

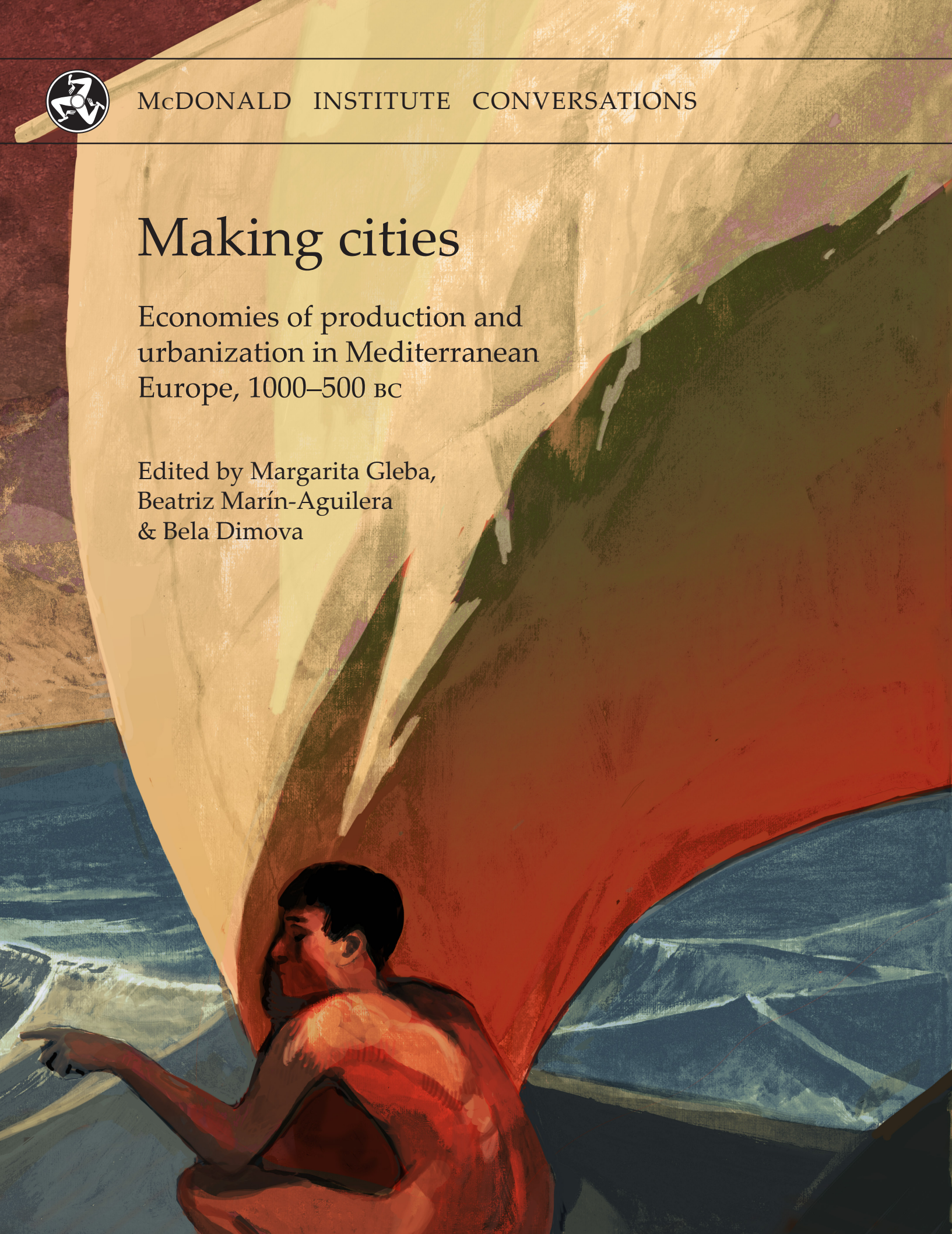


McDONALD INSTITUTE CONVERSATIONS

Making cities

Economies of production and
urbanization in Mediterranean
Europe, 1000–500 BC

Edited by Margarita Gleba,
Beatriz Marín-Aguilera
& Bela Dimova



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with contributions from

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Published by:

McDonald Institute for Archaeological Research
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Downing Street
Cambridge, UK
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(0)(1223) 339327
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McDonald Institute for Archaeological Research, 2021

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ISBN: 978-1-913344-06-1

On the cover: *Urbanization of Mediterranean Europe powered by sails*, by Kelvin Wilson.

