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## **Grave Reminders : Comparing Mycenaean tomb building with labour and memory**

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## Chapter 5. Reminders

*Old age hath yet his honour and his toil;  
Death closes all: but something ere the end,  
Some work of noble note, may yet be done,  
Not unbecoming men that strove with Gods.*

Excerpt from *Ulysses* by Alfred, Lord Tennyson (1842)

Before death's veil no labour ends, and it may yet be carried forward by others to lengths unforeseen. I opened with a quote from the perspective of Telemachus mourning the lost glory from his absent father who lacked a tomb, and I close with one defiant reference to Odysseus two and a half millennia later. Since my catalogue of individual tombs and clusters narrows focus nearly to the exclusion of the surrounding reality (Chapter 4), it is important to conclude with a broader view. The tombs at Menidi, Portes, and Voudeni must operate, ironically, within a lived experience (*sensu* Alcock 2016: 5; Boyd 2002: 18–19; Dakouri-Hild 2016: 14–16). From the start (Section 1.1), I posed four sets of questions assessing how tombs fit in the lives of commissioners, builders, and witnesses, through their design (Q1), burden (Q2), memorial (Q3), and perception (Q4). Perception more or less attempts to summarise the others emically, and memorial is tenuously proxied by ethnographic and historical analogies.

Design and burden at least are measurable and mutually intelligible using architectural energetics, collective memory, and signalling (Sections 1.1 and 2.3.1). A tomb is unquestionably costlier, for instance, when hypothetical teams of 10 labourers spent a month (VT25, TRex 4.55) cutting the outline of one versus only a week for another (VT71, TRex 1.02). This is as clear to us as it would be to planners standing outside the *dromos* in 1400 BC. Blocking direct visual comparisons, the tripartite design of Mycenaean chamber tombs and *tholoi* rely on collective memory to replicate hidden chambers and thresholds (*stomia*). When opened, the exact size of comparable *stomia* may not have mattered, but crawling into one (VT6, Rex\_sh 0.89) obviously differed from walking upright into another (VT4, Rex\_sh 2.41) (for other embodied spatial analyses using Mycenaean tombs, see Papadimitriou 2016a, 2016b). Poorly lit burial chambers assaulted the senses when re-entered (Boyd 2002: 62–63, 2016: 63–64; Galanakis 2016a: 194; Hamilakis 2013: 131–132), amplifying the memory of the experience but weakening opportunities for visual learning from older vaults. Even so, four-sided vaults were a deliberate departure from rounded chambers (Kontorli-Papadopoulou 1987: 145–147), just as conglomerate masonry was a deliberate, costly choice for the largest *tholoi* at Mycenae (Wright 1987: 177–179). Whether a diminutive chamber tomb like VT3—easily built by a pair of labourers in a few days—or an exceptional *tholos* like Menidi—demanding multi-yoke wagons hauling stone for weeks—investment opted for subordinate or superior signalling to rivals and peers. Signals can be cast as (1) cooperative, cohesive, and underwhelming, (2) pragmatic, contextual, and standard, or (3) competitive, assertive, and exceptional, repetitive terminology for a dealer's choice that amounts to the same deck of cards. In short, tombs either conveyed solidarity or were deliberately deviant.

As part of the SETinSTONE project, I sought to clarify communal burden concerning Mycenaean multi-use tomb construction, while others posed similar questions of fortifications, infrastructure, and subsistence (Boswinkel forthcoming; Brysbaert 2013, 2015a, 2015b, in progress-2020; Brysbaert et al. 2018; Timonen forthcoming). Isolated, none but the largest built tombs of Mycenae and Orchomenos would challenge the level of investment seen in the other categories (Cavanagh and Mee 1999; Harper 2016). Less influential sites like those under study here attempted similar conspicuous mortuary expressions within their means. Since most costly *tholoi* and large chamber tombs were built during the LH IIB–IIIA periods, however, their compounding costs could interfere with ongoing efforts elsewhere, amplifying the communal burden by diverting resources and depleting the available labour pool. Oxen teams needed for ploughing fields and hauling large stones would especially feel rising demand from concurrent tasks (Brysbaert 2013: 81–82; 2015b: 101–102). Individual tombs posed no threat unless an ill-timed investment overshot social constraints and exposed local readiness. Tomb

commissioners risking noticeably higher scales of investment—greater than 1.5 times the standard (TRex > 1.5)—wagered communal support for familial or corporate legacy, a gamble that I have framed here as a dialectic of costly signalling and altruism.

Further to the risk of scale could be the group identity proclaimed by tomb shapes. Breaking with tradition to build a *tholos* in place of a tumulus, a chamber tomb in place of a *tholos*, or a house-type chamber in place of a hive-type chamber tomb was a risk in itself. Succeeding generations at Portes opted for many tomb forms in close proximity, anchoring the new within the memories and traditions of the old. Despite that generational will to adopt new styles, a conservative local bond seemed to encourage superpositioning and close repetition for the scale and shape of its chamber tombs. Voudeni by contrast built anew, focusing on chamber tombs and loosening restrictions as to which chamber shapes to follow. Individuals continued to experiment with architectural styles and flourishes, but the overall progression of form acknowledged an idealised shape for what a standard tomb should look like for each generation, carefully curated by collective memory and reproduced through mimetic design. Centuries of reuse down to the troubled LH IIIC period hint at the strength of those memories, as well as the apparent comfort found in a fading past.

### 5.1. Building legacy in the early LH

Group-planned and group-built, multi-use tombs reflect relationships forged elsewhere, in or on settlements and ships, forests and fields, highways and homes (e.g., Hope Simpson and Hagel 2006; Mason 2007; Timonen forthcoming; van den Berg 2018). The strength and variety of those relationships influenced tomb scale in a similar way to the prestigious offerings that passed between regional players (Voutsaki 1997: 39, 2001: 204). Larger tombs could invoke patronage as well as kinship, which even the least of multi-use tombs must have included in processions if not the passages and chambers (Boyd 2015a: 216, 2016: 65; Papadimitriou 2015: 104). MH III–LH I cemeteries and tumuli at least seem to be structured around kin groups (e.g., Papadimitriou 2016b: 339, 342). Whether LH II–III tomb commissioners and builders themselves were related by blood or business, recollection of construction deteriorated quickly into myth or oblivion (in the Mycenaean case, e.g., Brysbaert 2013: 86; Zangger 1994: 192; more generally on collective forgetting, e.g., Bindman 1999: 93; Forty 1999: 7–10). No known written media preserved Mycenaean eulogies or prayers, and the Homeric epics were not recorded for another 400 years (Palaima 2008: 346, 354–355). Centuries of tomb use anonymised all involved, to be reanimated and relabelled in reuse (e.g., Antonaccio 1994: 407; Cavanagh and Mee 1978: 35; Hamilakis 1998: 128; Paschalidis and McGeorge 2009: 81–84; on the general phenomenon of forgetting the dead, see Allard 2018: 117–118, 123, with references; Hallam and Hockey 2001). Atavistic memories, rever-sions to a vague ancestral world, have a long reach partly from the amplitude of the architectural signal—in the case of tombs, investing in future generations with the sunk costs of imagined past connections (Cavanagh 2008: 340; Dabney and Wright 1990: 52; Papadimitriou 2016b: 344; Voutsaki 1997: 38). Similar atavistic potential was found by Larsson (2010) in the 600-year upkeep of a ceremonial stave building in southern Sweden during the first millennium AD.

The underlying theories being well trodden (e.g., recent bibliographies on signalling in Conolly 2017; mnemonics in Lillios and Tsamis (eds) 2010; and architectural energetics in McCurdy and Abrams (eds) 2019), my contribution combines labour investment and architectural signal into a measurable index. The index is meant to resonate with builders, direct witnesses, and those who ‘remember’ second-hand through stories of the events or rediscovery of forgotten features. Investment has been expressed here through labour models, where energetics and signalling propose how tomb shapes and scales were perceived by those who used them. Thus the four research questions from Chapter 1 querying design, burden, memorial, and perception are re-packed into that measurable index of relative cost and risk.

The labour models (Chapter 4), taken together as an index of relative investment or burden (Table 4.3), target two questions assessing perception risks for Mycenaean tomb commissioners. How big or different could a

tomb be before witnesses felt alienated, and would a deviant tomb be perceived more readily as unfair (by inferiors), unbecoming (by superiors), or unfamiliar (by peers)—similar to comparisons of mortuary feasting (Borgna 2004: 263–264; Hamilakis 1998: 118, with references)? My over-simplified answer to these has been to classify tombs using a relative index (TRex, Table 4.3). Tombs larger than 1.5 times the median standard (AA01) are exceptional, assertive or costly signals by local officials to promote factional authority. Tombs less than 0.75 times the standard are undersized, cohesive or group signals not meant to elevate users beyond others. Tombs between 0.75 and 1.5 times the standard are pragmatic and could be interpreted either way depending on the scale of nearby tombs. This arbitrary classification of scale appears flat without imagining each choice as a loaded decision made by real actors. Tomb builders coordinated with highly connected commissioners, either conservatively adhering to previous patterns or risking costlier designs. Commissioners of new tombs largely made that choice in the prosperous fifteenth and fourteenth centuries BC, when display secured the position of future generations with durable reminders of powerful ancestors who built grand spaces (Cavanagh and Mee 1998; Dabney and Wright 1990; Papadimitriou 2016b; Voutsaki 1997, 2001; Wright 1987; for later examples in sixth/fifth century BC Thessaly see Stamatopoulou 2016). Claimants to tomb memories who opted for cheaper reuse did so during and after the thirteenth-/twelfth-century upheaval across the eastern Mediterranean, when building anew may have been less tolerable or desirable. Reuse of rock-cut tombs at least would be cheaper and still provide the backdrop of palpable authority over the past, something the more lavish LH IIIC burials—like those found in the large LH IIIA tombs VT4 and VT75—highlighted *in extremis*. When and how tolerance for chamber tomb construction and reuse constricted adds to the lively conversation over the end of the Bronze Age (e.g., Bennet 2013: 11–13; Cline 2014; Jung 2010: 174–178; Murray 2017; see section 5.2).

Although no less a part of that changing world, local contexts might be less dramatic than the image of fiery destructions consuming palatial centres in the century prior to the final closing of tombs at Portes and Voude-ni (cf. destruction layers at Achaean settlements from Aigion, Agia Kyriaki, Pagona, and Teichos Dymaion, e.g., Moschos 2009: 347; van den Berg 2018: 186–188). Late reuse here could speak equally to continuity in a shared past as it would to a contested future (Connerton 1989: 45; Papadimitriou 2016b: 340–344; on the contraction of the LH IIIC economy, see Murray 2017: 247). Relatively inexpensive labour requirements, particularly for standard tombs no larger than 40 m<sup>3</sup> (e.g., VT64, TRex 1.44, 480 ph), were not prohibitive to new investments on their own. Households of modest wealth could spare ten days for ten labourers to build a new tomb, unless dire circumstances of famine, disease, or war demanded complete attention elsewhere. Continued long-distance exchange during the LH IIIC period presents a compelling case for short-term resilience, enough to maintain the major Achaean cemeteries alongside eastern mainland holdouts like Tiryns and Perati (Moschos 2009; Murray 2017: 86–94; van den Berg 2018). Influential households, like those reusing VT4, VT75, and PT3, maintained lucrative Adriatic trade in metalwork (Moschos 2009; van den Berg 2018). Building new tombs would not have posed an economic risk for them, so perhaps it was socio-politically beneficial to reuse older tombs (e.g., Cavanagh and Mee 1978: 44; Papadimitriou 2016b: 344). If the old order was threatened or replaced during the early eleventh-century crises, new or newly assertive players would scramble to own public memory (e.g., Burford 1969: 84–88; Holtorf 1996: 127; Maran 2016: 153; Trigger 1990: 126–127). Claiming “ancestral narratives” in cemeteries legitimised early Mycenaean expansion up to the LH IIIA2 period (Papadimitriou 2016b: 342), strategies that could be extended to LH IIIC reclamation of collective tombs that amounted to four-century palimpsests of bones and offerings. In the case of tombs never used again, this was a final desperate effort.

