

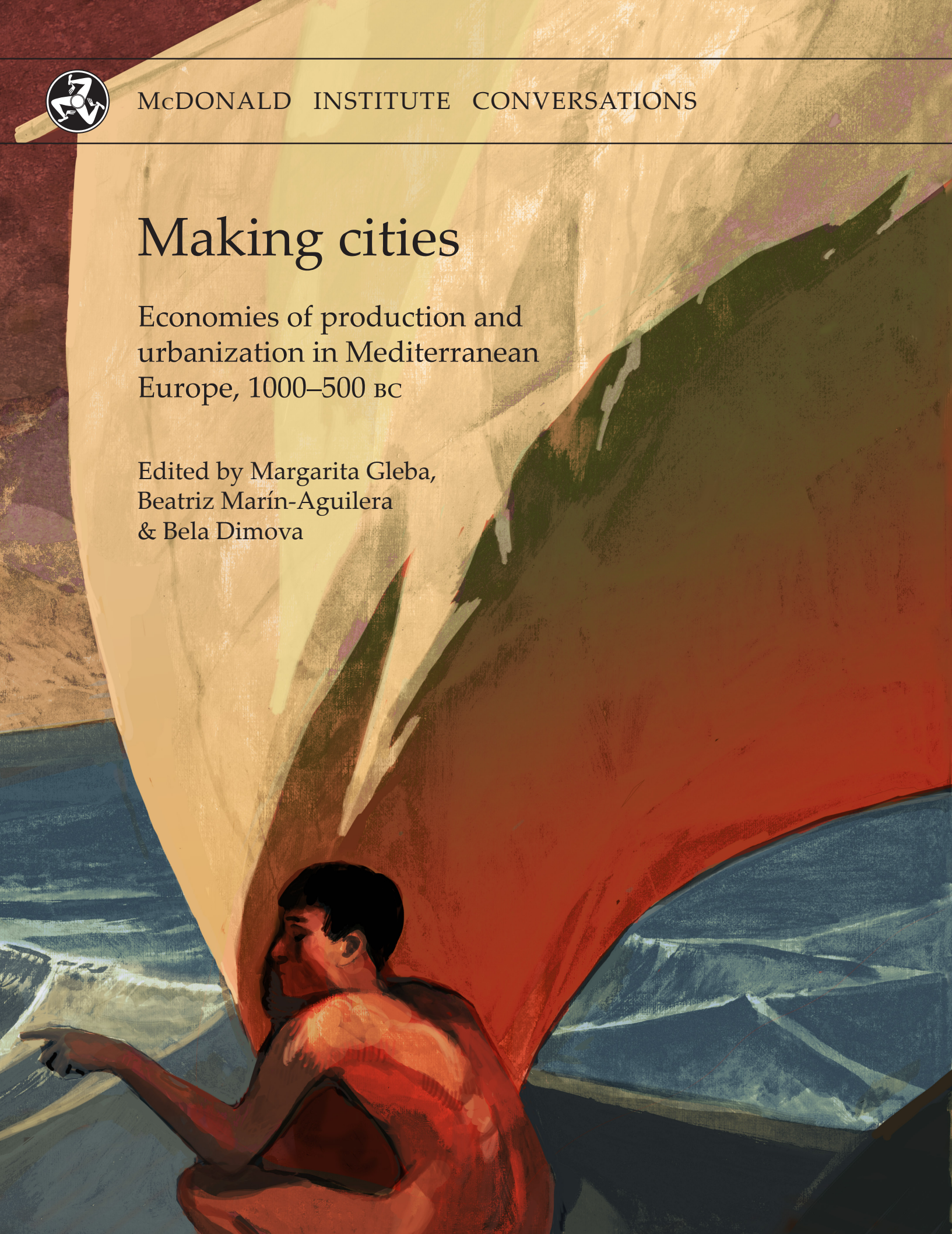


McDONALD INSTITUTE CONVERSATIONS

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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Chapter 25

Productive power during the Early Iron Age (c. 650–575 BC) at the Sant Jaume Complex (Alcanar, Catalonia, Spain)