Cover design by Dora Kemp and Ben Plumridge.
Typesetting and layout by Ben Plumridge.

Edited for the Institute by Cyprian Broodbank (*Acting Series Editor*).

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Chapter 2

Argilos: the booming economy of a silent city

Jacques Perreault & Zisis Bonias

The lower Strymon region was in antiquity an area extremely rich in gold and silver mines (Zannis 2012, 184ff; Nerantzis 2015). Many ancient texts refer to the mineral wealth of this region, which was the envy of all, and this is attested by the more than 50 mine galleries found on Mount Pangaion, many of them going back at least to the Archaic period. It is thus not surprising that Thracians, Greeks, Macedonians and Persians all tried to profit from the mining activities and control the access to these mineral resources.

Since 1992, a team of Greek and Canadian archaeologists has been excavating ancient Argilos (Fig. 2.1), one of the two earliest Greek colonial settlements in the lower Strymon region.¹ Argilos is the northernmost of the four colonies founded by inhabitants of the Cycladic island of Andros in the mid-seventh century BC. The others, Sane, Akanthos and Stagira, were situated along the eastern coast of the Chalkidiki Peninsula (Tiverios 2008, 52–66; Perreault & Bonias 2010, 225–33). Before our excavations, very little was known about the history of the city, as there is very little mention of it in literary sources. When Argilos is mentioned, it is never for the city itself, but in relation to historical events that took place in the area, such as the Persian presence or the Peloponnesian War and its implications for Amphipolis, the Athenian colony founded in 437 BC just a few kilometres east of Argilos (Isaac 1986, 36–45; Liampi 2005, 83–7). At first, this may seem surprising, especially in regard to the economic wealth of the area. But it may also be due to the fact that Argilos was a short-lived city. It was conquered by Phillip II in 357 BC, and then rapidly abandoned, the population probably forcefully displaced to Amphipolis.

The colony was established on a small hill along the north Aegean coast. The site was already occupied by Thracians when the Greeks arrived, but there is no indication that the locals were expelled. On the contrary, it seems that both communities cohabited for a

few generations. This is shown by the abundance of Thracian material before and during the early years of Greek occupation, down to c. 550 BC (Perreault & Bonias 2010). This cohabitation was most surely beneficial to the Greeks, as the territory of the Bisaltians, on which the colony of Argilos was founded, was also renowned for its sources of gold and silver (Isaac 1986, 29–30; Zannis 2012, 211–12). In addition to this, as noted by Strabo (VII fr. 34), both sides of the Strymon River, which is in the vicinity of the colony, were also rich in these minerals.

From the first years of excavation, we noticed a rapid economic development and evident prosperity of the city (Fig. 2.2). If, at first, the settlers had occupied the coastal area and the *acropolis*, from the second quarter of the sixth century onwards, many residential and public buildings were erected on the southern slope of the hill and we see the implementation of a veritable urban plan. Large streets link the different sectors of the city and a mudbrick fortification wall encloses it (Ouellet 2014). During the third quarter of the sixth century, Argilos established a small colony at the eastern limit of its territory, on a hilltop overlooking the Strymon River, Kerdylion, yet another indication of its growing prosperity (Th. V 6.3–5; Koukouli-Chryssanthaki 1997). This strategic position allowed the Argilians to keep an eye on activities along the river. Excavators have also found several indicators of economic activity covering all phases of the city's short history. First and foremost, the presence of metalworking and other industrial activities for which various furnaces have been found. The earliest one was uncovered in the coastal area and dates to the second quarter of the sixth century BC (Perreault & Bonias 2007, 81–3). The horseshoe-shaped furnace, measuring 50 × 38 cm, has a small cubic platform made of baked clay placed in its centre. Around the furnace the remains of three charcoal pits were found. On the southeast slope of



