

The Early Iron Age upper and middle Ebro group. Cabezo Morrudo (Rodén, Zaragoza) within the frame of the “Eastern middle Ebro sub-group”

El Grupo del Hierro del Alto y Medio Ebro. Cabezo Morrudo (Rodén, Zaragoza) dentro del marco del “Subgrupo del Ebro Medio Occidental”

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Abstract

The research of domestic assemblages constitutes nowadays one of the best tools in order to study the ethnicity of protohistoric peoples. Taking into account that it is very probable that Early Iron Age middle Ebro peasant communities made the largest part of its hand-built wares within the household and that a generalized exogamy took place within more or less established marital areas, this research tries to identify territories connected by a series of privileged ties, as for example the “Eastern middle Ebro sub-group” between the Huerva river and the Martín river. Cabezo Morrudo (Rodén, Zaragoza) Phase II would be completely inserted in this last area, showing an interesting destruction layer that should be contextualized within the frame of the 7th and 6th cal BC Ebro valley destruction horizon.

Keywords: Ebro valley, Cabezo Morrudo (Rodén, Zaragoza), Early Iron Age, exogamy, domestic domain, hand-made pottery.

Resumen

El estudio de la cultura material producida dentro del ámbito doméstico constituye, en la actualidad, una de las mejores herramientas con las que cuentan los investigadores para estudiar a los pueblos protohistóricos. Teniendo en cuenta que es muy probable que las comunidades campesinas del Valle Medio del Ebro produjeran la mayor parte de su cerámica manufacturada dentro del ámbito doméstico y que existiera, así mismo, una exogamia generalizada dentro de áreas matrimoniales más o menos establecidas, el presente estudio intenta identificar territorios unidos por vínculos privilegiados, como por ejemplo el denominado provisionalmente “Subgrupo del Ebro medio oriental”, entre el río Huerva y el río Martín. La Fase II de Cabezo Morrudo (Rodén, Zaragoza) se encontraría plenamente integrada dentro de este ámbito geográfico, presentando un interesante nivel de destrucción que debería contextualizarse dentro del marco del horizonte de destrucción del Valle del Ebro en los siglos VII y VI cal A.C.

Palabras clave: Valle del Ebro, Cabezo Morrudo (Rodén, Zaragoza), Primera edad del hierro, exogamia, ámbito doméstico, cerámica manufacturada.

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Introduction

This paper aims to show, in the one hand, the main conclusions obtained in a research work carried out in 2008 in order to obtain a *Diploma de Estudios Avanzados* (DEA) within the frame of the Prehistory area in the University of Zaragoza. The work, entitled *El Grupo del Hierro del Alto y Medio Ebro*, has been directed and supervised by Dr. Elena Maestro Zaldívar. In the other hand, a specific example of the methodology undertaken within the research work is given by means of showing some of the results obtained in the unpublished archaeological excavation carried out in Cabezo Morrudo, (Rodén, Zaragoza).

Since the 1980's authors have remarked the existence of a high affinity in regard to the Early Iron Age material culture in the upper and middle Ebro banks and in the lower valleys of the south Ebro bank tributary rivers. This fact led Dr. Gonzalo Ruiz Zapatero to propose the existence of an Upper and middle Ebro group. Taking this fact into account, the aforementioned research work intended to help towards a better knowledge of the geographic frame where the Ebro group evolved during the 8th to 6th centuries B.C. During the research it seemed appropriate to make a difference between an upstream sub-group and a very similar but not identical sub-group located at the downstream area.

The first sub-group has been named, in a completely provisory way, "Western middle Ebro sub-group" and the second one "Eastern middle Ebro sub-group". This denomination has been chosen because it seems to be quite devoid of problematic connotations and because it continues with the geographical naming parameters established in 1985 by Ruiz Zapatero¹. According to this author the Upper and middle Ebro group would be an assemblage of Iron Age peasant communities characterized by having a very affine material culture. Years later José Ignacio Royo propose the term "sub-group" as assemblages integrated inside the general Iron Age Ebro group².