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The ability to identify types of social organization relies on a number of lines of evidence interpreted in combination: supra-local community scale, supra-local community centralization, public works investment, wealth differentiation, prestige differentiation, tributes, different kinds of power sources, and some level of power institutionalization, among others (Drennan & Peterson 2011). It is generally agreed that the first evidence of complex societies in Iron Age Spain is related to the appearance of the Iberian Culture in the mid-sixth century BC. However, after studying a group of five settlements, located on hills and very close to each other in the south of Catalonia, we believe that, during the preceding period, the Early Iron Age (c. 650–575 BC), there already existed some isolated hierarchical societies such as what we call the Sant Jaume Complex. The GRAP (Grup de Recerca en Arqueologia Protohistòrica / Protohistoric Archaeology Research Group) from the University of Barcelona has been carrying out excavations in this area of southern Catalonia since 1985.

The study of this group of five settlements, located some 20 km south of the mouth of the Ebro River (Fig. 25.1), has led us to suggest that a single community inhabited them, and therefore, these settlements had different, complementary functions. According to our working hypothesis, the social-political system of organization of the Sant Jaume Complex corresponds to what in social anthropology is known as a chiefdom, albeit an incipient one. The local chief would have exercised direct control from the main site of Sant Jaume over the nearby settlements (Garcia i Rubert *et al.* 2016): La Moleta del Remei (Alcanar), La Ferradura, Cogula and Castell (Ulldecona) (Garcia i Rubert 2011; 2015; Sardà *et al.* 2016). This chiefdom established intense, lasting trade relations with Phoenician seafarers present in the region. It must have required a wide, dense and organized chain of production in

terms of agriculture, textiles and metals in order meet the increasing demands for goods.

In the following pages we attempt to demonstrate the complexity of the Sant Jaume Complex phenomenon by exploring its production structure and the changes involved in the establishment of contact with the Phoenicians.

The Sant Jaume Complex

The settlement of Sant Jaume-Mas d'en Serrà (from now on Sant Jaume) is situated on a hilltop at 224 m asl in the south of Catalonia, some 5 km north of the Senia River mouth, and roughly 20 km south of the Ebro River Delta (Fig. 25.2). Sant Jaume is a small, strongly fortified site of roughly 700 sq. m with a slightly elliptical ground plan (Fig. 25.3). It is in an excellent state of preservation, as evidenced by the surviving walls with an average height of about 2 m. The excavations carried out to date documented a little over 80 per cent of its internal structure, while almost 40 per cent of the site has been fully excavated. It was occupied during a single, brief period, corresponding roughly to the last decades of the seventh and, perhaps, the first decades of the sixth century BC, i.e. in the Early Iron Age.

The settlement is characterized by several clusters of constructions that are arranged in an orthogonal pattern. Each group is made up of rectangular, two-story buildings. In some cases, the ground floor seems to have been used as a stable, while in others it appears to have been used for the processing of agricultural products. In all cases, the upper floor was used to store large quantities of containers, manufactured products, raw materials and other goods. None of the constructions excavated to date in the northern area (from A1 to A5) can be considered a domestic dwelling with some confidence. In fact, the northern area of Sant Jaume seems to be a sector especially destined for the