Figure 2.1 (above). *Argilos, aerial view.*

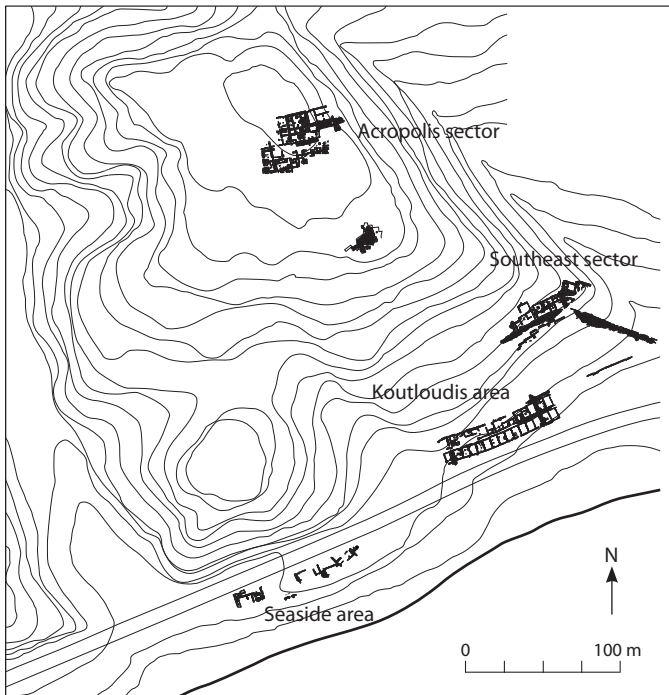


Figure 2.2 (left). *Argilos, general plan* (F. Gignac, J. Perreault, K. Zambas and X. Samaras, 2018).

the hill, where several impressive buildings border a large street that must have led from the port to the *acropolis*, excavators uncovered a house dating to the sixth century BC (Perreault 2011, 40–2). It comprised, in its first phase, two rooms, the larger of which had a small hearth in one of the corners and served as living quarters. The second room, much smaller, roughly 5 × 5 m, had a small furnace in the centre with two or three channels linked to it (Perreault & Bonias 2015, 268–70, pl. 31,1–2). The furnace's circular floor was originally lined with small stones placed vertically. The furnace may have been used for smelting or smithing, and quantities of slag were found around the structure. It was clearly in use during the first half of the fourth century BC, which corresponds to the latest phase of occupation of this dwelling, but the objects found in its vicinity indicate that it was already in use during the fifth century BC. In the neighbouring building E, another small metallurgical furnace was uncovered (Fig. 2.3). It is of the same type as the one just described and was in use during the second half of the sixth century BC. At least two other kilns linked to metallurgical activities have been found in other areas of the city.

The presence of metal workshops in domestic contexts is not unusual (Sanidas 2013, 189–91).² Examples are known from other sites, where one generally

distinguishes two types of installations, temporary or permanent (Sanidas 2016, 20–1). The furnace uncovered in the seaside area is difficult to characterize because the excavated area around it is too small. On the other hand, the two furnaces found in buildings in the southeast sector clearly fit into these categories. The installation in the front room of the large building E is undoubtedly a temporary installation used during its construction, as it was covered by the earliest floor. It should be noted that building E is quite unique: it is very well built when compared to the surrounding buildings and its internal tripartite division, consisting of a front elongated room opening on two smaller rectangular ones, is related to sixth-century BC buildings of similar shape, often associated with public or religious dining halls (Perreault & Bonias 2011, 42–6). The furnace in the room next to house A has a more permanent look to it. The small pit oven is located near the centre of the room and a stone base used to support a large *pithos* was built at the southeast corner. The room is too small to have served for more than industrial activity.

Other types of objects testify to a variety of economic activities such as fishing, farming, weaving and the production of locally made pottery. Argilos also started minting its own coinage from the last quarter of the sixth century BC, another testimony to its



Figure 2.3. Small furnace in building E.

economic development and its access to silver sources (Liampi 2005). However, until recently, archaeological evidence of economic activity seemed to us to be a bit scanty when compared to the tremendous architectural development of the city during the sixth and fifth centuries BC.

Our knowledge of the economic life of the city experienced a major turning point with the opening, in 2012, of a new area of excavation, situated between the coastal strip and the southeastern slope of the hill. Here we uncovered two very large buildings (Fig. 2.4). Building L is composed of a total of 12 rooms, the dimensions of which may vary slightly from one room to another but are on average 4.50 x 7.50 m, the total length of the complex being a little more than 60 m. The back wall of this building also serves as a retaining wall for a terrace on which stands the second building, H. This is due to the fact that both buildings are constructed parallel to the natural slope of the hill. On the western side, the buildings are bordered by an open channel running along the external wall and used to collect rainwater from the rooftops. To the east, the buildings are bounded by a 1.70 m wide Northwest-Southeast street, which also separates L and H from two other buildings, P and Q, built further east (Fig. 2.5). A slightly narrower passage also runs along the back of complex L and provides access to