More than just mnemonic continuity, those tombs reopened in the eleventh century held fifteenth-century architectural memories governing their original shape and scale—remembered blueprints for mimetic design. Practically, mimetic design applied collective memory and cooperative labour to replicate multi-use tombs consistently across regions and generations. Mimetic design determined *how* the tombs were shaped and remembered, but group (cohesive) and costly (assertive) signalling influenced *why* they were built following a certain scale. Both can be measured in evidence-based analyses, such as I have shown in creating the Tomb

Relative Index (TRex) of measurements (shapes) and investments (scales). To my knowledge, this is the first time architectural energetics has been combined with collective memory to explore empirically how tombs were shaped and scaled as cohesive or assertive signals. Scales little more than double the regional standard (AA01, ca. 27.75 m<sup>3</sup>) and conservative shapes mimicking the hive vaults of earlier *tholoi* prevailed at Portes. This championed a cohesive group message of solidarity, even for the LH IIIC VIPs of the PT3 Warrior Tomb (TRex 2.18). Voudeni, however, allowed up to six variant designs for burial chambers, including house-like vaults more than nine times the standard size. The largest tombs at Voudeni, VT4 (TRex 8.67) and VT75 (TRex 9.26), sent an assertive signal that dared to elevate an individual or family far above their peers. The signal risked a social backlash given its relative cost compared with other tombs, demanding a larger workforce, skilled planning, specialised elaborations, and more than a month of work—a checklist fulfilled to the utmost by the Treasury of Atreus (Cavanagh 2008: 337–338; Cavanagh and Mee 1999). This presumably happened months or years prior to the first death, an occasion that demanded attention and perhaps a reordering of local leadership. Unquestionably a costly signal, the LH IIIA2–B1 Menidi *tholos* (TRex 22.27) telegraphed the wealth and influence of its commissioners to their interregional partners, contacts evident in the diverse nonlocal and expensive assemblage sealed within its vault (e.g., Konsolaki-Yannopoulou 2015: 498; Lolling et al. 1880: 45–48; Stos-Gale and Gale 1982: 479; Stubbings 1947: 3–4; Thomas 1995: 354).

As shown, multi-use tomb styles developed over the course of generations, simplified in the Mycenaean case to MH III/LH I tumuli, LH I–II *tholoi*, and LH III chamber tombs (see Section 2.1). Portes notably built examples of each over six centuries of use and intermixed these with cist tombs and built chamber tombs (see Section 4.2). Only three other clusters (the destroyed Tumulus B and PTh1; PTh2 and D group; and the comparatively distant E and ST groups of built chamber tombs) seem to diverge from the massive Tumulus A and (destroyed) C grouping that attracted the site’s largest chamber tombs and the largest recorded built chamber tomb (PC1) known from mainland Greece (see Chapter 4). Other chamber tombs scattered around the site seem more detached but were not always accessible to this survey, limiting claims on a definitive spatial layout. While overlap in usage inevitably occurred, construction of the slow developing tumuli-*tholoi*-chamber tomb legacy at Portes was staggered by generations and the initial construction acts themselves forgotten. That the inhabitants of Portes stubbornly continued to reuse the same cemetery space—even creatively incorporating subsequent tombs into their older counterparts and risking collapse by building too densely—indicates a strong sense of group identity with a conservative tethering to the past. Voudeni, by contrast, built its cemetery anew and almost entirely out of chamber tombs, with more flexibility in *concurrent* construction styles and scales from the LH IIIA onward. Finding an unused slope here was a feat unto itself.

Even as early as the 1970s, catalogue entries for Mycenaean tombs found in and around modern Patras (Tsoukaleika, Vrachneika, Aroe-Samakia, Ano Sychaina [possibly Voudeni; see Chapter 4], Achaea Clauss, Thea, Pavlokastron, Kallithea, Krini, and Gerokomeion) revealed how densely populated and wealthy the area between the Gulf of Patras and Mount Panachaicon was before the LH IIIB/C crises (Papadopoulos 1979: 26–28). Excavated to some extent by Kyparisses but since obscured by modern housing (Papadopoulos 1979: 26), several extensive Mycenaean cemeteries at Aroe and Samakia occupied the hills east of the sixth-century AD Patras castle and the ancient acropolis it destroyed. Although modern excavations have shown Voudeni and Achaea Clauss to be exceptional cemeteries, many of the hillslopes in the area also hosted Mycenaean chamber tombs, which if better preserved and reported could have rivalled the better-known sites (Table 1.1). The phenomenon extends along the southern upland ring surrounding the fertile valleys of lower western Achaea. The Chalandritsa/Katarraktis area in the Pharai region, for instance, is covered with localities for Mycenaean settlements and cemeteries with limited excavation between the 1920s and 1960s. Many of these spawn confusion over typical Greek redundancy in place-names (Aktypi 2017: 1–7; Kolonas 2009a; Papadopoulos 1979: 30–31), but the overall message of extensive Mycenaean activity is clear. For instance, seven Mycenaean chamber tombs were excavated in 1920 by Kyparisses at Rhodia-Bouga (Papadopoulos 1979: 31). There are two LH IIIA/B *tholoi* excavated in 1956 under the Ayios Athanasios entry (also “above Rhodia”) which seem to correspond to Kolonas’s (2009a: 14–17) introduction to Katarraktis, a locational reference it-

self for no fewer than five catalogue entries due to the nearby waterfalls and whitewater rapids (cataracts) (Papadopoulos 1979: 30–31). Alongside six recently excavated graves (three built cists, two slab cists, and one pit), Aktypi (2017: 5) mentions “the modern village *Rhodia* (formerly *Bouga*)” in relation to the paired *tholoi*, typically referred to simply as ‘the Pharai tombs’ for their rich finds now dated to the LH IIB–IIIA and displayed in the Patras Museum. Comparing these with the Portes *tholoi* would be a worthy endeavour for future research into that period, underpublished for Achaea in comparison with Messenia, Laconia, and the Argolid. My focus on the later LH III chamber tombs at Voudeni, Achaea Clauss, and Portes factors largely through ease of access and preservation, since dozens of similar cemeteries once dominated the landscape of western Achaea (Table 1.1). With a noticeable shift in burial practices to simple graves and *pithoi* burials during subsequent periods, Achaean sites are uniquely positioned to show how interests in chamber tomb cemeteries tapered after the LH IIIC period.

## 5.2. End-stage from LH IIIC Achaea

Isolated as it might be, a mnemonic framework attracts important questions as the curtain fell on the chamber tomb phenomenon at Portes and Voudeni by the turn of the first millennium BC. If the multi-use tombs of the Achaean cemeteries fulfilled their roles as mnemonic vaults for four centuries or more, what happened outside the cemeteries as they entered their final phase of use? What could derail such a long-lived and successful tradition? Contraction is the oversimplified but perhaps no less applicable short answer, stemming from generations of socioeconomic changes (e.g., Murray 2017: 247; Shelmerdine 2001: 375). No single rapid stroke erased multi-use tombs from the Greek mainland—smaller *tholoi* built from schist slabs continued to thrive northward in Early Iron Age Thessaly with 51 examples across 22 sites, the largest being 6.67 m in diameter at Kapakli (Georganas 2000: 53). However short-lived over the long term, several Achaean cemeteries persisted beyond the Mycenaean palatial collapses, even flourishing during the LH IIIC and Submycenaean periods. The following gives a snapshot of important finds from the region that contextualise those who created, witnessed, reused, and finally abandoned the tombs at Portes and Voudeni. A more thorough review can be found in recent literature for these and similar Achaean cemeteries (e.g., Aktypi 2017; Kolonas 1998; Moschos 2009; Paschalidis and McGeorge 2009; Paschalidis 2018; van den Berg 2018).

At the foreground of tombs built or reused late in the Mycenaean period are the social and economic upheavals that unravelled palatial influence and greatly affected larger settlements. Cavanagh and Mee (1978: 44) concluded that reuse of chamber tombs in the LH IIIC period had most to do with unrest and shifting populations after the collapse of the palaces. With notable exceptions like Perati, few wanted to invest in new chamber tomb construction when abandoned tombs were conveniently available where ties to the original family had faded. Even at Perati, new tombs were “on average smaller, more closely packed, less carefully cut and shorter-lived than the chamber tombs of the previous period” (Cavanagh and Mee 1978: 44). Tomb commissioners in the LH IIIC period had more pressing issues than achieving perfect architectural form.

Achaea was no exception. Excavations at the nearby settlements of Agia Kyriaki, Pagona, and Aigion reveal widespread destruction by fire and brief abandonment around the same time as a conflagration engulfed the fortified Teichos Dymaion 50 km to the west (Moschos 2009: 347; van den Berg 2018: 186–188). Destructions by fire here during the final EH, LH IIIB–C, and final LH IIIC periods were noted by Mastrokostas in excavations from 1962–1966, though the site seems to have continued as a fortified settlement until the Venetian period and even had a brief military outpost during the Second World War (Papadopoulos 1979: 24; van den Berg 2018: 186). The LH IIIB/C mainland crises had reached the Gulf of Patras but did not have the same terminal effect as they did on the palatial centres in the southern Peloponnese. The region’s power continued measurably into the LH IIIC period, with imported objects of wealth like the Naue II longsword, 17 of which have been recovered in Achaea, appearing in warrior graves (Moschos 2009: 360; see extensive catalogue of objects from abroad recovered in western Achaea in van den Berg 2018: 440–484). New chamber tombs were rare, but the existing large cemeteries, like Voudeni and Portes, served the needs of the communities and

newcomers displaced by events abroad (Moschos 2009: 348). Exceptional among the sites studied in Achaea, Voudeni experienced a secondary florescence in the Submycenaean period (Moschos 2009: 364) and was a major hub alongside Kallithea for LH IIIC Achaean-Adriatic contacts (van den Berg 2018: 309).

The later dates of use for the tombs in the Achaean cemeteries reinforce early understandings that Mycenaean traditions persisted longer in this region than elsewhere, prompting Papadopoulos (1991: 36) to refer to it as “one of the last strongholds of Mycenaean culture and civilization”. Whether the region experienced a sudden influx of refugees fleeing catastrophes in the Argolid or gradual immigration over time is unclear, but no abrupt disruptions occurred until much later (Papadopoulos 1991: 35). Whatever the case politically for the maintenance of long-distance exchange, imported objects suggest that Achaean traders sustained or even expanded their networks for a short time before they permanently foundered by the turn of the first millennium BC (van den Berg 2018). Perhaps not coincidentally, decades of uncertainty manifested in grave goods with distinctly martial overtones, namely the weapons and armour of the LH IIIC Achaean warrior burials.

Fascination with warrior burials has persistently captured public imagination and attracted considerable attention from specialists. Examples can be found throughout the Aegean Bronze Age and Early Iron Age, relating more consistently with elite male status than the biographies of ‘real warriors’ (Georganas 2018: 189–191, with references; see also Alberti 2004; Preston 2004: 330–331). Martial or not, warrior tombs in Achaea do seem to abound. Of those yielding the iconic Naue II swords, two are known from the Achaea Clauss chamber tomb cemetery near Patras (Paschalidis and McGeorge 2009: 89), ca. 10–13 km over rough terrain south-southwest of Voudeni. These tombs were often equipped with a suite of other weapons and useful instruments, including bronze tweezers potentially deployed as part of a field medical kit meant to extract arrowheads (Arnott 1999: 501–503; Georganas 2018: 191; Paschalidis and McGeorge 2009: 93). Similar high-ranking warrior burials also appear during the LH IIIC period at Kallithea-Spenzes in Achaea (van den Berg 2018: 233–235) and at Palaiokastros in Arcadia (Papadopoulos and Kontorli-Papadopoulou 2001: 132–134). Since no definitive natural boundaries separate Achaea from Elis, it has been suggested to study these districts together alongside nearby north-western Arcadia and its similar cultural materials, forming a Late Mycenaean western koine (Papadopoulos and Kontorli-Papadopoulou 2001: 135). Well-furnished LH IIIC burials from Portes and Voudeni tend to coincide with the larger, more impressive tombs (e.g., PT3, VT4, and VT75), and though I have endeavoured to restrain my descriptions to avoid eclipsing smaller tombs, it is difficult to ignore the disparity in econometric and volumetric estimates (Tables 4.1 and 4.3). The late timing of reuse is intriguing. The tombs themselves were seldom new, and many were centuries old at the time of LH IIIC reuse (Table 4.4).