The so called "Western middle Ebro sub-group" is relatively well known thanks to the existence of well excavated and dated fire-destruction layers in Cortes de Navarra and La Muela. Furthermore, this group produces a highly representative hand-built pottery characterized by globular-shaped vessels with cylindrical vertical necks and truncated-conical shaped plates, with smooth and burnished surfaces³. Those two reasons justify the choice of this "sub-group" as a refer-

ence, allowing the undertaking of comparisons between groups and, therefore, allowing, to a certain point, a measurement of the cultural affinity occurring during the Early Iron Age in the Ebro banks, between Logroño and Bajo Aragón.

Afterwards, the whole archeological phases dated with a certain degree of certainty to the Early Iron Age in the region of the upper and middle Ebro had been taken into account in order to determine the existing level of affinity amongst them in terms of material culture produced within the frame of the domestic domain. Thereby, just the household products, especially the hand-built wares, had been studied. The artifacts suspected of having an exogenous origin, related to trade or exchange of goods, had been excluded from the research. Finally, a series of maps had been prepared showing different levels of domestic production know how affinity in relation to the "Western middle Ebro sub-group".

Nevertheless, before raising those matters it is necessary to put forward a series of reflections about the previous cultural and socio-economic substratum prior the Early Iron Age peasant communities were settled in the Ebro banks.

The Upper and middle Ebro group cultural substratum.

The cremation burial ritual, regardless of whether it takes place within the frame of an urnfield or a tumulus burial, had been traditionally considered as a basic element either to identify "invasions" of an Indo-European people that was able to prevail over the pre-existing substratum⁴, or to propose the gradual and uninterrupted arrival of little communities that intermingled with the pre-existing human groups on the same conditions⁵.

Nowadays, if the debate concentrates on the archaeological evidence, it is not necessary to deny the arrival of little communities coming from beyond the Pyrenees, as it could happen inversely. This fact doesn't represent anything new because the ways through the Pyrenees had been always opened and any kind of influences have circulated across them either northwards or southwards.

Hence, the arrival of different elements characteristic of the Urnfield culture should not be understood as a rupture with the pre-existent period as the inter-relationship between the human groups of both sides of the Pyrenees was probably pretty established and consolidated.

1 (RUIZ, G., 1985).

2 (ROYO, J.I., 1991).

3 (MALUQUER, J., 1958, MALUQUER, J. et alii, 1990, PICAZO, J. V., RODANÉS, J. M., 2009).

4 (BOSCH, P., 1944, MALUQUER, J., 1971, MARTÍNEZ, J.J., 1946, ALMAGRO, M., 1952, BELTRÁN, A., 1974).

5 (RUIZ, G., 1985, 1995).

None the less, the ideological and socio-economic model developed during the Late Bronze Age in the Segre-Cinca interfluvium is likely to have had a definitive impact on the Iberian Peninsula North-East. This model is characterized by four clue parameters:

- Furred decoration pottery (beyond the Pyrenees provenance).
- Cremation burial ritual (beyond the Pyrenees provenance).
- Hillforts with a central-space layout (North-Eastern Iberian Peninsula provenance).
- An expansive social reproduction system.

This last parameter seems to be especially interesting in order to understand the North-Eastern Iberian Peninsula's Late Bronze Age. This fact could be glimpsed in the mid-80's Gonzalo Ruiz Zapatero work and it acquires a definite form in a paper published a decade later⁶. According to this author, the successful expansion of the so called "North-eastern Iberian Peninsula urnfields" is based in a new socio-economic organization founded on three narrowly interconnected spheres: a new subsistence base, represented by new grain farming cultivation techniques and plants, a new social organization, a new burial ritual and finally new technologic developments, especially within the frame of the bronze, and later the iron, metallurgy.

The new socio-economic model should have been more efficient than the old Bronze Age subsistence patterns and hence highly desirable as a formula of socio-economic organization. Consequently, the upper and middle Ebro communities would have accepted the new pattern during the Late Bronze Age from the downstream area and thanks to it they would have experienced a significant demographic increase process. This process should explain the multiplication of settlements produced during the Late Bronze Age and, consequently, the colonization of the edge existing between the floodplains and the surrounding semi-arid environment.