the rooms of building H. We quickly realized, after excavating the first five rooms of building L, that these had a commercial function. This is clearly apparent in room L4, where a press-bed of an olive press was found (Fig. 2.6). In fact, since the wall bordering the building on its western side continues southward, we had concluded that these rooms most likely belonged to a *stoa*, composed of shops in the back and a covered walkway in the front. But while excavating the passage in front of the entrance of a few of the rooms, the discovery of roof tiles in front of the entrances led us to question our interpretation of the shape of the building. Indeed, these tiles indicate the presence of porches located above the doors to protect the entrance of the rooms from rain. These rooms could therefore no longer be associated with a *stoa*. This was additionally confirmed when we finally reached the eastern limit of the building, where the external wall does not continue southward as the western one does. In fact, the reason why the western wall extends southward is probably simply to avoid the possibility that the water flowing in the gutter might flood the area in front of the shop entrances.

Additional excavations around building L have now shown that this commercial building is part of a much larger complex of shops, workshops and housing units that may have marked the northern limit of the



Figure 2.4. View of building L.

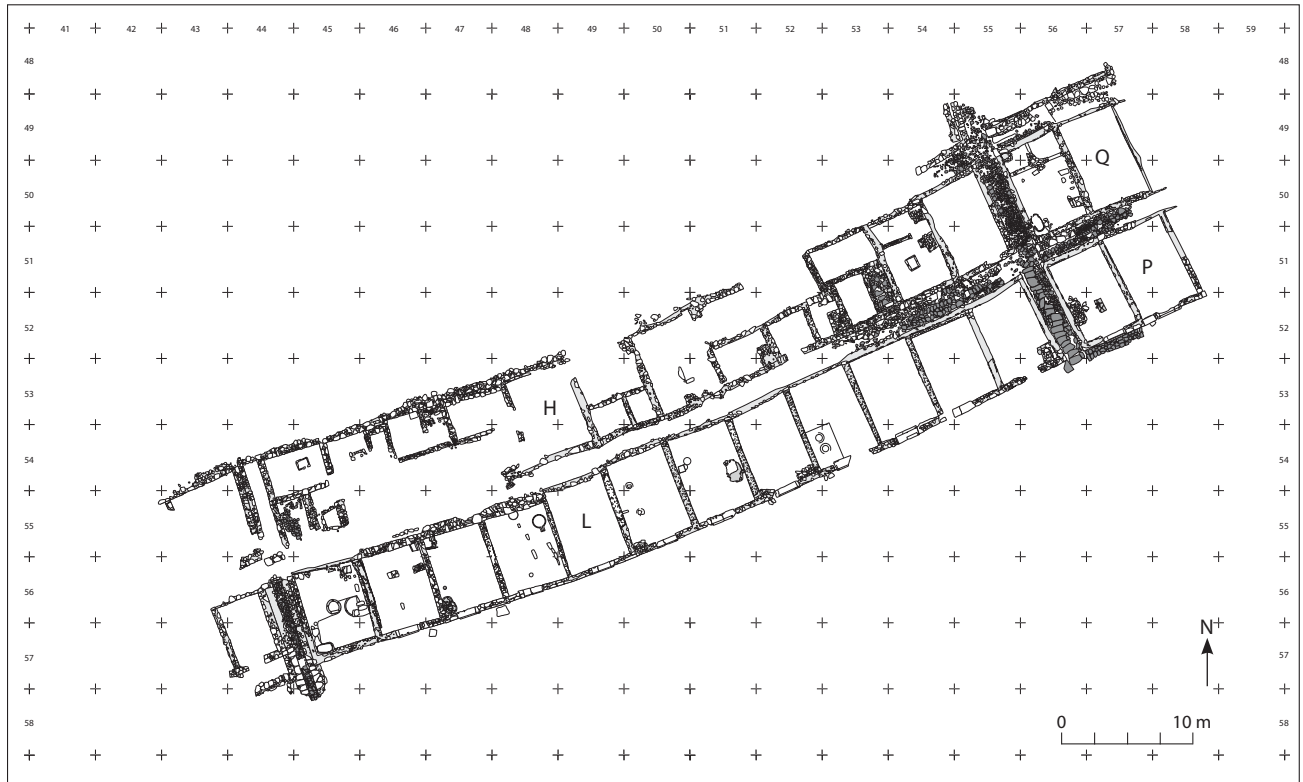


Figure 2.5. Plan of Koutloudis area with buildings H, L, P, and Q (F. Gignac, J. Perreault and X. Samaras, 2018).