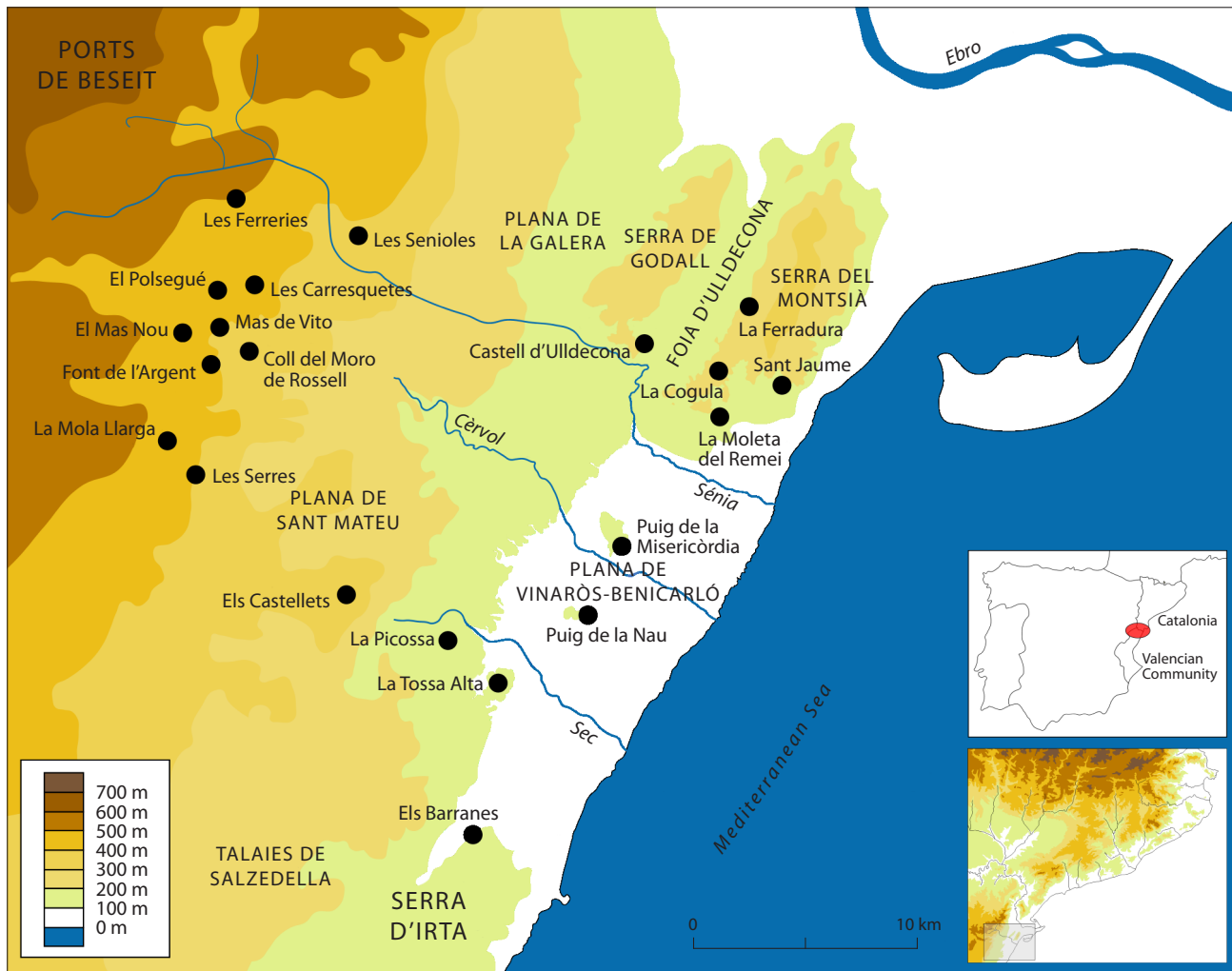


Figure 25.1. General location of the area under study.

storage of different products and animal husbandry. This evidence presents a very different situation when compared to the nearby settlements such as La Moleta del Remei and La Ferradura, as we shall show later.

The defensive system is characterized by the combination of three elements: a double-faced wall up to 4 m wide that encloses the settlement, two tall and narrow towers (T1 and T2), and a unusual gateway that includes several complex walls. In our view, the monumental design and construction of the complex gateway and towers were as much motivated by a concern with defence as they were intended to project an impressive appearance to the outside. This defensive system is to date unique for the entire northeastern Iberian Peninsula during this period.

The settlement played a very important role in the trade relations established during this period between local indigenous communities and Phoenician

traders from the settlements founded further south in the Iberian Peninsula. What stands out above all is the high volume of Phoenician pottery recovered from the settlement. The first Phoenician settlements were established in the area around the Strait of Gibraltar during the ninth century BC. Subsequently, this process was extended along the peninsula's Mediterranean coast – La Fonteta near Alicante; into neighbouring areas – Sa Caleta on Ibiza (López-Castro 2019); and along the Atlantic coast – Abul near Alcácer do Sal (Arruda 2019). The dynamics of Phoenician trading in the northwestern Mediterranean gradually began to change by the start of the seventh century BC and intensified around the middle of that century to the extent that strong commercial ties were established with the indigenous communities in the northeast of the Iberian Peninsula (Sanmartí 2014; Sanmartí *et al.* in this volume). These connections remained strong



Figure 25.2 (above).
View of Sant Jaume.