Secondary burials and reuse of tombs were common in Mycenaean Achaea and throughout the Aegean. Secondary burials of LH IIIA–B date equal the number of primary burials from LH IIIC (62 each, with 5 additional secondary burials from the later period) recorded at Achaea Clauss, with remains either swept to the side, interred in pits under the floor, or placed in an ossuary cut into the wall of a *dromos* (Paschalidis and McGeorge 2009: 81–84). The Messenian Tragana *tholos* tomb A contained a metre deep of funerary deposits with as many as thirty skulls and pottery styles ranging from the LH I to the Protogeometric period (Cavanagh and Mee 1978: 35). Twenty-five individuals were found among the layered LH IIIA–C remains of the Athenian Agora tomb J7:2 (VII). Investigations by Evans revealed 40 skulls and pottery ranging from the LM II–IIIC in the Royal Tomb at Isopata on Crete, prompting his assessment of the tomb’s late use as an ossuary (Cavanagh and Mee 1978: 40).

In some cases, similar grave goods also reflect standardised practice in votive assemblages. The sealed tombs excavated at Achaea Clauss indicate that missing or damaged materials from within the tombs occurred during their Late Mycenaean usage, which could include a function as retrievable storage after “the dead were no longer revered or feared” (Paschalidis and McGeorge 2009: 84; cf. Gallou 2005: 18; Tsaliki 2008). As at Voudeni (Kolonas 2009b: 13), pottery found among the human remains at Achaea Clauss also showed consistency with

vessel types (namely elaborately painted jars) appropriate for deposition in the tomb in that they mostly comprised closed shapes. Absent generally were vessels for bulk storage and transport, as well as those for serving food. Pouring and drinking vessels were common throughout LH southern Greece (e.g., Boyd 2015a: 211; Hamilakis 1998; Smith and Dabney 2014: 149), alongside stirrup jars and alabastra for perfumed oils and rarer effigy vessels interpreted as feeding bottles for young children or disabled adults (Paschalidis 2018: 401–402; Smith and Dabney 2014: 151; see below).

If the paucity of existing evidence gives any indication of frequency in antiquity, Mycenaean cremation was rare in Achaea as elsewhere. Although evidence from the late 1930s excavations at Achaea Clauss is missing apart from Papadopoulos (1979: 27) mentioning the excavation of twelve tombs here by Kyparisses, later excavations have provided a strong sample of mortuary practices. Of the 129 instances of bodily remains recorded in the 16 chamber tombs excavated from 1988 to 1992, only one cremation was found for a middle-aged male from Tomb N (Paschalidis 2018), dating alongside the LH IIIC primary and secondary burials (Paschalidis and McGeorge 2009: 79–84). Early in the Submycenaean period a cremation has been recorded for Voudeni, with two others at Kallithea: Spenzes and Kallithea: Laganidia, and two more in the Spaliareika warriors' tomb (Moschos 2009: 367).

In addition to robust regional traditions, materials and influence from overseas showed an enduring web of contacts in LH IIIC Achaea, an extensive network analysis for which has been completed by van den Berg (2018). The Balkans, Italy, and Crete are particularly well represented. Tomb H at Achaea Clauss contained a “fenestrated razor” with the closest known parallels at Scoglio del Tonno and Peschiera del Garda (Paschalidis and McGeorge 2009: 85; van den Berg 2018: 203–204). A bronze knife from the Achaea Clauss Warrior 2 burial also conformed to the Peschiera type known from that site near Verona in northern Italy (Paschalidis and McGeorge 2009: 92; van den Berg 2018: 223, 235–236). Two other Peschiera daggers in the region are known from Teichos Dymaion and Voudeni (van den Berg 2018: 253). Stirrup jars with typical Minoan qualities appeared in Tomb A at Achaea Clauss and Tomb 2 at Spaliareika-Loussika (Paschalidis and McGeorge 2009: 87). PT7 at Portes yielded another stirrup jar, and several Minoan vessels appeared at Voudeni. Both Voudeni and Portes also harboured two-handled alabastra (Moschos 2009: 373–374).

Other archetypal funerary deposits known from LH IIIC Achaea included duck-vases or bird *askoi* accompanying child burials, such as PM 12185 from Tomb Δ at Achaea Clauss and its twin found during earlier excavations and thought to be from the same artist (Paschalidis and McGeorge 2009: 96–100). One ‘feeding bottle’ was reinterpreted as an “invalid cup” due to its recovery alongside an adult male burial (Paschalidis 2018: 401–402). Similar feeding bottles and bird vessels have been recorded at Ayia Sotira (Nemea), Prosymna, Perati, and Kallithea-Rampantania (Paschalidis and McGeorge 2009: 100; Smith and Dabney 2014: 151). Clay whorls and bobbins found with the adult female Burial ΣT of Tomb 3 and the sickle attached to the waist of the adult male Burial Z of Tomb B indicate the importance of weavers and farmers interred at Achaea Clauss. Iconic, attention-grabbing grave assemblages were not the exclusive legacy of warriors from the Late Mycenaean period.

Difficult under heavy reuse, contextual clarity concerning chronology of construction and use from associated finds would save labour studies of tombs from being incomplete and monochromatic. Ideally, tombs constructed concurrently would be compared in the absence of noise from tombs constructed decades or centuries before or after. Although used for 75–150 years, comparatively short-lived sites like the six excavated LH IIIA1–B2 chamber tombs at Ayia Sotira near Tsoungiza would be especially fruitful for future labour analyses (Smith and Dabney 2014: 145–146). One defence remains for comparing all tombs wholesale, in that each data point tracks a discrete episode of construction. One tomb should not, unless under extraordinary circumstances, have avoided completion for more than a few months. Each was purpose-built, and dragging construction into a multi-generation affair would be absurd under common scenarios. A scatter plot of tombs

constructed, irrespective of their chronological appearance, is still worth examining for the outline of events it portrays. Painting the full picture, however, requires the chroma of context and chronology unmasked from the confusion of reuse.

### 5.3. Interpreting tomb scale and sameness

Some perspective is necessary to avoid overshooting the evidence if taken out of context. As my primary proxy, tomb building represented only a small fraction of Mycenaean economies. Far more effort was expended in erecting walls (Boswinkel forthcoming; Harper 2016; Loader 1998), building and maintaining domestic and public spaces (Burford 1969; Pakkanen 2013; Walsh 1980), and creating portable crafts and commodities consumed locally or distributed for far-flung trade (e.g., Berg 2004: 74; Broodbank 2013: 415; Murray 2017: 248–250; Voutsaki 1997: 42, 2001: 197; for named examples in the tablets see the late Pylian *po-ku-ta* craftsmen likely exempted from military service, Nakassis 2010: 273). With an estimated cost over a century of building at 240–290 talents—roughly 75% of the yearly internal revenue of Athens—the sanctuary of Asklepios at Epidauros was financed through donations ranging from the pocket change of individual contributors to more than 1,200-*drachmae* gifts provided by the communities of Epidauros and Hermione (Burford 1969: 84–85). Militarism, if as popular as iconographic depictions and warrior burials would suggest, also incurred much higher costs than any tomb could boast. Maintaining troops in the field or ships at sea would cost more in a season than building their barracks and shipsheds at home, a relative cost no less applicable for fifteenth-century Pylos as for fifth-century Athens (Nakassis 2010: 270–274; Pakkanen 2013: 72–74). At roughly 4 talents per year and 100 workers per season—“a minimum expenditure of 1.2 million man-days or 200 talents”, enough to support “100 triremes out at sea for a month or somewhat more”—fifth-century Athens could easily build 300 shipsheds at Piraeus in 50 years and still afford the 30 talents per year for the 500-talent Parthenon (Pakkanen 2013: 72).

Although a debatable proportion of local economies, few more widespread manifestations of cooperative preindustrial labour can be found than earthmoving (see Chapter 3). If earthmoving acts as a reliable index of relative socioeconomic strength, then multi-use tombs must convey some sense of local and regional capabilities. Local manufacture is key for the tombs to meaningfully relate to their corresponding settlements. Fortunately, outside help would likely be too infrequent for skewing results with standard chamber tombs that did not depend on instruction like complex *tholoi* (Cavanagh and Laxton 1981: 132). Labour at least would be a local expense, even if the ideas were sourced from abroad. In the case of the Mycenaean *tholos* at Kolophon in Ionia (western Anatolia), “local builders working outside the mainstream of the tholos-building tradition” deviated from the typical shape with a wider entrance compared with its chamber diameter (Bridges 1974: 266). While some interregional coincidences open the door for travelling talent, as Papadopoulos (1987: 139) mused over Aetolian tomb similarity with the Kiperi-Pargas *tholos* in Epirus, it is far more likely for common chamber tombs to have sought their builders nearby. Rumour of similar tombs on the Peloponnese likely influenced construction of the Menidi *tholos* and Portes *tholoi*, but the labour behind their demanding stonework was undoubtedly as locally sourced as the stones.

Capability to build is only part of the equation. It is the hard cap hardly reached, as willingness to build is more easily exhausted and quickly changeable. The two find equilibrium in standards of scale to which most tombs gravitate. Standards of scale—e.g., constraints on overly ostentatious building—show a collective wish to adhere to forms internalised by social and ritual principles (e.g., on standardisation see Berg 2004; Eerkens and Bettinger 2001; Rice 1991; on collective mimetic design with funerary iconography, see below, e.g., Küchler 1999; Rowlands 1993). It is argued here that those standards hold the majority of LH III chamber tombs at Voudeni and Portes on the near side of the spectrum from sameness to exceptionalism. The spectrum here relies on the square symmetrical matrix created for tomb dimensions (see Figures 3.2–3.4), colour-coded to highlight patterns in a similar manner to Bourgeois and Kroon (2017: 10).

Exceptionalism has often underwritten the motivations of a powerful few. For Mycenae especially, unrivalled power and complexity oversaw the resurgent LH III monumental construction program giving rise to the Lion Gate and expanded circuit wall, a refurbished Grave Circle A, and the final three massive *tholoi* (Genii, Clytemnestra, and Atreus) (Wright 1987: 177). Big tombs were built for those of wealth and (not always royal) importance, a truism with which many have intersected from various roads (Cavanagh and Mee 1998: 56; Dickinson 1977: 63; Mee and Cavanagh 1984; Trigger 1990: 127). Sameness, however, telegraphs something more than any single personality or small group of personalities can project, a tenacious ideal rooted into the collective memory of many. Tombs calling back to a standard united communities, muting assertive elaborations that alienated public opinion.