As a matter of fact, this demographic increase is not absorbed by means of laying out a new enclosed neighborhood. On the contrary, new central-space hillforts are built, and they are laid out taking into account a previously established demographic capacity that must not be exceeded. Thus, in the 1950's Juan Maluquer de Motes was aware of the particular central-space hillfort layout, where the different houses occupy a previously determined space that cannot be exceeded. Therefore, this author was persuaded of the exis-

tence, in the one hand, of a generalized exogamy and, in the other hand, of a powerful demographic increase focused in a new "satellite hillforts" building process⁷.

Taking up again, to a certain point, Maluquer's statement, Julián Ortega defines, from a highly influenced by social archaeology point of view, the settlement pattern that Sistema Ibérico's peasant communities could have undertaken during the Iron Age, pattern that seems to be easily extrapolated to the Ebro valley. Therefore, hillforts would have been laid out in advance, taking into account surface and population dimensions that they are not allowed to exceed. Again, the response to a demographic increase would not have been building an enclosed neighborhood but founding a new settlement, laid out by means of strict criteria that would prevent the exceed of previously decided demographic and space limits⁸ as it could be seen, for instance, in Las Eretas (Berbinzana, Navarra)⁹.

Even though the middle Ebro peasant community socio-economic system seems to have its origin within the frame of the Final Bronze Age Segre-Cinca interfluvium, it is pretty difficult to establish the same solution of continuity between Final Bronze Age and Early Iron Age hand-built wares typology. The upper and middle Ebro Late Bronze Age assemblage of vessels are highly similar with regard to their original models, located in the Segre-Cinca Interfluvium and the Bajo Aragón regions. However, at the beginning of the Early Iron Age, occurs an apparently sudden and radical change in terms of hand-built pottery technology, implying new shapes and smooth and burnished surfaces. This technological change will differentiate considerably the Ebro pottery assemblages and the Bajo Aragón and Segre-Cinca assemblages since the 9th century B.C., beginning of the chronological horizon studied in this research work.

Within Alto de la Cruz (Cortes de Navarra, Navarra), Maluquer highlights the existence of a clear continuity between Phase PIIa and Phase PIIb. Thus, most part of features is superposed without solution of continuity and the material culture is almost identical in both phases. On the contrary, there is a considerable change, in terms of material culture, between Phase PIII and Phase PIIa.

The author considers that the existing material culture parallels between phases PIIa and PIIb and the rest of Navarre and South-Western France are numerous. This is the reason why Maluquer proposes, within this chronological horizon, the existence of intense

6 (RUIZ, G., 1985, 1995).

7 (MALUQUER, J., 1958).

8 (ORTEGA, J.M., 1999).

9 (ARMENDÁRIZ, J., 1994, 1996, 1998, ARMENDÁRIZ, J., DE MIGUEL, M.P., 2006).

relationships between the North-Western and the South-Western Pyrenees, highlighting the resemblances found between PIIa and PIIb wares and Mont Lassois or Cave de Landric wares¹⁰. Thus, José Ignacio Royo states that most part of the “Middle Ebro urn-fields” cultural contributions come from Aquitaine, in south-western France. This fact would be mainly represented by a classical “Urnfield culture” ceramic typology where autochthonous models, especially fingertip impressed cordon and incised decorations have survived. This pottery typology will also receive contributions from other Ebro valley “Urnfield culture” groups, especially from Navarre, Rioja and Bajo Aragón¹¹.

In short, the Upper and middle Iron Age group peasant communities inherit an expansive social and economic system gestated in the eastern Pyrenees area during the Late Bronze Age. The affiliation that should be established in order to know the shape typology elements defining the domestic “Western middle Ebro sub-group” material culture origins is a problem still unresolved, as its Aquitanian origin should still be demonstrated.

An attempt to delimit the extension of the “Western middle Ebro sub-group” and the “Eastern middle Ebro sub-group”

In order to contribute to a geographic bounding approximation of these two cultural sub-groups, the not affected by exogenous stimuli artifact assemblages had been studied and systematized. Therefore, only the artifacts made within the domestic domain have been taken into account, as a reflection of the social reproduction processes inherent to the peasant communities and closely related to the communities’ settlement and demographic systems.

