

**ENGLISH TEXT
SUMMARY**

At the beginning of the 1990s, an archaeological excavation was carried out at the site of the former barracks in Carrer Sant Pau in Barcelona. The current work, level IV occupation from the Neolithic Age, which is the result of the new work being carried out on the prehistoric sites of Barcelona and the study of its resulting archaeological register, is being analysed

First, M. Molist *et alii* have presented and analysed the data from the structural remains to chronologically date the site based on available datings and, finally, contextualise the site within the framework of the Ancient Neolithic settlements in the western Mediterranean region. A. Gómez *et alii*, on the other hand, have analysed the entire series of ceramics from a technological and morphological-typological viewpoint and have highlighted those that were produced connected to the world of Cardial printed ceramics and the complete register of the most developed perspectives of the Ancient Neolithic, with one of the most numerous amounts of complete glasses and forms in the country. F. Borrell has done the same with a series of sculpted lithic remains, which have been analysed from the viewpoint of raw materials, in which there is a major exploitation of jasper, and from a technological and morphological optical viewpoint. The great number of remains recovered and their exhaustive analysis have made this group of implements one of the most documented in Catalonia.

At the same time, J. F. Gibaja has functionally analysed a sample of lithic remains from the settlement, thus completing the available information that until now had been limited to funerary materials. The implements connected to the work methods of grinding and sculpting have also been analysed by M. Bofill *et alii* to determine the raw material and in regards to their morphological features, thus approximating their functionality, which seem to be essentially linked to the preparation and processing of food. The anthracological analysis of C. Mensua and R. Piqué provide, on the one hand, information about the means, in which oak would predominate, although with an incipient development of maquia; on the

other hand, it has been shown that these species linked to oak, probably near the settlement, were the most exploited by the group for combustible fuel. In this respect, it is worth highlighting the absence of riverbank species.

In regards to agriculture, analysed by R. Buxó and D. Canal, seed remains recovered from the most archaic phase indicate the cultivation of cereals and pulses of features similar to those recovered in the central area of the Catalan coast. The remains linked to economic activities such as livestock breeding and hunting, studied from the archaeozoological analysis by L. Colomines *et alii*, have determined the existence of livestock mainly consisting of ovicaprids, bovinds and suids, and that at times hunting was complemented by fishing. The malacological analysis by A. Estrada and J. Nadal allows for discussion about the contribution and importance of shells recovered in nearby coastal areas in the alimentation of the group.

The study of the funerary world carried out by Ph. Chambon provides for the first time an approximation to the funerary gestures practised in the necropolis of 26 graves. Thus, in a rigorous study, the exceptionality of the necropolis is observed, because of the inexistence of other contemporaneous sites and because it documents great variability in tomb features (diversity of gestures, items, etc). Although by chronology and territory, they should constitute the previous practices of the Catalan mid-Neolithic, their diversity makes this difficult. Finally, F. Estebaranz *et alii* have carried out a full study on the anthropological remains, in a detailed analysis of biometry, dentition, microstriation and the recovery of ancient DNA, in the aim of recognising and characterising the agropecuary settlement of the coastal region of Catalonia.

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The excavation carried out on the site in Carrer d'Avinyó in 2005 provided new information that allows us to complement and increase our knowledge of the area outside the *Barcino* walls between the 1st century AD and the 4th century AD. Settlement in this part of the *suburbium* was very important, practically dating back to the foundation of the city. There is evidence of great activity and dynamism in the area at that time, with documentation of, amongst other things, a pit for the extraction of clay, later used as a rubbish tip, and a section of the defensive trench of the Augustan wall. Given the great quantity of filling material recovered, the former is important in order to understand both the daily life of *Barcino* and its trade in its early days of activity. On the other hand, the trench that was found adds two basic facts to the information that we already had about this defensive system. First, its location in a point of the city that was previously unknown to us and, second, the documentation of a new type in terms of its morphology, that of a dual trench.

From the first half of the 1st century AD, the rubbish tip and internal valley disappears entirely from the area outside the *Barcino* walls and a new settlement is established in the same area, in which we have documented both residential and production and warehouse structures. This second phase began from the second half of the 2nd century AD, when the city continued its strong growth and dynamism, which would progressively fall into decay until that part of the *suburbium* became completely uninhabited at the beginning of the 4th century AD.