Figure 2.6. Building L, press-bed in room 4.

agora of the city. Buildings H and Q are of the same length as building L, and so probably is building P. The two western-most rooms of building P have been partly excavated. They are built in the same way as those of neighbouring building L, and it is probable that they shared a common commercial function. Building H is unfortunately not as well preserved as L. It was also divided in 12 rooms, but here the rooms have internal divisions, usually one small wall which separates each room in two distinct spaces. A first analysis of the finds seems to indicate that these units were used both as workshops and living spaces. The building east of H, Q, is in a better state of preservation. We have uncovered the total length of its back wall and excavated the first room to the west (Fig. 2.7). It is in fact a small house, consisting of a ground floor with a large room in the front, comprising a bathtub

and cooking area, and two smaller ones in the back. The discovery in the front room of the lower part of a staircase is proof of the existence of an upper floor.

If the entire Building Q were composed of individual houses, we would have here a typical example of Ionic city planning. One should also note the analogy between this elongated building and a similar housing unit at the site of Vrachos on the island of Euboea (Fachard 2012, 300–1; Sapouna Sakellarakis *et al.* 2002; Tritle 1992). The Euboeans were a dominant force in the colonization of northern Greece, mainly in the areas of the Thermaic Gulf and the Chalkidiki, but they are also said to have played a role in the foundation of the Andrian colonies (Tiverios 2008, 52–3). At Vrachos, we find a long complex consisting of four buildings of equal size, placed side by side. Each consists of five rooms, for a total of 20. According to the excavators,



Figure 2.7. *Building Q, room 1.*

Vrachos was a fortress built on the top of a hill and the four aligned buildings, which the authors date from the end of the Archaic period, were used to house the soldiers. This interpretation has been questioned, other scholars considering the Vrachos site as an urban, not a military, establishment (Tritle 1992, 142–4). In this case, the buildings would rather have served as simple dwellings. The presence of hearths in the centres of some of the rooms exclude the possibility of these being shops or workshops.

So here we have four buildings, all probably of the same length and equally divided in 12 rooms, but with different functions. The two southern ones, facing the sea, L and P, were commercial establishments composed of individual shops. The two buildings in the back of this front row seem to be workshops and/or living quarters.

Building L has been more extensively excavated than the other three, and although there remains a lot of work to be done, the numerous finds uncovered shed light on the construction and use of the building. As regards the chronology, it is now clear that all of the shops were occupied during the fifth and first half of the fourth centuries BC. But the construction date may in fact be earlier. Certain characteristics in the masonry of the back walls of the rooms resemble those of sixth-century public and private structures found elsewhere on the site. More importantly, in two rooms, L6 and L9, we have uncovered an occupation layer dating to the second half of the sixth century BC. In clearing the fifth century floor in room L6, excavators noticed the presence of small sand pockets. It turned out that this floor had been laid over a 60–80 cm thick sand fill. Under this fill lay a floor dating back to the sixth century BC, which contained yet another small furnace probably linked to metallurgical activities. In 2018, a sixth-century BC occupation floor containing pits for large, *pithos*-type storage jars was uncovered in room L9. We do not yet know if the entire building was constructed during this period, but it is clear that at least some of the rooms were. The chronological sequence of occupation corresponds for now to what we see elsewhere on the southern slope of the hill: intense building activity in the second half of the sixth century BC, destruction, and reconstruction, often on a larger scale, in or close to the second quarter of the fifth century BC, followed by another destruction during the last quarter of the fifth century BC, which may be in connection with the aftermath of the Peloponnesian War reconstruction, this time on a lesser scale, and abandonment shortly after 357 BC.³