Establishing a baseline of sameness and what it could mean to a given community, chamber tomb similarities and deliberate departures implicate which side of the spectrum maintained the upper hand for those constructing chamber tombs at Voudeni and Portes. What becomes immediately apparent from systematic measurements (Chapter 4), despite the two occupying the same region (ca. 90 km from one another) and touting a similar level in the Western Mycenaean koine surmounted by a regional power in the Dyme and Pharai regions of western coastal Achaea, Voudeni and Portes did not share a proprietary sense of appropriate tomb scale. Simply put, the Portes chamber tombs adhered more closely to an ideal of reserved scale, to say nothing of their universal beehive shape. To be sure, the site had experimented with other tomb styles in the centuries prior to the construction of its first chamber tomb, which likely coincided with or followed closely upon the later use of its *tholoi* (see Section 4.2). It also superimposed much smaller built cist graves on Tumulus A and PTh2, roughly concurrently with the construction of chamber tombs from the LH IIIA/B periods. Once chamber tombs had effectively replaced the earlier multi-use tumuli and *tholoi*, however, their shape and scale actively sought a group identity as rigid as their connection to an already ancient cemetery. Surrounding and intersecting tumuli and *tholoi* whose builders were by that time anonymised into an ancestral collective, the later Portes chamber tombs kept a cohesive tradition alive by embracing the ruins of inexorable change. Voudeni, on the other hand, showcased a freedom in form and scale that gave rise to tombs 10 times the median size for the site and more than 200 times the size of a typical pit grave (see below). The chambers also reflected at least eight shapes from house to beehive (see Figure 4.3.3). To some extent, lopsided scales and experimental shapes expressed unconcern with the risks of ostentation. If they did not, then few architectural excesses could do so within the limits that chamber tombs offered. It would be surprising indeed to recover houses two orders of magnitude apart in scale in close proximity, but domestic structures tap into different metrics of functional use, tolerable costs, and visibility (Chapter 2).

Perspective is critical in determining where tomb scale pushed social limits. The smallest tombs could be informative here. Despite sharing some core mortuary functions, pit graves operated differently than their chamber tomb counterparts. Reuse, multiple inhumations, and spectacle, common to chamber tomb construction and function, were not priorities for pit graves. Individuals and immediate use were the more logical focus, though not necessarily applicable in every sense. Excavation of a pit grave could hardly occupy more than a pair of labourers for a few hours, whereas most chamber tombs would demand a team of five or more for several days. Beyond those affected by loss—intensely variable in the anthropological literature on death (Robben (ed.) 2018)—construction and use of a pit grave would go comparatively unremarked by daily life in the settlement a kilometre away. Reduced visibility accompanies reduced investment here, but the circumstance of loss would not cheapen the impact to close family and friends.

Reduced economic investment in smaller tombs may obscure an outsized emotional impact, such as the loss of a child (cf. Allard 2018: 117). In association with nearby chamber tombs, shallow pit graves such as the VT33 cluster have been linked to child burials elsewhere. Seven pit graves with tell-tale funerary deposits but no human remains were recorded for the LH IIIC Perati cemetery in Attica, and four of these had skeuomorphic *dromoi* (Gallou-Minopetrou 2015: 58; Iakovides 1969). It is intriguing that the cluster of open pit graves at

Voudeni occurs close to the smallest excavated chamber tomb on site (VT3), also suspected of a connection to juvenile burial.

Large chamber tombs (PT3) that are not excessively scaled (e.g., VT4 and VT75) climb above the practicality and authenticity of standard tombs, yet fall below the risky message of exceptional tombs. PT3 made a statement with its scale, but it was a muted one relative to what might have been achieved (see VT4 and VT75). The projected cost of PTh2 proves that tomb builders at Portes, at least at one point in time, could complete labour-intensive projects that were far more expensive than PT3. It was not for lack of ability that the premier chamber tomb for the site was capped at a modest size. The commissioners of PT3 may have simply wanted to limit extravagance or excessive deviation from the standard. Whether this served in some capacity to enhance or preserve group cohesion is a compelling thought. For Portes, doubling the median may have been seen as extravagant enough.

Even accounting for a plodding pace of work, most multi-use tombs at Portes and Voudeni required minimal time and resources easily managed by extended families and close contacts. Wider networks at one's disposal, while not strictly needed, could further ameliorate the short-term effects of loss. This we know from labour costs typically falling in the four- to six-day range for teams of ten (Chapter 4). Why should that pattern appear? Perhaps it was a target that aligned with group ideals for tomb investment, whereas much larger tombs made an assertive, costly signal from an influential family or individual (Chapter 2). New tomb construction would not likely await death, interfering with the period of mourning and activities away from the tomb. Whether these culminated in a crescendo of eschatological significance punctuated by the tomb's readying, such as re-plastering—or re-opening in subsequent usage—is worth considering. For the LH IIIA2 Prosilio tomb 2 near Orchomenos, Galanakis (personal communication 2019) noted second coatings of clay over the bench within the burial chamber. This surface was only exposed prior to and immediately following the death of the tomb's lone individual, marking anticipatory tomb construction far in advance of an important individual's death. At least two prepared floors of lime plaster were noted in the chamber of Tomb 4 at Ayia Sotira in the Nemea Valley, only visible in the microstratigraphy due to poor preservation (Karkanas et al. 2012: 2731; Smith and Dabney 2014: 148). These were prepared for successive burials and secondary burials—with 8 or 9 individuals placed in different orientations across the floor, or in the case of the older layer, within pits—from the LH IIIA2–B. Two of the burials were judged to be men in their late 30s, with a third in a separate pit identified as “a young woman aged between 16 and 17 years old” (Smith and Dabney 2014: 148). Burials in modern Greece are typically completed within 48 hours following death (Ann Brysbaert, personal communication 2019), a reactionary process accounting for heat and religious imposition. Similar purity taboos surrounding decay and pollution from deviant behaviour, like the Greek mythos for miasma, are common for warm climates—protection against a maddening inevitability that eases with anonymisation of remains over time (Douglas 1966: 176–179; see below). Mycenaean secondary treatment of remains being frequently attested (e.g., Boyd 2015a; Gallou 2005; Moutafi and Voutsaki 2015; Papadimitriou 2011), contact with the sights and smells of decay would have been unavoidable.

The timing of Mycenaean burials, assumed to be rapid in most cases, would not likely be delayed to allow for the assembly of people or materials appropriate to the memorial of the deceased (cf. Boyd 2016: 61). If the labour models ring true, rarely less than three day/night cycles marked the progress of tomb construction prior to the first interment. Labourers might have required a week or more just to hollow the tomb, which would not account for time to apply finishing touches like the painted entrance seen with VT75 (Kolonas 2009b: 27–28; other examples see below and Demakopoulou 1990: 115; Gallou 2005: 68–69; Sgouritsa 2011: 737–739). For subsequent use, re-opening the tombs could occur as needed following death, requiring less than two days in all but exceptional cases (Table 4.2). Loose fill blocking *dromoi* could be shifted at three times the pace of cutting the rock anew (Chapter 3 § Placement). Exceptionally large tombs like VT4, VT75, and the Menidi *tholos*, may have required more than a week to reopen when fully closed, leaving the possibility for an open display long before the death of the next in line for the family vault. Tolerance would be low for delaying re-opening

or hurrying proceedings, as mourners already experienced a heightened sense of passing time for a potentially disorienting loss. In processing the “perpetual absence” of the deceased, grief is not far from rage (Flaherty and Throop 2018: 165–166). Shorter and longer schedules would break continuity, not lightly done for significant life events keenly felt, and remembered, by all.

No matter the timetable of construction, building the tombs echoed the socio-economic standing of the deceased, whose vacant role was purged from memory and replaced within expected limits (e.g., Allard 2018: 118; Battaglia 1990: 196; Hamilakis 1998: 117–118). Building tombs, like ‘testimonial memory’ in history or revered war memorials, invited direct comparison testing the limits of public expectation and opinion (King 1999: 148, 152; Ricoeur 2004: 21; Rowlands 1999: 129). Limitations on excess acknowledged the risks of alienating others with a garish monument that upstaged neighbouring tombs, sending a message of factional competition evident in mortuary display (Hamilakis 1998: 123–126; Voutsaki 1995: 62; 1997: 44, 2001: 204), as well as tomb type and placement (Boyd 2016: 64–65; Galanakis 2016b: 162; Papadimitriou 2016b). More influential individuals and sites had a greater allowance, a more forgiving scale for excess among locals as the message was understood to be cast further afield across space and time (e.g., the “far shining” *tumulus* McGowan 2016: 163–164, citing Homer.*Od.*24.80–84; see also Schnapp-Gourbeillon 2016: 206–207). Placed in full view of important routes between sites, monumental *tholoi* with decorated facades and overlying tumuli signalled to much more than local traffic (Galanakis 2011: 226; Mason 2007: 47–48; Wilkie 1987: 128–129). For instance, travellers from Pylos to Pherai (Kalamata) passed Nichoria’s largest and best-equipped *tholos* (Wilkie 1987: 128–129). Similarly, the *tholoi* of Mycenae, particularly the later Clytemnestra and Atreus, conveyed a symbolic message of power to a larger territorial audience than the restricted spheres occupied by the Shaft Graves (Mason 2007: 49; Wright 1987: 176). The crowded LH IIA scene of six contemporary *tholoi*, however, further corroborates the suspicion that *tholoi* did not house rulers alone but the heads of powerful lineages (Darque 1987; Mee and Cavanagh 1984).

When opened, VT4 and VT75 signalled a momentous change in the regional political economy. Someone with unmistakable influence was clearly lost when each was built (Kolonas 2009b: 17, 29), and, arguably, each time they were reopened. Closed, however, and the tombs all but disappeared like any other. Only the outline of the *dromoi* or an occasional chamber collapse opening a visible hole would prevent superimposition in the absence of markers (Papadopoulos 1979: 52; tomb collapses may have contributed to the Troubes site name in the Chalandritsa-Katarraktis area of western Achaea, Aktypi 2017: 1). The proximity of tombs like VT67 and VT68 show that avoidance was not always successful, and in the case of multiple burial traditions at Portes, superimposition was actively sought. Chamber tombs here continued a long tradition of intersecting earlier tomb types, engaging with an already distant past and reinventing it as needed in collective memory. Although their locations were apparent enough for builders to avoid them if they wished, chamber tombs did not share the visibility impact of marquee *tholoi* with displayed facades or tumuli “forever calling for attention” (Alcock 2016: 6). Even the mighty Atreus and Clytemnestra *tholoi* diminished under filled *dromoi*, though there are some indications that this was avoided with open *dromoi* for an indeterminate period (Mylonas 1966: 124–125; Wright 1987: 182–183). Chamber tombs relied more on construction and memory than a persistent visual reminder to carry forward their messages to the living.

More than concern over standing out, tomb builders actively mimicked previous examples using “mimetic technique”—Plato’s *tekhne eikastike* explained by Ricoeur (2004: 11) as reproducing a copy (*eikōn*) with dimensions and colours through pattern recognition. Cummings (2003: 39) proposed a similar mechanism, “archetypal memories”, for the local reproduction of styles in early Neolithic stone monuments in western Britain. Modelling tombs closely upon the dimensions of previous generations—the knowledge of which would be stronger among those with access to tomb interiors through close ties—restrains architectural choices with familial bonds and memorial traditions, providing a space for contested individual and collective memories to coexist (King 1999: 165; Küchler 1999: 55; Rowlands 1993: 146; 1999: 129, 139–141). Collective memory pushes for continuity—only when dreaming does individual memory take precedence in fragmentary and

incoherent form (Halbwachs 1992: 42). Individuals recall memories of the past in limited bursts, never capable of lingering indefinitely in a world that effectively no longer exists. They do so from a present that is the only real foundation for that recall (Halbwachs 1992: 51). Personal, recent, and distant memories all seem to strengthen from conversations with others, even anticipated conversations that never take place. Problems with chronological recall are sidestepped by focusing on memories that resonate in a particular group, responding to questions and aiding one another (Connerton 1989: 36–37). These associative memories are recalled by individuals specifically for group interests, such that families, organisations, or communities can use and retain information pertinent to their shared past (Halbwachs 1992: 52). In effect, exchanges with memory are compartmentalised. This is how I envision Mycenaean funerary construction: collective memories guide behaviour on how to engage community and sustain mimetic technique. For builders, collective recall informs construction, both the process and the final product in its shape and scale.