Authors have pointed out that the great majority of ware assemblages founded in Early Iron Age North-Eastern Iberian Peninsula settlements are likely to have been produced within the household cluster¹². Hence, the study of these artifacts within closed associations, as for example destruction layers, in the one hand allows obtaining an interesting “snapshot” showing patterns reflecting the activities that take place in and around a house during a relatively short period of time and, in the other hand, allows glimpsing geographical areas linked by privileged social and economic connections.

Indeed, social reproduction in peasant communities requires, due to its demographic structure, the mobility of men and/or women between different communities, at least between those settlements whose population was lower than a hundred. From this statement derive

a series of conclusions that help to adequately understand the archaeological record. Hence, the displacement of people within the frame of a stable territory and the exclusive existence of a household mode of production involves the change of residence of potters and, therefore, the homogeneization of shape typology and stylistic pottery production elements within the limits of a consolidate marital area¹³.

Hence, the study of material culture related to domestic labor dated from 8th to 6th centuries B.C. produced in excavated and published close associations of the upper and middle Ebro valley should lead to a better knowledge of territories characterized by the existence of privileged links between peasant communities.

Research methodology

As previously stated, this research is based on the use of different close or genuine associations that had been chosen following a series of criteria. Close associations would be a unit of stratification (US) or an assemblage of USs containing significant traces of domestic artifacts and remains dating from an, as precise as possible chronology, in the Early Iron Age. Consequently reliable comparisons between different genuine associations could be undertaken.

Once the complete amount of published information related to upper and middle Ebro Early Iron Age associations was compiled, three reliability levels were proposed:

High reliability level

- Close association (destruction layer, necropolis or a sufficiently representative abandon layer).
- It is possible to date accurately the association.
- It is well published. The archaeological artifacts are abundantly designed and the level or US where the remains had been founded is specified.

Middle reliability level

- Close association (destruction layer, necropolis or a sufficiently representative abandon layer).
- There are a certain amount of doubts in regard to the association’s chronology and/or the publication is not optimum.

Low reliability level

- The archeological remains are decontextualized or insufficiently published.
- There are excessive doubts about chronology.

10 (MALUQUER, J., 1954, 1958).

11 (ROYO, J.I., 1990).

12 (MORET, P., et alii, 2006, PICAZO, J. V., RODANÉS, J. M., 2009). Hence, the study of.

13 (ORTEGA, J., 1999).