A series of local ceramic material recovered during the archaeological intervention carried out in the Santa Caterina market is presented in this article. The site, occupied by a convent of the same name and with a implantation chronology begun in the mid-13th century, has provided interesting information about certain material that until very recently was practically unknown. Preserved in a very fragmentary manner, the material comprises a range of ceramic pieces including common oxidized and reduced ceramics, as well as common glazed ceramics. A very characteristic type of ceramics at the time was *Pisa arcaica* pieces. These pieces – basically dishes, bowls and jugs or tankards – present a very poor stanniferous finish, sometimes little more than an engobe, with green or manganese decoration; examples of combination colours have not been documented. Decoration is located on the outside of closed pieces and on the inside of open pieces, with a series of designs made up of geometric, schematic plant and zoomorphic motifs.

The excavation work carried out at the end of 2006 in the portal of San Daniel in Barcelona and its surrounding area showed, on the one hand, its high level of preservation and, on the other hand, its morphological evolution over time. The excavation also offered an archaeological view of the last episodes that took place on the site within the framework of the War of the Spanish Succession.

The work has meant that the zone's evolution can be divided into seven major stages:

1. Medieval wall, portal and bridge of San Daniel.
2. Adjacent building to the medieval wall on its interior side.
3. Embankment to reinforce the defensive structure at the beginning of the 17th century.
4. Construction of the Santa Clara bastion.
5. Elements relating to the final moments of the War the Spanish Succession.
6. Construction of the Ciutadella.
7. Demolition of the Ciutadella to build the park of the same name. The demolition also affected the structures of medieval origin that had remained within one of the fortification's bastions.

The evolution of this zone from the 14th century must be understood as a response to the need of adapting the city's defensive structures to the new techniques of attack arising from the appearance and improvement of gunpowder artillery. We would like to especially emphasize, because of their exceptional preservation, the elements that we have been able to relate to the final moments of the War the Spanish Succession: defensive structures and barricades, as well as abundant war material, especially represented by cannonballs and rifle bullets. These elements, as well as the various cannonball strikes that we have been able to document on the front of the wall, show the intensity of the battles that took place in this area.

Thanks to the excavation work, it can be seen that the historical evolution of the site, with the building of the Ciutadella at the beginning of the 18th century and the demolition of the fortress and

construction of a park of the same name towards the end of the 19th century, meant that a high level of preservation of the underlying remains was possible. Therefore, paradoxically, the building of the Bourbon fortress also preserved the area of the San Daniel portal, because this remained within the fill of one of the major bastions of the fortification.

Finally, there is the localisation of various boreholes used for explosives to destroy some of the structures of medieval origin. These boreholes must be related to the demolition of the Bourbon fortress from 1868.

Demolition of the fortress also damaged the structures of medieval origin. This fact, which we believe did not go unnoticed by contemporaries of the time, must be simply understood as a response to the need to level the land for the construction of the park, at a time when sensitivity towards medieval constructions was the heritage of a few. In this sense, it is worth recalling that a major part of Barcelona's medieval wall was demolished from 1854.

THE CLAY PIPES FROM THE 17TH CENTURY FOUND IN THE EXCAVATION SITE OF THE OLD BORN MARKET IN BARCELONA: ENGLISH AND DUTCH IMPORTS

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ANALYSIS CARRIED OUT ON THE RESIDUES FOUND INSIDE THE PIPES FROM THE ARCHAEOLOGICAL SITE OF THE BORN MARKET

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The habit of smoking became popularised based on contact with America, and the pipe remained linked to tobacco in the 16th century, although its existence had been known since prehistory. In England, the fashion for smoking was introduced by Queen Elizabeth I and kaolin pipes began to be manufactured around 1575 in Broseley. In Holland, English immigrants escaping from religious persecution by King James I against the use of tobacco began the major industry of clay pipemaking towards 1608. The use of tobacco was always linked with gaming and drinking. Painting is an important source and a good complement to documentary information and materials, offering a multitude of possibilities. Moreover, it provides a *post quem* date for the objects that are represented and information about their sociocultural context.

Spanish painting of the 18th century contains a strong presence of religious subject matter and scenes representing customs and manner are not very common. On the other hand, in Dutch painting of the 17th century, and also in English painting, the subject of the pipe smoker is very common. An analysis of various scenes has provided some interesting information.

A large quantity of kaolin pipes made in Dutch and English workshops has been found in the Born excavation site, and these have been classified according to the types established by A. Oswald (1975), for the English pipes, and by H. Duco (1976), for the Dutch pipes. The latter are more abundant, and it seems that Dutch pipes spread across Europe during the Thirty Years' War (1618-1648).

Brands on the pipes normally consisted of figurative motifs, letters or numbers, and in the case of the Born pipes, only figurative and letter motifs have been documented. The brand was usually located on the pipe heel, although in some cases it can be found on the bowl. The presence of a brand allows for the identification of specific workshops. Nonetheless, the workshop's brand is at times insufficient to date a pipe, or at least generates certain doubts. On the one hand, the stamp was passed down from generation to generation and, on the other hand, the brands could be

sold as if they were patents and at times the same brand could have been used by more than one manufacturer.