Collective recall is key in adhering to a standard of scale and shape, as the tombs practically disappear under backfill until their next use, concealing what lies within similar to tumuli (Alcock 2016: 6). Despite being closed most of the time—though displayed before and immediately following death, sometimes with painted or plastered surfaces (e.g., Asine, Deiras, Kokla, Mycenae, Prosymna, Tiryns, and Thebes, Demakopoulou 1990: 113, 115; Voudeni Tomb 75, Kolonas 2009b: 27–28; Prosilio tomb 2, Yannis Galanakis, personal communication 2019; Tomb 4 at Ayia Sotira in Nemea, Karkanas et al. 2012: 2731; Smith and Dabney 2014: 148)—*dromoi* invited reuse and sustained memory of individual chamber tombs. By contrast, the dolmens of Neolithic northern Europe lacked passages and were sealed with megalithic blocks set within mounds (Sherratt 1990: 161). Even so, offerings continued as the earlier tombs acted as focal points for lineages and rituals (Sherratt 1990: 151).

Rowlands (1993) made an effective case for how a buried tomb could be reproduced from memory. Combining Kopytoff's (1986) model for discussing object biographies as the embedded stewardship of memory in material form as well as Gombrich's (1979) link to "a template held in the collective mind", Rowlands (1993: 144) explained the recurrence of recognisable and durable architectural forms like Classical Greek columns in American public buildings. Through recalling enduring motifs, continuity of form lends weight to newer memorials and navigates taboos on charged depictions where reverence is expected (King 1999: 152–155; Rowlands 1999: 139–141), just as calendar repetition of performative acts deliberately claims continuity with the past (Connerton 1989: 45). Deviations draw reproach (Rowlands 1999: 129), but conservative repetition is also devalued. Originality is elevated, ironically, by some redundancy in form. As Rowlands (1993: 146) phrased it, "However false or fictional it might be, the illusion of singularity, authenticity, uniqueness, and originality of culture rests on the redundant condition of a reified signifier."

Builders at Portes especially cultivated a strong sense of architectural tradition when constructing new chamber tombs, weaving them in and around older tumuli and built chamber tombs. Tombs clustered closely, demanding considerable care in construction to avoid collapsing earlier tombs if not borrowing from them intentionally (as in PT3 partially dismantling the built chamber tomb PC1). Tombs 7, 8, and 9 at Portes spared so little room between them that excavators were able to interlink chambers and *dromoi* with small portals. The result is reminiscent of a macabre playpen. With all passages open, one can simply drop from the main chamber of tomb 8 into the lower chamber of 7 and climb further into the *dromos* of tomb 9. As stated previously (Chapter 4), the setup seems more a convenience of access during excavation than an intentional feature of the original tombs that had no need for rapid access via an awkward drop from an adjacent ledge.

Small room for error invited irreversible mistakes, and the many collapsed ceilings of chambers at Portes and Voudeni attest to the vagaries of preservation, particularly among the shallower tombs. The builders must have been aware of these risks, but some calculus led them to proceed. Expediency is tempting but seems unsatisfactory on its own. Deeper, larger, and more stable tombs did not come with prohibitively high costs, leastways not in terms of labour alone. The cost may have aligned more with avoiding an inflation of status,

which could have been construed as off-colour or fraudulent. Worse than a *faux pas* would be attracting the attention of more powerful families. There are many familiar sayings in Western traditions that advocate humility, and the Greek myth of Icarus sharply frames the antiquity of that concern in the region.

Beyond elevated difficulty in construction, proximity of tombs may suggest closer relationships among those that commissioned them but not on the strength of location alone. Conducted in the same style and executed to a similar scale, however, clustered tombs with a higher degree of sameness raise the possibility of family or factional ties. At Voudeni, two or three such groups appear based on the dissimilarity matrix of their dimensions and their locations relative to one another (see Figures 3.2–3.4, 4.3.1). Potential pairs with adjacent tombs (VT53/54, VT71/72, and VT77/78) can be spotted from the site maps, but remarkably similar distant pairs like VT29 and VT62 would go unremarked without the matrix (Figure 5.1). Other apparent mimetic clusters would almost certainly be incidental: VT72 closely resembles VT6/8 in shape and scale, for instance, but its location and orientation distance it from the pair (Figure 5.2). What the matrix does not account for, the diverging traditions of house-like and hive-like vaults, also nullifies some apparent clusters, particularly those forming around the conservatively scaled VT1 (Figure 5.3). Corroboration from finds and remains might support this idea of clustering (Figure 5.4; see also Table 4.4), but only if reuse was not so thorough as to erase initial construction.

Part of the intent behind construction following a certain scale, big or small, may still be depicted through relative investment. Measurable intent lies in a signalling approach to labour costs. I labelled tombs more than 1.5 times the standard as exceptional, assertive signals by wealthy families to claim a share of local leadership during the LH IIB/IIIA florescence of Mycenaean sites in Achaea (for mapped examples at Portes and Voudeni, see Figure 5.5). This not only includes obviously extravagant examples like PTh2, PT3, VT4, and VT75, but the more subtle confidence suggested by the construction of PT7 and VT56. Smaller tombs, including those near the standard size like PT9 and VT71, attempted to append group membership for less influential families without risking backlash from rivals and peers. Subsequent reuse of tombs, including the lavish LH IIIC warrior burials, made similar statements with the added weight of an anonymous past, yet without most of the expense required by new construction (Table 4.2). More expensive by far would be the accumulation of the imported wealth on display here (e.g., Kolonas 2009a, 2009b; Moschos 2000, 2009; van den Berg 2018).

#### 5.4. Labouring toward forgetting

From here, tomb labour must part from events singular to regional timescales and join a discussion relevant to the human condition, namely that of memory. Doubtless the bustle of construction around the Menidi *tholos* and monumental chamber tombs like PT3, VT4, and VT75 impressed their intended audiences with architectural achievement and collective potential. The impression certainly endured through encouraging reuse of the tombs or mimicry in new constructions, but it might be more efficacious to follow the much longer-lasting and wider-reaching spectacle of rumour and memory. Both never quite allow labour's role a peaceful rest, so long as some vestige of glory remains for Ozymandian feats. Retracing memory's evolution back to architectural inspiration follows a circuitous, context-dependent route but generally has a similar destination in commissioner/community prestige and posterity. The subject recurs often in studies of monumentality. Santillo-Frizell (1997: 103) connected Mycenae's largest tombs to their "main value" in prestige. Others have argued that monuments primarily claimed a past or stabilised a present in transition (e.g., Glatz and Plourde 2011; Renfrew 1973). Holtorf (1996: 121, citing Assmann 1992: 71) prioritised monument roles in projecting into the future, placing posterity in primary focus as others have done (Bretschneider 2007: 4; Speer 1985; Trigger 1990; see Chapter 2, this volume). Commemorative projections blur as memories change, each ignited by reminders coded into mortuary architecture. For that staccato reinvention I have chosen the simple phrase *grave reminders*. Grave reminders quickly supersede or misplace purpose, prestige, and posterity in humanity's vain search for a durable record of existence. Perhaps more unsettling for those concerned over legacy, deriv-

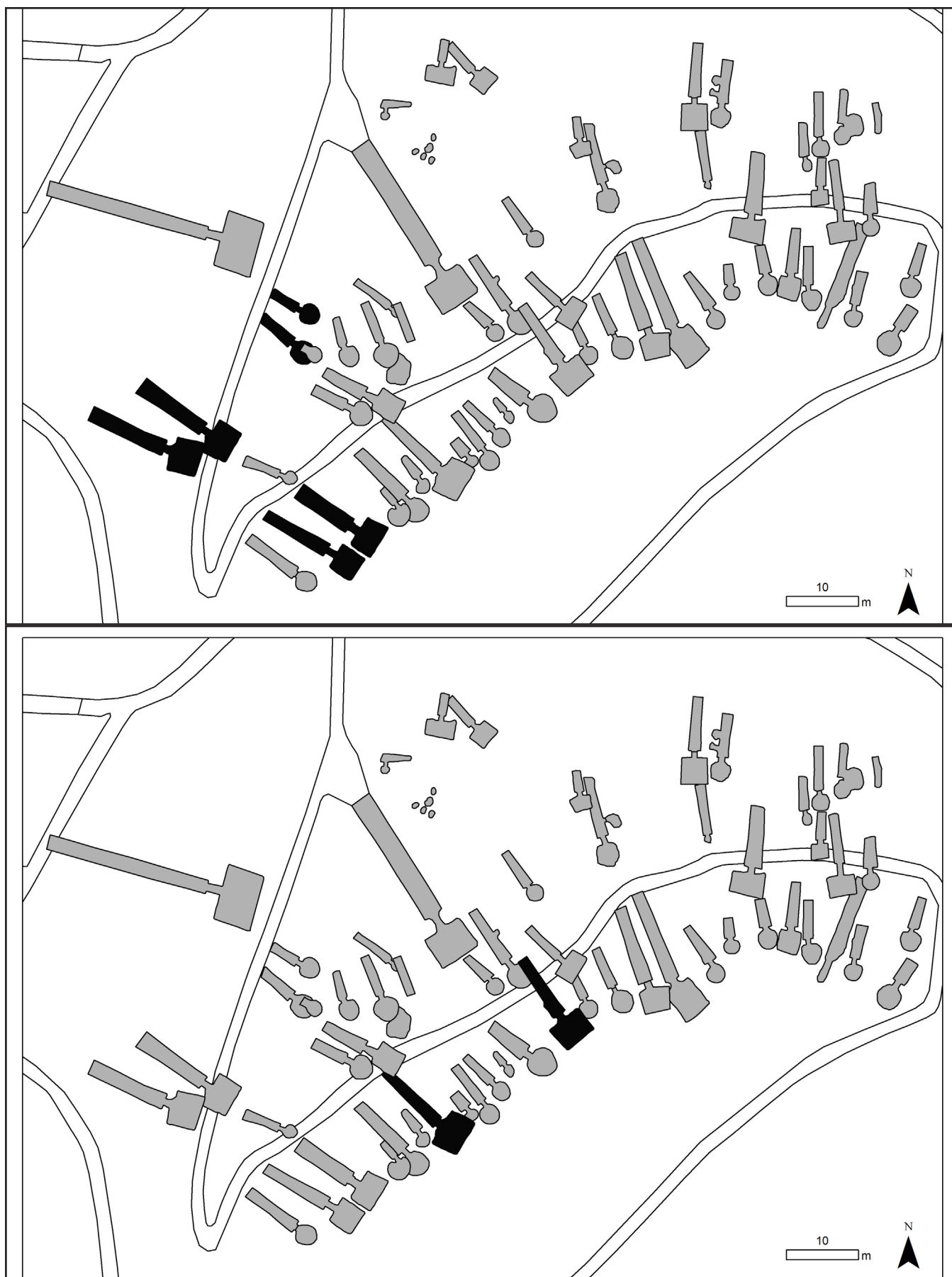


Figure 5.1. Paired clusters of tombs showing strong correlation from mimetic design and location.