Figure 25.3 (left).
Plan of Sant Jaume.

until the very end of the initial three decades of the sixth century BC or the middle of that same century, by which time Phoenician trade in the area of current Catalonia declined notably. Thanks to these commercial relations, Phoenician products, including and especially wine, were introduced into the region as luxury goods. In fact, all studies of Phoenician trade in Catalonia and northern Valencia region explain the rapid acceptance of wine in terms of the opportunities that it afforded to certain social sectors, as imported wine allowed various groups to act as intermediaries in trade, and to control the redistribution of imports (Arteaga *et al.* 1986; Mascort *et al.* 1991; Ruiz Zapatero 1992; Aubet 1993; Ramon 1994-96; Sanmartí *et al.* 2000; Gracia 2000; Sanmartí 2004; Garcia i Rubert 2005; Vives-Ferrándiz 2005; Rafel 2006; Sardà 2010a).

The lower basins of the rivers Ebro and Senia make up the coastal areas of the northeastern peninsula, where the impact of Phoenician trade was most marked. These contacts led to the introduction of new food products like wine, olive oil and salted fish and meat, as attested by the large storage containers (*amphorae* and *pithoi*) that were used for their transport and distribution. In the local context of a prestige goods economy, these new exotic products would have served primarily to enhance the exclusive nature of certain meals and, as such, they may be counted among the luxury foods that served as active symbols of the feast.

A careful study of the characteristics of the site of Sant Jaume, noting the particular layout of buildings, the strong defensive system and portable material culture, has led us to conclude that Sant Jaume was not a village but a big house. A functional study of the site suggests that Sant Jaume was a large, fortified settlement that functioned as the seat of local political power increasingly dominating over the lower Sénia River valley. It is our belief that a local leader exercised direct control from this fortified settlement over several nearby sites, among which we would include at least La Moleta del Remei (Alcanar), La Ferradura (Ulldecona), Cogula (Ulldecona) and Castell (Ulldecona). We thus suggest that this area constituted a political-territorial entity, and there is indeed evidence of a marked social hierarchy and a political system of integration that are characteristic of a simple chiefdom. Some of this evidence is the existence of a supra-local community scale, a supra-local community centralization, investment in public works, wealth differentiation, prestige differentiation, tributes, different kinds of power sources and some level of power institutionalization, among others. We have named this polynuclear political entity the Sant Jaume Complex (Garcia i Rubert 2005; 2010; 2011;

2015; Garcia i Rubert & Moreno 2008; Garcia i Rubert & Gracia 2011).

La Moleta del Remei is situated in the southern foothills of the Montsia mountain range (208 m asl) in the village of Alcanar. The builders chose a low-rise hill, located very close to the coast (currently 3.8 km away). During the Early Iron Age, the settlement had a pseudo-oval ground plan with rectangular structures and a total surface of 3800 sq. m (Fig. 25.4). This format follows the Late Bronze Age settlement layout, with a central space or street (Gracia *et al.* 2000; Garcia i Rubert *et al.* 2016). Most of the rectangular constructions have an average surface area of 21 sq. m and many have circular fire pits in the central area. This settlement appears to have been a village with domestic dwellings. Around 300 inhabitants – corresponding to several nuclear families – lived there, while only about 20 people would have resided in Sant Jaume. This fact makes La Moleta del Remei one of the largest sites in the Early Iron Age of the northeastern Iberian Peninsula (Gracia *et al.* 2000; Garcia i Rubert *et al.* 2016). Despite this, La Moleta is considered to be below Sant Jaume in the settlement hierarchy because, as noted above, La Moleta was a village while Sant Jaume was a large house, i.e. a large palace-type residence.