We are now certain that all rooms of building L, except for room L1, had a commercial function during the two most recent occupational phases, those of the

fifth and fourth centuries BC. The discovery of close to 400 coins in these shops supports this interpretation. The number in some of the rooms is quite surprising. In room L7, 73 coins have been found; 58 coins were uncovered in L9; another 52 in room L5. And since we have not finished excavating most of the rooms, these numbers will probably increase. In addition to these coins, some of the rooms contained one or more small portable altars, rectangular in shape. They all have a small circular cavity in the centre of the top, which recall certain small altars found at Olynthos (Robinson 1930, fig. 222), Pella,⁴ and on Delos (Chamonard 1924, 104; Deonna 1938, 384, fig. 449). This cavity was probably used for incense burning. In the case of room L1, the commercial function is clear for the fifth century BC occupation, but during the first half of the fourth century BC, it was used as living quarters. The room was separated in two, the front part containing a bathtub, and as such used as a living area, while the back part looks more like a working and storage area, as it contains an Olynthian-type millstone placed on a support in one of the corners, and a small hearth made from three large pieces of *pithoi* rims. There is also no front (southern) entrance to L1, so it had to be accessed from L2 during this last phase of occupation.

As we are still excavating this building, it is difficult to ascertain the products manufactured and/or sold in each of the shops. The press-bed found in Room L4 probably testifies to the production of olive oil. Our late colleague Joanne Cutler did considerable work on the large number (38) of loom weights found in room L7. Her preliminary results indicate that they were used together with extremely fine thread, probably to make weft-faced tabby fabrics.⁵ This same room contained a small rectangular feature built against its western wall. It is coated with white stucco, and two circular flat stones made of gneiss were found at its base.

In room L8, we now know that objects made of bone and antler were produced. Indeed, many fragments of antler and worked bone were discovered in the back of the room and it has been ascertained that these were all worked using the same techniques, and that these techniques differ from those used on worked bone found elsewhere on the site.⁶ In the eastern most room of the building, L12, we have uncovered remains of a large oven in the southeast corner. Beneath a pile of stones, excavators cleared a large flat base consisting of fragments of flat tiles, slabs of gneiss and large bricks of baked clay. The adjoining room, L11, also has its particularities. It is the only one which contained a low bench, about 30 cm wide, that runs along the back wall of the room. It is still unclear if this structure served as a support for objects, as an actual bench or as reinforcement for the back wall. At the front of

the room, to the right of the entrance, are remains of *amphorae*, circular clay supports for *amphorae*, and various lids (Fig. 2.8), as well as a few large pieces of roof tile and small stone blocks, indicating the presence of a permanent installation that allowed for the easy placement of *amphorae* and access to their contents. About 10 *amphorae* were found in the room and at least one of these contained olives. In another room, L5, the layout and objects found indicate yet another type of activity. Here, fragments belonging to three millstones of the Olynthian type were discovered, as well as a miniature one made of marble. Furthermore, the owners had fixed a row of large rectangular gneiss slabs on the face of the western wall of the room. Room L3 contained a bathtub in the southwest corner, which had been repaired in several places as indicated by the numerous lead clamps. With its lead stopper still in place on the drain hole, its purpose must have been different than that for which these objects are generally employed. A second bathtub, in the northwest corner of the room, was reused in the construction of a wall of a small storage space.

The variety of objects discovered in the shops demonstrates a great diversity, each shop having its own speciality. This contrasts with what has been found later, in the *agora* of Pella for example, where shops grouped in one area produced and/or sold the same category of products. Of course, these shops also changed hands over time, and the products that were sold probably changed also. Those enumerated here correspond to the latest phase of occupation.

Building L has certain original architectural features that should be noted: first, all the adjoining walls were constructed in the same way (Fig. 2.9). The lower part of the wall consisted of multiple rows of small squared stones, the upper part of mudbrick. At the rear, where the walls interlock at the back wall, the height of the stone portion is greater with the addition of a few additional rows over a length of about 30 cm. The entire outer surface of these two wall sections, the lower part in stone and the higher part in clay, were then coated with an additional layer of clay. This technique is still apparent on some of the adjoining walls.⁷



Figure 2.8. Building L, room 11, crushed *amphorae*.