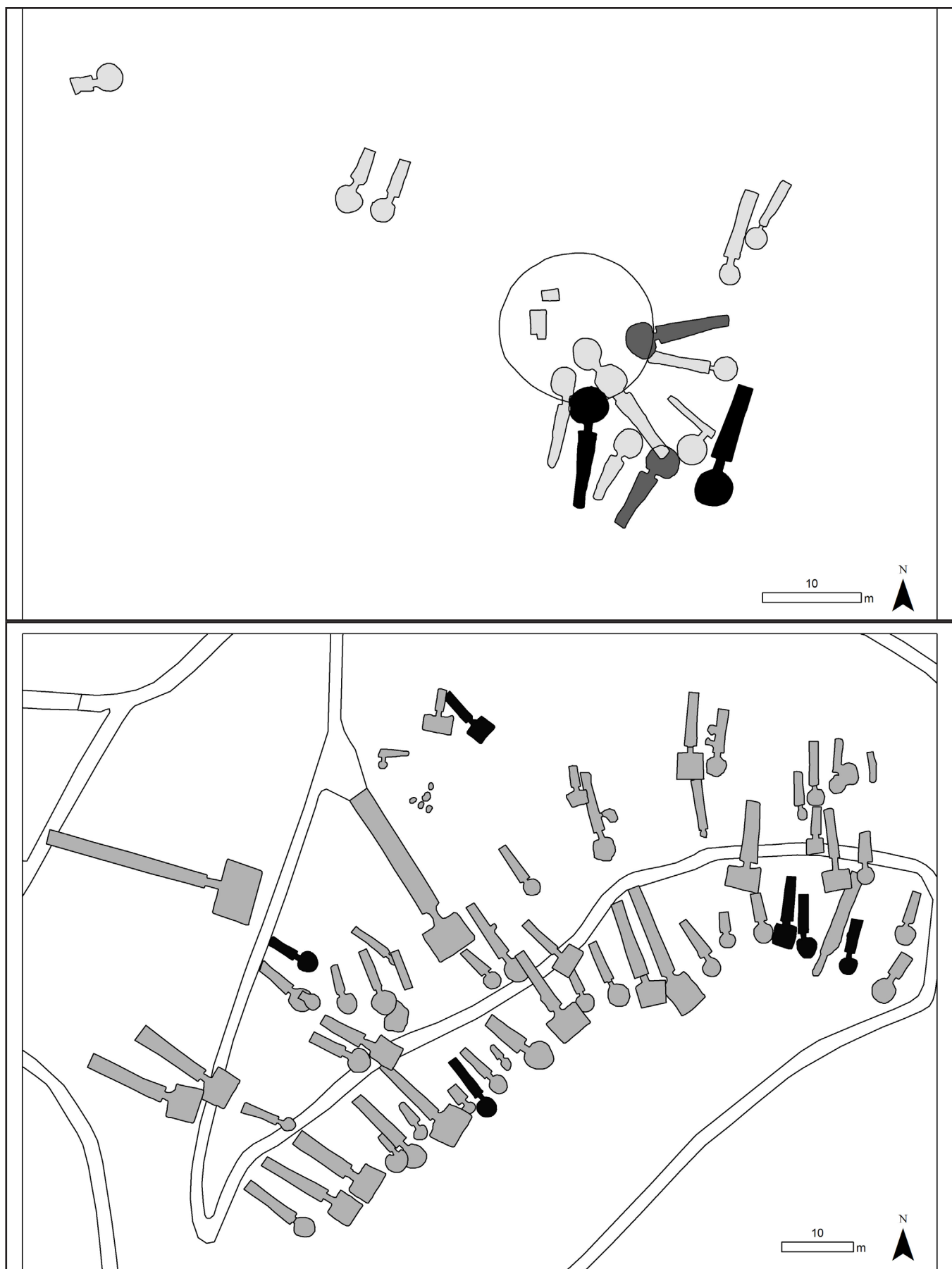


Figure 5.2. Incidental clusters of tombs showing strong correlation in design but weak correlation in orientation and location at Portes (top) and Voudeni (bottom).

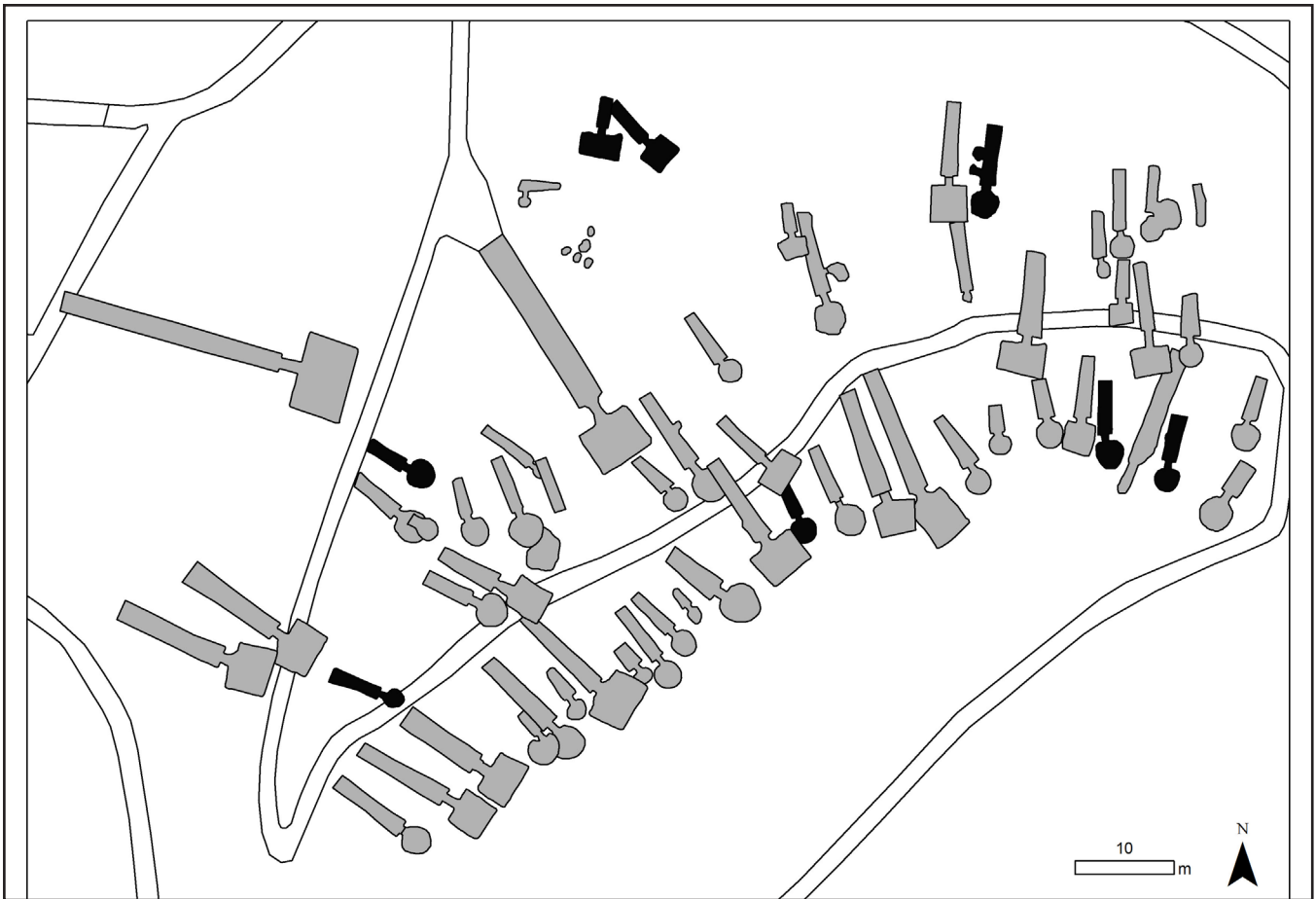


Figure 5.3. False clusters of tombs showing strong correlation in scale but weak correlation in shape and location.

ative lessons from ruined architecture, like Percy Shelley's *Ozymandias*, will almost certainly outpace the scope of its original intent.

Memory and memorials share global similarities despite diverse cultural manifestations (e.g., Lillios and Tsamis (eds) 2010; Hamilakis 2013; Henry and Kelp (eds) 2016; Peterson 2013; Williams 2006). Where monuments serve as mnemonic devices, cultural transmission through memory is seen as a more rigid process than societies where memory replaces and recreates destroyed objects (Rowlands 1993: 141). Less rigid transfers of memory in material can be found in Maussian terms of object sacrifice and gift exchange, where memories of objects-in-action drive future behaviour rather than commemorate the past (Mauss 1966 [1925]; Rowlands 1993: 147). Destroyed objects especially are said to be "held in the social memory" where actions can parallel beliefs in the process of death (Rowlands 1993: 148). The mnemonic role is no less effective here, and there is little if any information lost after destruction (Jones 2007: 114–118; 2010). Performance is more significant than the material object in creating and sustaining memory. With their antecedents being stripped by money flung from funeral attendants who discarded them into the jungle to rot, some elaborately incised Malangan funerary sculptures were reproduced consistently after more than a century (Küchler 1999; Rowlands 1993: 148–149). Schieffelin (1985: 707) also emphasised performance rather than recognition as the semiotic vector for symbolism (Argenti 1999: 23; see also Connerton 1989; Forty 1999:2).

Contrary to their image of permanence, the durability of chamber tombs has been contested, and rightly so given the many collapses commonly recorded at Mycenaean cemeteries. Cavanagh and Mee (1978: 42) were bleak about the survivability of most chamber tomb ceilings, noting the mixture of roof collapses even among layers of use (see also Smith and Dabney 2014). Faulty architecture would not halt operations so long as the cemeteries served community needs. Destruction of tombs could also stem from deliberate acts of forgetting through superimposition or intentional abandonment. The *tholos* at Voidokoilia was sunk into a MH I tumulus



Figure 5.4. Tomb clusters through time using provisional chronology. In reading order: LH IIB, LH IIIA, LH IIIB, LH IIIC, Submycenaean.

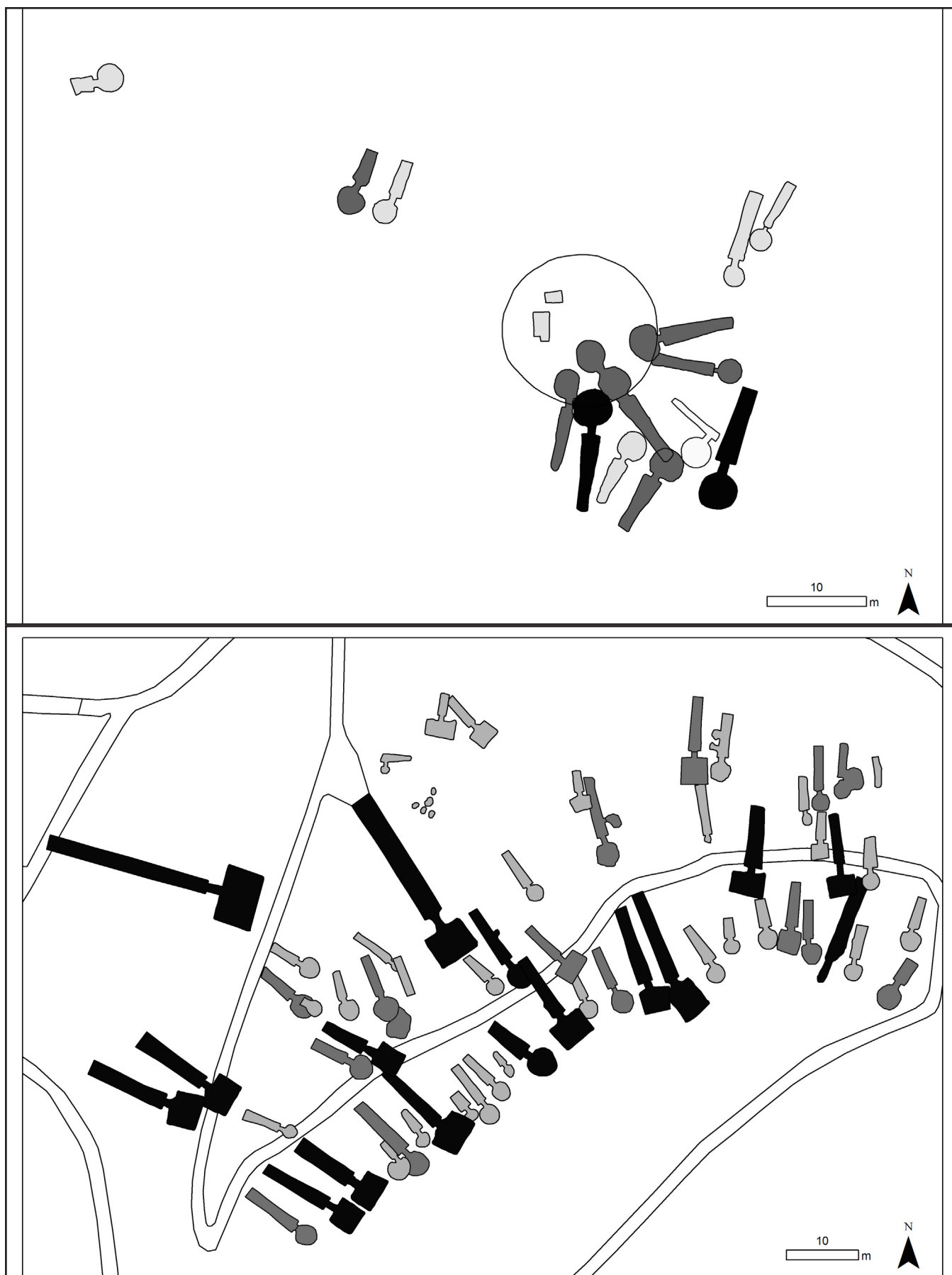


Figure 5.5. Tomb scale/signalling classes at Portes (top) and Voudeni (bottom): undersized/cohesive (light grey), standard/pragmatic (grey), and exceptional/assertive (black).