La Ferradura is a small settlement located on a high ledge at the southern end of the Montsia mountain range, 226 m asl. This settlement of 400 sq. m has a set of 11 rooms and would have probably been inhabited by a group of 30–35 persons (Fig. 25.5). Its elevated location indicates a certain concern with its defence, also suggested by a simple, although not very thick, enclosing wall. Regarding the settlement's function, it would have probably combined farming and livestock raising with strategic activities, such as controlling the main routes of the surrounding territory (Garcia i Rubert & Gracia 1998; Garcia i Rubert *et al.* 2016).

Production in the Sant Jaume Complex chiefdom

As mentioned before, Sant Jaume was a fortified residence from where a chief could control not only the nearby settlements but also the productive activities in the surrounding area. The large-scale and lasting trade with the Phoenicians is evidenced by the large amount of Phoenician pottery – 30 per cent relative to the total number of fragments recovered from the Sant Jaume settlement (Garcia i Rubert 2015; Garcia i Rubert *et al.* 2016; Sardà *et al.* 2016). Evidence also suggests an increase in local agricultural, textile and metallurgical production shortly before the destruction of these settlements. Most probably, these changes would have



Figure 25.4. *Aerial view of La Moleta del Remei.*



Fig. 25.5. *Aerial view of La Ferradura.*

meant a redefinition of the relationships between the nearby settlements and the supra-local communities in terms of exchange.

Agriculture

The fire that ended the occupation of Sant Jaume, as well as of La Ferradura, La Moleta, Cogula and Castell, facilitated the preservation of the abundant organic remains. Thanks to this excellent state of preservation, our team has been able to collect important archaeobotanical data at the Sant Jaume residence (López *et al.* 2011; Garcia i Rubert *et al.* 2016). Unfortunately, neither La Moleta nor La Ferradura have been studied using this approach. Thus, we will first present an overview and then go through the specific evidence from Sant Jaume. This will help to introduce some general considerations about agriculture in the Sant Jaume Complex.

Rain-fed agriculture would have been carried out on the plain of Uldecona and nearby regions, since the steep slopes of the hills where the settlements are located would not allow cultivation at the settlements themselves. The interpretation of the domestic dwellings of La Moleta, based on ethnographic studies and other protohistoric archaeological studies (Garcia i Rubert 2005), suggests that before the arrival of the Phoenicians the processing of agricultural products corresponded to a household production. After contact and the establishment of exchange with the Phoenicians, this household production likely evolved into household industry. The agricultural production could have generated a surplus, which could have been eventually destined for redistribution. This kind of production necessarily implies the work of 'low status producers' (Nijboer 1998), which matches with the archaeological evidence at La Moleta, where we find very little evidence of specialized or complex activities, and the hierarchical model of the Sant Jaume Complex.

Barley (*Hordeum vulgare*), common wheat (*Triticum aestivum/durum*) and hard wheat (*Triticum durum*) are the most common crops documented at Sant Jaume, along with leguminous and fruit plants, similar to other settlements of the south of the northeastern Iberian Peninsula (Alonso 2007). They were identified in relation to large containers and possibly also sacks. This suggests that part of the legumes – grass pea (*Lathyrus sativus*) and chickling vetch (*Lathyrus cicera*) – were destined as fodder for the livestock that was kept in room A4. Owing to the importance of animal husbandry, documented by zooarchaeological remains (Font 2017), a significant part of the agricultural production, particularly the above-mentioned species, would be animal feed. Ovicaprines would have provided secondary products and meat, while

bovids were used as working animals, which matches with the idea of an extensive agricultural system (Font 2017). This type of agriculture implies that a large part of the population would be working during an extended part of the year to produce a surplus destined for the chief. This shows the political and social power of this figure and the consequent unequal redistribution of these resources (Vives-Ferrándiz 2008).

Another interesting archaeobotanical find is the cultivated grape vine. Although only a few seeds have been found, they allow us to consider the possible introduction of viniculture in the northeastern Iberian Peninsula. This would have constituted an important change in agricultural production, even though grape vine cultivation would have coexisted with the extensive agriculture already mentioned. The requirements of the grape and the maintenance costs of vineyards entail complex arboriculture. Grape cultivation also means that agriculture would no longer have been a mere activity for obtaining primary food products or immediate yields; it would have required new techniques to ensure the success of the plantation. If we would consider this – admittedly limited – evidence as a proof of grape cultivation rather than consumption at the site, this would imply a structured organization of production. This would have furthermore created not only surplus, but also prestigious asset because of the high value of wine and the cost of the complex techniques associated with its production.