Figure 2.9. *Dividing wall between L7–L8 with remains of clay over the lower courses of stone.*

Second, there is no evidence to suggest that the shops had an upper storey. At the most, we can imagine the presence of a mezzanine for storage at the back of the rooms. In L6, a piece of a millstone that was placed vertically may have been used to secure the feet of a ladder allowing access to such a structure. The absence of a second floor is interesting, particularly in the case of room L7, since it means that the warp-weighted loom would have been exposed to the public.⁸

Third, all the rooms, except for the first, L1, opened onto the street, and gneiss, poros or marble thresholds were found in all shops except two, from where they seem to have been robbed in antiquity, as shown by the openings in the front wall. These thresholds, differing slightly in shape and dimensions, were most likely reused. They have, however, a common characteristic: the position of the pivot holes indicates that the doors opened outwards and not inwards, as is customary. This arrangement is an interesting one since it avoids having to free the interior space on either side of the threshold. But also, as is still visible in many shops in the old areas of Athens, Istanbul and many Near Eastern cities, often the single or double leafed doors are not pushed against the outer wall, they remain open so they are perpendicular to the wall, thus creating an additional exterior space for

displaying products. A few of the rooms have pivot holes on both sides.

Fourth, who owned these shops? The size of the building, its commercial character, its position facing the sea and therefore close to port facilities, all suggest a public building, constructed by the city. However, certain architectural features contradict this interpretation. The façades of the shops are all different (Fig. 2.10). The stones used for the construction of the lower courses vary from one shop to the other. In addition, by looking closely at the back walls of the rooms, one has the impression that here, too, different masons were at work from one room to another. It may be that the city decided to grant a space for the construction of a commercial building and determined the size of each shop, yet the construction was the responsibility of the owners, who employed their own masons and procured for themselves the stones used in the construction of each shop façade. Building L is not the only known shop complex with this architectural particularity. In Athens, the Classical ‘commercial building’, of which up to seven contiguous rooms opening onto the street and identified as shops have been excavated, was also built using various types of material. But here, excavators offer a different explanation, suggesting that the building may have been built ‘piecemeal, room by room,



Figure 2.10. *Building L, facades of L2–L3.*

rather than according to a single, unified plan' (Camp 2003, 249). The Athenian building is not as regular as building L, the rooms at the southern end are wider and deeper than the northern ones, the cross-walls between the rooms are not parallel, shops differ in size and shape (Rotroff 2013, 103, fig. 22). So, it may be that the city authorized the construction of rows of shops in this particular area of the town, without imposing specific standards for the size of each one, the result being a more disorganized complex. This, of course, differs from what we have at Argilos.

With regard to its early construction date, Building L is quite unique in Greece. The evidence of rows of shops or strip-malls is a common feature in the Hellenistic period, as shown for example by the streets lined with shops on Delos (Hellmann 2010, 283). Closer to Argilos, there is a strong resemblance between our building and the rows of small commercial shops in Thasos, along the street bordering the eastern side of the *agora* (Marc 2015, 339–43). But as on Delos, these buildings are later than those of Argilos, dating from

the first half of the third century BC. We can also compare our complex with the gigantic *agora* of Pella, with its rows of shops and workshops, grouped according to their specialties (food, perfumes, etc.), but which date to the fourth century BC. Examples going back to the sixth or fifth century BC are much rarer. On the Greek mainland, one must turn to Athens to find vestiges of buildings with commercial functions of the Classical period. Susan Rotroff has recently suggested that some of the buildings uncovered on and around the Agora, for which other functions had been originally proposed, may have served as shops (Rotroff 2009). These buildings are all characterized by a series of small rooms, mostly of identical size, arranged in rows or on either side of a street or small courtyard. None of these buildings pre-dates the Persian Wars and they are all smaller than the Argilos complex. In the Greek colonial world, there exist a few examples of interest for us. The site of Locri Epizefiri in south Italy, even though the architectural features are dated to the first half of the fourth century BC, offers an interesting

comparison (Bagnasco & Aimar 1992, 18; Bagnasco 2000, 28; Meirano 2012, 257–79). At Locri, facing the sea, there are two groupings, perhaps three, of shops built against the outer face of the city's fortification wall. The first group comprises eight rooms, the second 12. Unfortunately, the function of these spaces is still debated, certain scholars favouring a commercial function, while others preferring to see them as accommodation for sailors and visiting merchants. But there is another group of at least four rooms, considered as shops, built along a street more or less perpendicular to the fortification (Costamagna & Sabbione 1990, 212, area 3). More interesting are the Classical-period structures considered as rows of shops found at Morgantina on Sicily; although a bit later in date than the ones at Argilos, they clearly had a commercial function (Bell & Holloway 1988). Finally, the Archaic shops at Gela, again on Sicily, offer another example of this type of commercial architecture (Wilson 1987–1988, 129; 1995–1996, 98). They consist of a series of adjoining square rooms built of mudbrick and preserved in some cases to a height of 2 m.