built over an EH II settlement, staking claim to a rich past as Galanakis (2011: 220) saw it. Positioning *tholoi* near MBA tumuli likewise may have accelerated forgetting by replacing, rather than commemorating, the earlier monuments (Galanakis 2011: 222). The builders of the two LH IIB Portes *tholoi* avoided the prominently placed MH III/LH I tumuli A and C, instead preferring association with Tumulus B (PTh1) or a marginal slope (PTh2). That the site's largest LH IIIA chamber tombs returned to the A/C cluster of tumuli and built chamber tombs, even dismantling them in some cases, could reflect a generational divide in the layout of the aging cemetery. Abandoned tombs with a gap longer than three generations between uses were assumed to be co-opted by another family or one distantly tied to the previous users (Cavanagh and Mee 1978: 32). The point here lies with material longevity being less crucial than the survival of the tombs in collective memory, even if some connections must have been made anew. Dispelling the notion of architectural permanence also brings us closer to perceptive connections with somatic experience, the foremost being decay (as anyone on the north side of middle age can attest).

Architectural metaphors for the human body offer stark imagery of decay. For the Oku *ndavos*, “once built, the house is left to fall into decay, never to be repaired again. As the king grows old in his palace, so too the house will fold in upon itself and crumble into the ground” (Argenti 1999: 27). Drawing a parallel to the sempiternity of medieval European kingship, in which a king's natural body dies but the body politic endures, Argenti (1999: 27) noted the euphemisms veiling an Oku ‘lost’ king. Natural decay is expected; institutional decay is unacceptable. Invoking that anonymisation process under other terms, ethnographies—from the Merina tombs of Madagascar to Melanesian exchange—have elevated ephemeral objects, performance, and the ancestral collective in social memory's crusade to absorb and forget individuals (Williams 2003: 6–7 with references). Water, darkness, and dirt have the same erasing effect, an anonymising by homogeneity and immersion (Douglas 1966: 161). Thus, closing tombs darkens and finalises what lies within, allowing it to be forgotten until the next death cycle. In a similar vein, Fowler (2003: 53) saw parallels between the decaying mortuary structures of Neolithic Britain and the rotting bodies left inside, a pungent image that demands covering to control attention and mask offensive reminders with dirt's “creative formlessness” (Douglas 1966: 161). Transposing this directly on Mycenaean elites and mortuary rites might be reckless, but it would be equally wilful not to see some glimmer in the decay of chamber tombs and the anonymisation of ancestral remains in secondary funerary practices (Boyd 2015a; Moutafi and Voutsaki 2015; Papadimitriou 2011). At Routsis *tholos* 2, for instance, Boyd (2015a: 213–214) speculated whether the tomb's collapse was deliberate to seal its contents and prevent reuse. Elsewhere, collapsed chamber tombs either failed to deter reuse as new floor layers or prompted construction of side chambers to avoid previous burials (e.g., Cavanagh and Mee 1978: 42; Smith and Dabney 2014: 151). In the case of Tomb 6 at Ayia Sotira (Nemea), builders repeatedly repaired collapses with rubble masonry, the final episode of which stemmed from tunnelling through the roof of the *stomion* rather than unblocking the entrance (Smith and Dabney 2014: 152–153). I wonder if, of the many roof collapses seen at Portes and Voudeni, not a few resulted from deliberate negligence, if not orchestrated sabotage (from a design flaw like too-shallow construction, since demolition of rock-cut architecture seems unnecessarily risky). Their proficiency in construction elsewhere certainly casts doubt on ignorance as a principal factor.

Fortunately, grave reminders do not rely on markers or direct recollections of events and can arise entirely from social transmission, hearsay, or personal suppositions, so long as they tether to a concrete experience via some degree of separation. If that is difficult to accept, celebrations of birth are routine reminders of events we cannot possibly recollect without help, or in Telemachus's anxiety over coming of age without a father, “Who, on his own, has ever really known who gave him life?” (Homer. *Od.* 1.250–251). Fabricated or not, reignited memory in grave reminders derives from and surpasses material durability in extending the life and influence of memorials. Idling in the background, such memories seldom roar to life without a kick-start from a recent death or material reminders of an older one. Initial frames of reference from reminders of Mycenaean funerals should take into account the rarity of the event itself, particularly where archaeological enthusiasm may have forgotten it.

Voudeni makes for the perfect example here. It was indeed a massive and long-lived cemetery, and its estimated 150 (ca. 78 excavated) multi-use tombs could have accommodated over 3,000 individual remains with heavy reuse, as suggested by tombs showing MNI counts from 2 to 27 individuals (Kolonas 1998; Moutafi 2015: 537). Stretched over 350 years, however, the rate of reuse shows roughly 8–9 burials per year, or one every 45 days. The purpose here is not to suggest the actual rate of use for the cemetery, which surely varied with demographics and the fortunes of nearby communities. It is rather to dampen the notion of rampant mortality and tomb obsession in lives obviously lived outside of cemeteries. It also shifts the tombs away from active space and into their more accustomed niche of memory.

Fixations of Agatha Christie novels and modern mass media notwithstanding, inescapable death does not generally insert itself into daily thought, much less experience (Flaherty and Throop 2018: 162). Even where mortality rates elevate risk, passive awareness suffices until the unthinkable occurs, whereupon specific coping mechanisms promote individual and collective resilience (e.g., Barbarin 1993; Maček 2018; Utsey et al. 2007; Zakour 2012). For instance, Sarajevans converted 1990s wartime disillusionment into a popular joke about an old man in a rocking chair teasing snipers (Maček 2018: 244). Community attention to recent losses may last for weeks or more as the missing links are renegotiated, depending on the circumstances of death (i.e., sudden or expected) and importance of the person or close affected groups (e.g., family, economic or political contacts). Individuals, however, are more susceptible to traumatic loss and may take years to recover if at all (Zakour 2012: 98).

Less so do the comparatively short-term preparations surrounding death preoccupy the aggrieved for long, outlasted by far by the emotional and practical impacts of loss. From my own labour estimates throughout Chapter 4, standard chamber tomb construction of seven days seems nontrivial compared to the few hours needed for a simple pit grave. However, those 7 days versus 15,000 days lived (perhaps the last 7,000 were integral to the community) by a hypothetical 41-year-old Mycenaean official would be on the verge of imperceptible for those left behind. The loss itself and reminders thereof are more keenly felt than the expense of tomb construction. Thus, the practical cost of multi-use tomb construction might be trivial, and the even cheaper cost of reuse especially so, but the psychological and social rewards of memorialisation are not.

This leads into the question of whether a threshold can be found where practical costs reclaim a nontrivial element of collective labour potential. Perhaps a population undergoing exceptional demographic crises of war, famine, or pestilence would take greater note of frequent funerals. It might if that frequency did not also have its limits in terms of response. Too many fallen may trigger responses to collective trauma rather than individual loss, where it is more likely that normal operations would defer to necessity in multiple or commingled mass burial, as with the ca. 150 buried at Kerameikos in the 430–426 BC Athenian epidemic (Papagrigorakis et al. 2008: 162–166). While lessons here need be sought no further than twentieth-century atrocities (e.g., Kontsevaia 2013; Maček 2018), their antecedents extend as far back as the Early Neolithic in Central Europe with documented massacres at Talheim, Asparn/Schletz, and Schöneck-Kilianstädten (Meyer et al. 2015; Teschler-Nicola 2012; Wahl and Trautmann 2012). Mass burials at Nichoria and Thebes show precedent for the Greek Bronze Age (Arnott 1996; Vika 2009; see Chapter 2, this volume), and it would take no great leap to imagine similar scenarios playing out under the martial fascinations evident in LH IIIC Achaean warrior burials (see above).

Under harsh but not exceptional circumstances—where collective trauma is absent or more diffuse—several thousand residents in the LBA communities on the Gulf of Patras may have buried dozens from locally important families in a rough season of violence or disease. As the labour index indicates (Table 4.2), space to bury the less-influential dead would be exhausted long before cost became prohibitive—interring 20 bodies all at once in each of the 89 surveyed chamber tombs from Portes and Voudeni would demand ca. 109,000 ph (roughly a working calendar year, 218 five-hour days, for 100 labourers) in cumulative reopening costs, compared with ca. 33,000 ph in initial construction costs (a little more than two months for the same group).

Neither scenario is likely in the short term, yet it still leaves thousands of common deaths to be disposed elsewhere. Unless secondary treatment or other vagaries of taphonomy have erased the evidence with remarkable efficiency, clearly not all victims warranted use of a chamber tomb. Neither would a community majority turn out *en masse* for any but the most extraordinary funeral, leaving the average death comparatively unremarked. This is not to say the dead were not celebrated, as indeed evidence remains of goodbyes ranging from a reflective offering to a wild party. A final offering of an LH IIIB2 drinking vessel seemed to mark the last use of Tomb 4 at Ayia Sotira, one of several examples from the site of parting gifts, which included an LH IIIB amphoriskos placed near a slab-covered pit in the deliberately cleared Tomb 3, an LH IIIB jug in the *stomion* of Tomb 5, and an LH IIIB1 stirrup jar set above older burials in Tomb 6 (Smith and Dabney 2014: 149–153). Menidi, on the other hand, held an apparent feast in or near its cavernous *dromos* (Borgna 2004: 263–264), closer to the vivid image envisioned by Hamilakis (1998: 128) as a drunk, possibly high, dancing crowd for extravagant Minoan and Mycenaean funerals.

Death looms large in Mycenaean archaeology, partly from its festive allure and partly from taphonomic serendipity. Funerary evidence is the best remaining proxy for daily activity, supporting continued fervour in Mycenaean mortuary studies (Cavanagh 2008: 327–328). Quite simply, cemeteries and their more fortunate unpilfered graves dominate the literature and the landscape, justifying the seldom necessary variant term of deathscape. Dense and rich Mycenae, for instance, generated more than 250 chamber tombs across 27 cemeteries (Boyd 2016: 68, citing Shelton 2003), and likewise disposed of some poorer and younger dead in other, less visible ways. Near Tiryns, another palatial power of note in the Argolid, 50 chamber tombs arranged in three clusters were excavated in 1927 along the eastern slope of Profitis Ilias, whose opposite slope housed the looted remains of two large *tholoi* (Papademetriou 2001: 67–71). Not to be outdone by rock-cut counterparts, particularly in Messenia where *tholoi* were indisputably preferred (Dickinson 1977: 63), over 200 LBA *tholoi* have been recorded across much of Greece and the Aegean (Galanakis 2011: 223).