Finally, the carpological studies have also identified flax (*Linum sp.*), although due to seed fragmentation it cannot be identified as *Linum ussitatissimum*. Nevertheless, given the large number of loom weights documented in Sant Jaume, it is not unreasonable to think that the species was used to procure fibre.

Metallurgy

In general, evidence for metals in the Sant Jaume Complex is scarce, a circumstance that contrasts with the abundance of other types of the archaeological materials, such as pottery. This could be attributed to a possible looting carried out after the attack and destruction of the settlement attested by the evidence of burning (Garcia i Rubert *et al.* 2016). Nevertheless, even this limited set of metal finds is very significant, consisting of iron and bronze objects in all the settlements under study. Based on ethnographic and social archaeological studies, we believe these items would have been a relevant part of the elements of power that the chiefdom would use as prestige goods in order to increase its power, thus recreating a network strategy (Trubitt 2000). That is why the scarce finds – a few iron weapons, some small bronze jewellery, a

roaster, a *simpulum* – have been considered prestige items belonging to the ruling people.

The geology of the Senia area includes deposits of metallurgical ores (Armada *et al.* 2005; Garcia i Rubert *et al.* 2016). Here, the strong regional networks would have been essential to assure the access to these minerals. The acquisition of the raw materials would have been achieved by the aforementioned redistributive policy of the chiefdom through the exchange of foreign manufactured products, such as Phoenician ceramics and their contents (wine), and they would then have been processed in the local context. Evidence of this regional contact is found in settlements located far from the Mediterranean coast (Bea *et al.* 2008; Garcia i Rubert 2015), which implies well-defined redistribution and commercial networks, not only between the indigenous populations and the Phoenicians, but also an internal trade between the native communities.

The exchange of the raw materials would have been done via the commercial networks, but the manufacture of the final product was most probably carried out only in some settlements of this area, most of which, unlike the Sant Jaume Complex, are not yet studied. However, the archaeological record at Sant Jaume preserved evidence of what would have probably been a metal workshop. It is plausible that skilled craftspeople – who knew the craft of bronze and ironworking – would have inhabited the Sant Jaume residence. What we suggest is that, just like in the Tartessian Culture (Cabrera Bonet 1994), the restriction of knowledge about the production techniques of metal artefacts, but also of other means of production, would mark a social and political differentiation from the rest of the community, who would not have access to this type of knowledge.

This interpretation is based on the evidence related to metallurgy from each settlement. In the first place, there were a few metal objects documented in La Ferradura (in room A3) during the first excavations. These bronze objects were likely produced at the site, since a used metal mould was also documented (Garcia i Rubert 2005). Secondly, La Moleta also presented a limited number of bronze and iron objects, but in this case the documented elements were associated with a higher status group, since they were found in the only large house identified in the village, interpreted as the residence of people with a higher status than the rest. Thus, we can suggest that there lived not only the lower levels of society, but also families directly related to the chief. Thirdly, Sant Jaume presented, in terms of percentage, the highest number of metal artefacts. Along with the ornamental objects and weapons documented, it is interesting to note the copper bars, drops of molten metal, lead objects and metal

moulds. All these elements lead to the conclusion that manufacturing of metal products took place at the site.

Based on all the evidence, we can suggest that La Ferradura had a low intensity of metallurgical activity, which was limited to recasting bronze, probably related to a household production. La Moleta would not have participated in the processing of metal raw materials, while Sant Jaume, perhaps, would have hosted specialists able to work bronze and iron. The access to and control over the knowledge associated with the metal craft would have been, of course, extremely valuable at the beginning of the Iron Age, resulting in power differentiation between the chief and the community.

Textiles

Recently, special attention has been given to the unusually large number of loom weights found in the settlements during the 20 years of excavations. Sant Jaume produced one of the largest quantities of textile tools on the Iberian Peninsula, thanks to the exceptional conditions of preservation at the site. More than 900 loom weights have been recovered from the different layers and different rooms. The contexts where they were found indicate that they were likely deposited in storage in what has been interpreted as warehouses. It is interesting to see that the main sets were placed in rooms A4 and A5, which are also the largest rooms and best-preserved areas of the completed excavations.