In Argilos, we are therefore in the presence of one of the earliest examples in mainland Greece of what can be considered, without doubt, as a truly commercial building. It is part of a larger complex: Building P to the east is built exactly in the same manner, and both buildings may have marked the northern limit of the *agora* of the city. Unfortunately, we may never know this for sure, as the modern coastal road is built just a few metres in front of these shops.

Our initial astonishment at the absence of signs of major economic activity in agreement with a remarkable urbanistic development is thus resolved by the discovery of building L. The economic dynamism of the city in the sixth and fifth centuries is no longer in doubt. But this dynamism was most likely a regional phenomenon and must have involved other Greek, Macedonian or Thracian cities of the lower Strymon valley, which in turn could explain why ancient authors repeatedly mentioned the richness of the region without mentioning that of each individual city. Unfortunately, this economic boom was short-lived, as with the foundation of Amphipolis in 437 BC and its takeover of the main economic activities of the region, Argilos' access to the mineral resources of the Pangaion area was cut off. Building L remained active, but there is no clear evidence on the site of new building programs or urban development comparable to earlier periods. Economic activities continued during the first half of the fourth century BC in building L, but like many other cities of the lower Strymon valley, with the conquest of Philip II in 357 BC, Argilos was soon to be silenced.

Acknowledgements

The Argilos excavation project is a Greek-Canadian *synergasia*, of which the co-authors of this article are the co-directors. The work is carried out by the Ephoreia of Serres and the Université de Montréal. The project has received funding from various public and private institutions, amongst which the Greek Ministry of Culture, The Social Sciences and Humanities Research Council of Canada, The Quebec Government and the Université de Montréal.

Notes

- 1 Argilos was founded on the west side of the Strymon River. Another Greek colony, Eion, was founded, maybe a bit earlier than Argilos if we take into account the Greek pottery found on the site, on the east side of the river (Malamidou 2009). There are no literary sources regarding the foundation date of Eion or the provenance of its colonists (Zannis 2012, 231–2, 246–9).
- 2 Closer to Argilos, at Olynthos, Cahill 2002, 236–65; at Thasos, Grandjean 1999, 161–9; Burford 1972; Rotroff 2014, 39–40.
- 3 The latest occupation phases are very clearly illustrated in room L1 where the fourth century BC floor was built over a thick fill made up of debris from the destruction of the previous phase. Under this debris, excavators uncovered the fifth-century BC floor containing a large basin, at the bottom of which were a few complete vases.
- 4 Archaeological Museum of Pella, inv. n. 90.411, from the sanctuary of Darron.
- 5 Information sent to us after her preliminary analysis of this group of 38 loom weights.
- 6 The meticulous study of these bone and antler fragments were done by Angelos Gkotsinas, a zooarchaeology PhD student at the Université de Montréal and the Université de Montpellier.
- 7 Particularly for L4–L5. It is not clear if the upper clay part of the walls consisted of clay bricks or simply of different layers of clay, as is the case in other buildings on the site.
- 8 Recent studies suggest that textile work was carried out by people of different genders, according to the place where it was practised (Harlow & Nosch 2014, 10 and note 49).

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Making cities

Large and complex settlements appeared across the north Mediterranean during the period 1000–500 BC, from the Aegean basin to Iberia, as well as north of the Alps. The region also became considerably more interconnected. Urban life and networks fostered new consumption practices, requiring different economic and social structures to sustain them. This book considers the emergence of cities in Mediterranean Europe, with a focus on the economy. What was distinctive about urban lifeways across the Mediterranean? How did different economic activities interact, and how did they transform power hierarchies? How was urbanism sustained by economic structures, social relations and mobility? The authors bring to the debate recently excavated sites and regions that may be unfamiliar to wider (especially Anglophone) scholarship, alongside fresh reappraisals of well-known cities. The variety of urban life, economy and local dynamics prompts us to reconsider ancient urbanism through a comparative perspective.

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*Published by the McDonald Institute for Archaeological Research,
University of Cambridge, Downing Street, Cambridge, CB2 3ER, UK.*

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Cover artwork by Kelvin Wilson.

Cover design by Dora Kemp and Ben Plumridge.

ISBN: 978-1-913344-06-1



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ISBN 978-1-913344-06-1



9 781913 344061