Greater numbers of reported tombs do not always guarantee availability of information. Magnification on their contents nullifies some advantage gained by lengthier catalogues of sites and features, particularly where ritual prescription in the past prompted wholesale removal of tomb contents. Selective bone removal on MBA Crete was taken to the extreme for the fifteen *tholoi* discussed by Xanthoudides (1924) in *The Vaulted Tombs of Mesara*, who recorded only eight skulls for what Branigan (1987: 48) estimated as “at the very least a thousand burials”. Tomb 3 at Ayia Sotira (Nemea) was thoroughly cleared, leaving only fragments of an LH IIIA2 conical rhyton in *dromos* fill, two adult teeth in a slab-covered *dromos* pit, and an LH IIIB amphoriskos deliberately placed at the edge of an empty slab-covered pit in the chamber (Smith and Dabney 2014: 152). Earlier burials at Portes and Voudeni were certainly swept to the side or removed to secondary pits in *dromoi* or side chambers to accommodate newer additions, but the extent of removal away from the tomb would be difficult to track (Moutafi 2015).

Avoiding total loss, looking beyond tomb contents recalls that purpose is imprinted on the architecture itself. The operation of multi-use tombs was very much a forward-looking family affair with the weight of antiquity, being collective in construction, maintenance, and use; meaningful in deliberate shapes and elaborations, and enduring in physical and symbolic longevity (Cavanagh 2008: 336–340). Tombs, like houses, extend beyond container to fulfil roles of “creating and perpetuating social relationships” (Sherratt 1990: 164). Like most monuments, they recall a symbolic past and provide anchor points for the future. That the largest and most elaborate tombs anchored and transferred a hereditary elite identity has been strongly attested (Dabney and Wright 1990: 50; Santillo-Frizell 1997: 103). The smaller more rural tombs, however, applied to a shared human condition, one not always rooted in the late emphasis on ancestor worship and its deliberate manipulation (Dabney and Wright 1990: 52; Gallou and Georgiadis 2006: 126; Stamatopoulou 2016: 182).

Two centuries of archaeology may have inflated the resulting deathscape away from the ground-level Mycenaean experience but not from the wider human one. Deathscapes form part of a phenomenon well attested

by anthropology, art, and literature: humanity's strident attempt to capture some element of permanence in the face of inevitable impermanence (e.g., Hallam and Hockey 2001: 25 and associated bibliography). As Hallam and Hockey (2001) observed, the key factor is not death but memory. Every action following loss thus claims a mnemonic function. Even mundane items can take on transformative meaning to trigger memories in defiance of catastrophe, as Kurt Schwitters' collages of street rubbish invoked a world broken by the First World War (Hallam and Hockey 2001: 12). Memorials in durable materials are not without their rules (e.g., King 1999: 148, 152–155; Rowlands 1993: 146; 1999: 139–140). The Lion Mound Memorial commemorated the Battle of Waterloo but did so via destruction of the battlefield, with construction levelling the surrounding fields to create the 41 m tall mound and prompting the Duke of Wellington to call it “a hideous thing” (Morgan 2008: 23). A similar proposal to commemorate the Second World War with a bulldozer-built tumulus never materialised (McGowan 2016: 164). Statuary war memorials typically depict soldiers without aggression or violence, electing for defensive or watchful postures if combat is shown at all. Bayonets were removed from the Bradford City War Memorial after an outcry from moralists who objected to the violent imagery (King 1999: 152–155). The image of the ‘good soldier’ in statuary did not hold up when literary accounts came forward (King 1999: 152), particularly Remarque's (1929) flawed characters and Jünger's (2004 [1920]) visceral eyewitness viewpoint. Tombs are another form of commemorative architecture, a powerful, purpose-driven form of mnemonic investment. They return families and communities to daily routine, where upended lives can move forward absent mortality's cloud.

The vaults of *tholoi* and chamber tombs functioned as repositories for atavistic memories (*sensu* Larsson 2010: 180), invented and autochthonous, to be opened and re-lived during secondary treatment or new primary burials, heterochthonous experiences with unknowable death (Flaherty and Throop 2018). In this my use of the term *vault* when referring to the burial chamber has been deliberate, as it alludes to the tomb's role as memory bank, safeguarding the revered past irrespective of how fabricated it might be. In this sense, I am less focused on another popular role of the tomb as performative stage (see Dakouri-Hild and Boyd 2016), wherein much activity takes place just outside the tomb on the meaning-loaded threshold (Dakouri-Hild 2016: 20; Gallou 2005: 67) or in processions around the cemetery (Boyd 2016: 64–65; Gallou and Georgiadis 2006: 140). Since I argue elsewhere against the visual impact of closed chamber tombs (see Chapter 2), it is important to reiterate here that mnemonic purpose permeates construction irrespective of continued use or visibility. Similar arguments have already surfaced in Greek mortuary studies, particularly where mid-first millennium traditions intersect with tumuli (e.g., McGowan 2016; Stamatopoulou 2016). Galanakis (2011: 220) applied landscape associations rather than visual prominence in reconstructing mnemonic landscapes with tumuli, since MBA and early LBA tumuli in the broken Greek landscape are not as visually striking as those on the open steppe (Alcock 2016). With their maximum observed heights of 5 m and diameters of up to 30 m, mountainous terrain simply eclipses their visual fields. Even cleared as it has been for the modern archaeological park, the Voudeni cemetery is not easily spotted from a distance (see Figure 1.10). Its view toward the gulf is impressive (see Figure 4.3.2), but like all ground-level or subterranean architecture in broken terrain, the cemetery melts into the background maze of ravines and hillslopes.

Mnemonic roles, like grave reminders, merely add to the repertoire of Mycenaean multi-use tombs. In addition to tomb-specific reuse and secondary treatments, those mnemonic roles were playing out on a grander scale already in the early LH, shaping sitewide architectural and socio-political trajectories at Mycenae. Here, older tombs and cemeteries served in the systematic veneration of ancestors for the benefit of living actors, as affirmed by Gallou (2005: 13) in anchoring a Mycenaean cult of the dead on the reorganisation of Grave Circle A in the LH IIIB period. At a time of sweeping architectural projects, Grave Circle A avoided subsequent overtopping construction, gained its own wall, and was placed within the circuit wall and near the cult centre (Gallou and Georgiadis 2006: 127). Grave Circle B was not accorded the same concessions, as evident in the intrusion by the Tomb of Clytemnestra (Button 2007: 89; Gallou 2005: 17). Despite their different roles, however, both grave circles were thrust back into public memory by non-random acts of construction, just as builders at LH III Tiryns and Pylos negotiated new construction by demolishing or preserving ruins (Maran

2016: 161–162; Nelson 2007: 150–151). Proximity may function similarly as an (unexpected) grave reminder in the case of densely clustered chamber tombs. Several cases at Voudeni and Portes have been shown where wall collapses have merged burial chambers built with too little intervening space, such as VT40/44, VT67/68, and PT7/8 (see Chapter 4).

## 5.5. Concluding summary

I initially asked what considerations affected tomb shape, scale, siting, and reuse (Q1). Correspondence analyses of photogrammetric measurements and labour costs suggest pragmatic strategies appropriate to local resources and social constraints. Large LH IIIA chamber tombs (e.g., PT3, VT4, VT75) declared factional strength for a regional audience, similar to MH III/LH I tumuli (PTumA–C) and LH II *tholoi* (PTh1–2) built by preceding generations. By siting its largest chamber tombs on tumuli and a massive LH IA–II built chamber tomb (PC1), Portes grounded its evolving mortuary traditions in a mythical past. Diverging LH IIB/IIIA traditions could reflect competition with those reusing the site's LH IIB *tholoi* or superimposing LH IIIA–B cist and built cist tombs there rather than alongside their peers on the dense Tumulus A/C cluster. The changing landscape across six centuries of use no doubt fostered mercurial fortunes and rivalries, but new multi-use tomb construction at the site settled on *tholoi*-like, hive-type chamber tombs of a muted scale no greater than twice the site median (or roughly triple the AA01 standard) from the LH IIIA onward. Voudeni, on the other hand, built its cemetery anew and almost entirely out of chamber tombs, loosening restrictions on the shape and scale they could assume with at least eight apparent vault shapes and scales from less than a fifth to more than nine times the median.

Further to this I asked if construction and reopening costs burdened the commissioner(s) while creating a memorable experience for the builders and witnesses (Q2). Of the tombs accessed here, only the Menidi *tholos* presented a cost sizeable enough to challenge local resources, while still falling far short of enormously costly projects like the LH IIIA/B mega-*tholoi* and fortifications of major citadels. Future publications by the SETinSTONE research group may illuminate the relative technical challenge of these marquee endeavours (Boswinkel forthcoming; Brysbaert in progress-2020; Timonen forthcoming). For most LH IIIA chamber tombs, construction costs were unlikely to strain local resources. Late reuse during the contracting LH IIIC period further allowed lineages to claim powerful ancestry with reduced construction costs, freeing resources to invest in far more expensive grave goods like those found in 'warrior burials'.

For my third set of questions, I asked if tomb architecture reflected the memory of the deceased or if their remains and assembled offerings were more informative for those remembering them (Q3). Ideally, tomb architecture would combine with contents to write eulogies insofar as we can discern them three millennia later. Reuse and looting has hindered progress, but snapshots are still possible where access limitations do not defer querying available data. Unsurprisingly, tomb architecture does reflect the standing of the deceased and their close supporters, pulled from and assessed by a local audience. Grave goods, particularly nonlocal and expensive items, point to connections made further afield. Whether the deceased also came originally from afar would be an intriguing line of research for variable mobility through the long Mycenaean era.

For my final question, I asked how builders perceived tomb construction, its costs and rewards (Q4). Comparatively low costs of construction and reuse did not evidently prohibit building excessively scaled tombs on technological or economic grounds. Social rather than economic constraints encouraged compliance with a recognisable standard, limiting overly ostentatious tomb building away from major citadels. Collective memories held a 'blueprint' for tombs to follow, allowing mimetic design to replicate the tripartite shapes familiar to builders and witnesses. By electing to build larger, more elaborate tombs, commissioners risked family and factional reputations in a costly signalling gamble to secure legacy. Builders and supporters sacrificed time and resources on the legacies of others, deferring benefits of association with grand projects and wielding the powerful court of public opinion for a garish misstep.

The main takeaways from this study began as largely methodological but leave openings into bolder statements on Mycenaean mortuary practices. Relating the hosting tombs to their human remains and grave offerings, for instance, is a daunting task awaiting further study. Combining the architectural data here with the work of Moutafi (2015) and Kolonas (1998) would be especially fruitful for Voudeni, as would inter-site comparisons using the work of van den Berg (2018) and recent publications from Aigion, Achaea Clauss, and Chalandritsa-Agios Vasileios (Aktypi 2017; Papadopoulos and Papadopoulou-Chrysikopoulou 2017; Paschalidis 2018). As I hope to have shown, comparative labour—as a simplified but lengthy catalogue application of architectural energetics—enhances econometric research through compiling labour rates and casting a wider net for case studies. Visualisations and tabular data depicting labour ranges with many case studies are more informative than the exhaustive treatment of single cases with single rates.

Adding case studies for energetics at a faster pace than traditional reliance on plan drawings, digital modelling of tombs promises greater preservation and efficiency in relevant measurements for architectural features. It also enables statistical analyses that capture patterns not easily demonstrated with conviction in qualitative descriptions. Multidimensional scaling, for instance, helped to illuminate the spectrum of sameness and exceptionalism in tomb scale (Figures 3.2–3.4; Tables 4.1–4.3). This suggested the inter-site duality for a conservative Portes—interweaving rigidly designed chamber tombs in a dense, centuries-old cemetery of tumuli, *tholoi*, cist and built chamber tombs—and cosmopolitan Voudeni, flexibly building chamber tombs with different shapes and radically variable scales on a blank slope. The relative index of tombs also showed intra-site clustering that may indicate family groups and traditions (Figures 5.1–5.4). Groups of three and more clustered solely on a shared sense of scale and shape. Interpretive gains are only tempered with the prospect of combining that insight with osteological and portable finds data, an eventuality that must await further research and publication of these important sites. Architecturally at least, multi-use tombs seem to express much more about Mycenaean community than the individuals interred therein.