The analysis of the clay has demonstrated that the loom weights found at Sant Jaume were manufactured with local materials and, hence, likely produced by people who inhabited the site. The regularity of the types has led us to consider them a household industry production, as we have pointed out in previous works (Mateu 2016).

Considering the site dimensions and the free space actually available both inside the buildings and in the narrow corridors of the residence, there are too many loom weights to interpret them as remains of household production. The quantity of the textile production equipment and their spatial distribution suggest that they were used as a means of maintaining socio-political status and power. Unlike metallurgical craft, textile production would not have taken place in Sant Jaume but rather elsewhere. We think textile production equipment could have been controlled by the chief during specific periods of time and, when needed, would have been distributed to the inhabitants of La Moleta. This would imply that sacks of loom weights were regularly carried to and from the countryside. On the other hand, although the inhabitants of La Moleta would be able to produce textiles with their knowledge of the techniques, the chief would have enough power

to restrict the production by controlling the tools used to manufacture them.

Conclusion

Considering the investigations carried out during the last 20 years, there are a few points we would like to emphasize. The good preservation of the Sant Jaume residence provides us with valuable and rich but still partial information. The soil conditions and the violent burning of the settlements resulted in the destruction of a valuable part of the archaeological record. First of all, to date, we have no evidence of what gender would be involved in these economic activities. Agricultural, domestic, household and textile production have traditionally been associated with women and children. Metallurgy, on the other hand, has traditionally been associated with men. However, the absence of iconographic, written or any other kind of evidence from the Early Iron Age in the south of the northeastern Iberian Peninsula, means that we know too little about this aspect to come to any firm conclusions.

What we know for sure is that the Sant Jaume Complex represents an exceptional example of the first hierarchical societies in the Early Iron Age in south Catalonia. The architectural remains and the highly valuable and numerous artefactual evidence suggest that the complex played an important socio-political role not only on a local but also on a regional scale. As we have argued in several previous works, the site is connected to the elite.

The contact established between the Phoenicians and the local communities resulted from an interest in obtaining metals by the former and the desire to obtain new and limited goods of prestige by the latter. This, along with other internal dynamics prior to this external contact, must have helped to stimulate the economic dynamism of the south of Catalonia, consequently increasing the need for metals to be exchanged between indigenous peoples and Phoenicians and also to produce prestige items. The arrival of the Phoenicians and the long contact with them facilitated a change in the lives of all the inhabitants of the Sant Jaume Complex. Due to these contacts, the incipient hierarchy ended up reinforced through the exchange of raw metals, among other goods, and the acquisition of wine and other prestige products.

The exchange and subsequent redistribution created the need for increasing production levels. The people integrated into the upper levels of society from inside the Sant Jaume Complex and the supra-local communities would have been responsible for this increase, transitioning from household production to household industry, characterized by its more

commercial purpose (Nijboer 1998). During this change in production scale, the type of products manufactured would also have changed. Most probably, prior to the commercial impact of the Phoenicians, the local communities would have produced traditional prestige assets that would be redefined in value after the arrival of wine and fine pottery (Garcia i Rubert 2005). The production of local goods had to change to adapt to the new needs of trade.

At the same time, the new technologies that made possible working with iron meant an opportunity not only for trade, but also for differentiation from the rest of the population. This allowed the chief to control the manufacture of this new metal and its application to agriculture, daily subsistence, wealth and, of course, to control the raw material (and the agriculture surplus) for commercial exchange. The monopolization of production equipment leads us to reflect upon the highly hierarchical structure present in the Sant Jaume Complex. The impressive fortification of the Sant Jaume residence materialized the power of its inhabitants, which, we have argued, extended to control over production in the area. The commercial and socio-political paradigm shift following the contact with Phoenicians meant a change at all production scales, since the production had to adapt to the changes. The shift required a higher level of production of agricultural goods, an increase in metallurgical acquisitions, and in textile production. In the process, this area of south Catalonia went from household production to low-level household industry.

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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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