, M. (1990). "Shamans and Other "Magico-Religious" Healers: A Cross-Cultural Study of Their Origins, Nature, and Social Transformations." *Ethos* 18(3): 308-352.

Winkelman, M. (1997). "Altered States of Consciousness and Religious Behaviour". In S. D. Glazier (ed.) *Anthropology of Religion: A Handbook*. Westport, Connecticut & London, Greenwood Press: 393-428.

Winkelman, M. (2000). *Shamanism: The Neural Ecology of Consciousness and Healing*. Westport, Connecticut & London, Bergin & Garvey.

Witzel, N. (1979). "Finds from the Area of Dromolaxia." *Report of the Department of Antiquities, Cyprus*: 181-197.

Wobst, H. M. (2000). "Agency in (spite of) material culture". In M. Dobres and J. E. Robb (ed.) *Agency in Archaeology*. London & New York, Routledge: 40-50.

Wood, M. (1985). *In Search of the Trojan War*. London, BBC.

Wright, G. R. H. (1992). *Ancient Buildings in Cyprus*. Leiden, E.J. Brill.

Wright, J. C. (1995). "Empty Cups and Empty Jugs: The Social Role of Wine in Minoan and Mycenaean Societies". In P. E. McGovern, S. J. Flemming and S. H. Katz (ed.) *The Origins and Ancient History of Wine*. Philadelphia, Gordon and Breach: 287-309.

Wright, J. C. (2004). "A Survey of Evidence for Feasting in Mycenaean Society". In J. C. Wright (ed.) *The Mycenaean Feast*. Princeton, The American School of Classical Studies at Athens. 13-58.

Wyatt, N. (2002). *Religious Texts from Ugarit, 2nd Edition*. London, Sheffield Academic Press.

Wylie, A. (1985). "The Reaction Against Analogy". In M. Schiffer (ed.) *Advances in Archaeological Method and Theory*. Vol.8. Orlando, Fla, Academic Press: 63-111.

Yasur-Landau, A. (2008). "Hard to Handle-Aspects of Organization in Aegean and Near Easter Feasts". In L. A. Hitchcock, R. Laffineur and J. Crowley (ed.) *DAIS, The Aegean Feast, Proceedings of the 12th International Aegean Conference, 25-29 March 2008, The University of Melbourne*. Liège, Université de Liège. 29: 353-358.

Yon, M. (1983). "Céramiques Base-Ring." *Report of the Department of Antiquities, Cyprus*: 177-180.

Yon, M. (1986). "Instruments de Culte en Méditerranée Orientale". In V. Karageorghis (ed.) *Acts of the International Archaeological Symposium "Cyprus between the Orient and the Occident," Nicosia, 8-14 September 1985*. Nicosia, Department of Antiquities, Cyprus: 265-288.

Yon, M. & Caubet, A. (1985). *Kition-Bamboula III: Le Sondage L-N 13 (Bronze Récent et Géométrique I)*. Paris, Éditions Recherche sur les Civilisations, Mémoire No. 56.

Zervos, C. (1956). *L'Art de la Crete Neolithique et Minoenne*. Paris, Éditions "Cahiers d'Art".

Zeuner, F. E. & Cornwall, I. W. (1957). "The Animal Remains and Soil Samples". In J. du Plat Taylor (ed.) *Myrtou Pighades: A Late Bronze Age Sanctuary in Cyprus*. Oxford, Ashmolean Museum.

Zias, J. (1995). "Cannabis Sativa (Hashish) as an Effective Medication in Antiquity: the Anthropological Evidence". In S. Campbell and A. Green (ed.) *The Archaeology of Death in the Ancient Near East. Oxbow Monograph 51*. Oxford, Oxbow Books: 232-234.

Zias, J. e. a. (1993). "Early Medicinal Use of Cannabis." *Nature* 363: 215.