The archaeological context of the Born pipes is quite precise and encompasses a very short period of time; most of them can be dated between the end of the 16th century and 1714/16. Most of the pipes – almost 5,500 fragments – found in the excavation site are related to the documented archaeological contexts. On the one hand, a Hostal, the Hostal del Alba, owned by the Duran family, shopkeepers connected to the sale of tobacco. On the other hand, a games area has been located in the same sector, where croquet and ball games were played, as well as table games, darts and cards, amongst others. We have already mentioned the existing relationship between tobacco, gaming, taverns and alcohol, and this relationship has been confirmed by archaeology.

The excavation site at the Born market is very extensive and is located in the old La Ribera district of Barcelona, which was destroyed from the year 1716. Various materials have been found in this site, amongst which are kaolin and ceramic smoking pipes. At the time, the consumption of various drugs of plant origin was common, such as opium (*Papaver somniferum*), hemp (*Cannabis sativa*), Solanaceae like belladonna (*Atropa belladonna*), henbane (*Hyoscyamus niger*), mandrake (*Mandragora officinarum*) and jimson weed (*Datura stramonium*), and certain fungi, such as *Amanita muscaria*. Of all these drugs, two in particular, hemp and belladonna, were mixed with tobacco and smoked. The techniques used were chosen after exhaustive bibliographical research. Phytolith study was decided upon because trichomes typical of hemp were found in the carbonised remains in the inside of the pipes from the medieval era found in the Cornellà castle (Juan-Tresserras, 2000: 296). However, in the case concerning us, we did not have any success, because the remains were overly carbonised.

On burning, nicotine, THC and atropine become degraded in a very high percentage (Van der Merwe, 1975: 77-80). For example, nicotine during combustion is destroyed some 35%, another 35% dissipates as environmental smoke, 22% is inhaled and only 8% is left in carbonised remains. These remains also degrade over time.

The analytical techniques used to detect these types of components at very low concentration levels are gas chromatography-FID (Zuo, Zhang, 2004: 36-38) and gas chromatography-mass spectrophotometry (GCMS) (Balanova, Wie, Krämer, 1995: 68-75; Guerra, 2006: 53-61; Rafferty, 2002: 897-907). And these were the techniques we used to carry out our studies on the different pipe residues. Despite all our efforts, we were not able to detect any of these drugs.

Before the second half of the 17th century, tobacco was not very present in everyday Catalan life. However, towards 1670, the situation began to change rapidly. In the period between 1670 and 1712, the average quantity of tobacco that could be found in Barcelona's household goods stores multiplied by a figure greater than eleven in respect to the situation before, analysed between the years 1641 and 1658. At the same time, during the final decades of the 17th century, there was an increase in the number of tobacco varieties for sale in the aforementioned establishments. The list is simply amazing, as is the diversity of their place of origin. The rapid increase in the consumption of tobacco, with its accelerated integration into daily Catalan life, logically had to do with the interest that the country's merchants had in creating a solid market in Catalonia. The strong commercial (and personal) relationships established during this time with Holland, an essential area in the trade of tobacco, must have played an important role. Amongst the great quantity of tobacco varieties, the existence of economically accessible types for almost everyone promoted everyday access to the product on the part of people of modest means. In order to favour market conditions, however, it was necessary to ensure the supply of different types of tobacco. It was essential to ensure the supply of a product that had now become essential. What reflects the success of tobacco in a more visible manner is this period is the specialisation of parts of the area of stores dedicated to selling, displaying and maintaining this product. These establishments, in effect, equipped themselves with areas, cupboards and containers exclusively dedicated to the display, storage and sale of tobacco. At the same time, some Barcelona stores became known as tobacco shops, thus expressing the relevant increase in the importance of this product. Together with tobacco and, in a complementary manner, pipes, which were made in the country but, above all, were imported in great numbers from Holland and England, became an indispensable part of daily life. There were thousands of them in the stores and many have been found in the Born

excavation site, in which the Duran store is a highlight.

If the growing incidence of tobacco in people's habits is evidenced in the stores, perhaps the best place to appreciate the products economic importance is in the fight to control the kiosks for the manufacture and sale of this product and in the persecution of the frauds that originated from its introduction. Parallel to this battle for a monopoly, many renowned merchants and traders, shopkeepers and including former shopkeepers tried everything within their reach to obtain profits from the import, cultivation, elaboration and sale of tobacco. It was not in vain that, at the beginning of the 18th century, the product had become absolute essential in the daily life and economy of Catalonia.