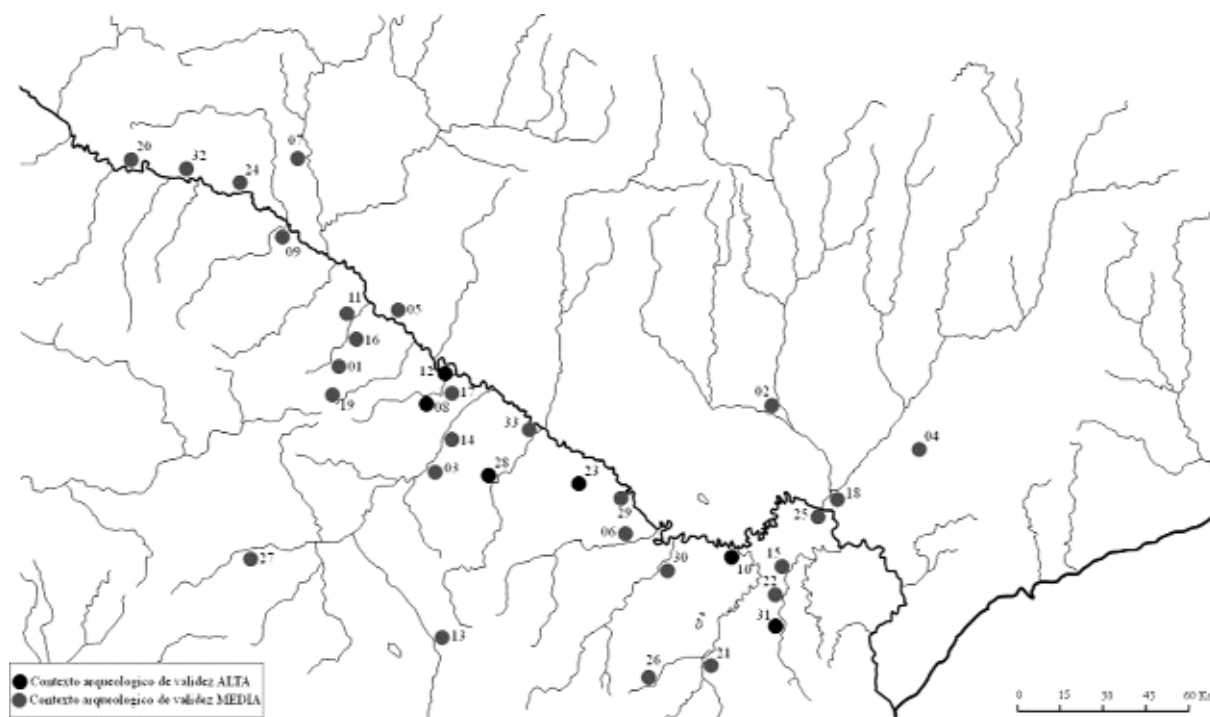


Figure 1. Upper and middle Ebro Early Iron Age associations' reliability levels: 1. Inestrillas (Aguilar del río Alhama, La Rioja). 2. La Codera (Alcolea de Cinca, Huesca). 3. Cabezo Chinchón (La Almunia de Doña Godina, Zaragoza). 4. Els Vilars (Arbeca, Lérida). 5. El Castejón (Arguedas, Navarra). 6. Cabezo de Alcalá (Azaila, Teruel). 7. Las Eretas (Berbinzana, Navarra). 8. Cueva de Esquilar (Borja, Zaragoza). 9. La Torre de Campobajo (Calahorra, La Rioja). 10. La Loma de los Brunos (Caspe, Zaragoza). 11. El Castillo (Castejón, Navarra). 12. Alto de la Cruz (Cortes de Navarra, Navarra). 13. La Umbría (Daroca, Zaragoza). 14. Cabezo Ballesteros (Épila, Zaragoza). 15. Roquízal del Rullo (Fabara, Zaragoza). 16. Peñahitero (Fitero, Navarra). 17. Cabezo Morredón (Fréscano, Zaragoza). 18. La Serra del Calvari (La Granja d'Escarp, Lérida). 19. El Solejón (Hinojosa del Campo, Soria). 20. La Hoya (Laguardia, Álava). 21. Santa Bárbara (Mas de las Matas, Teruel). 22. San Cristóbal (Mazaleón, Teruel). 23. Los Castellazos (Mediana de Aragón, Zaragoza). 24. El Castillar (Mendavia, Navarra). 25. Los Castelletes II (Mequinenza, Zaragoza). 26. Loma del Roblar (Molinos, Teruel). 27. Cerro Ógmico (Monreal de Ariza, Zaragoza). 28. Cabezo de la Cruz (La Muela, Zaragoza). 29. Las Dehesas (Quinto de Ebro, Zaragoza). 30. Pompeya (Samper de Calanda, Teruel). 31. Tossal Montañés (Valdetormo, Teruel). 32. La Custodia (Viana, Navarra). 33. Zaragoza (Zaragoza, Zaragoza).

Low reliability level associations have not been taken into account in the research. As a result of this, 60 % of First Iron Age sites known in the area had been discarded. Moreover, a great deal of well excavated and published close assemblages in Navarre, Soria and Zaragoza provinces had been rejected due to the presence on them of scored ware with fingertip impressed collar cooking pots, usually associated to wheel thrown pottery and even Attic wares, fact that encourages to propose a lower chronology for this type of vessels¹⁴.

Thus, thirty-five genuine associations have been selected. Eight of them have a high reliability level (22.85 %) and the rest, 77.14 %, have a middle reliability level.

Afterwards, the level of affinity of chosen associations towards the "Western middle Ebro sub-group" domestic labor artifacts had been established. In this way, four categories had been created:

- "Western middle Ebro sub-group". In this category 100 % of material culture referring to domestic labor is characteristic of this sub-group.
- High level of affinity towards the "Western middle Ebro sub-group". Between 70 % and 100 % of "household" material culture is identical to the reference group.
- Middle level of affinity towards the "Western middle Ebro sub-group". Between 30 % and 70 % of "household" material culture is identical to the reference group.

¹⁴ (BURILLO, F., ROYO, J.I., 1996).

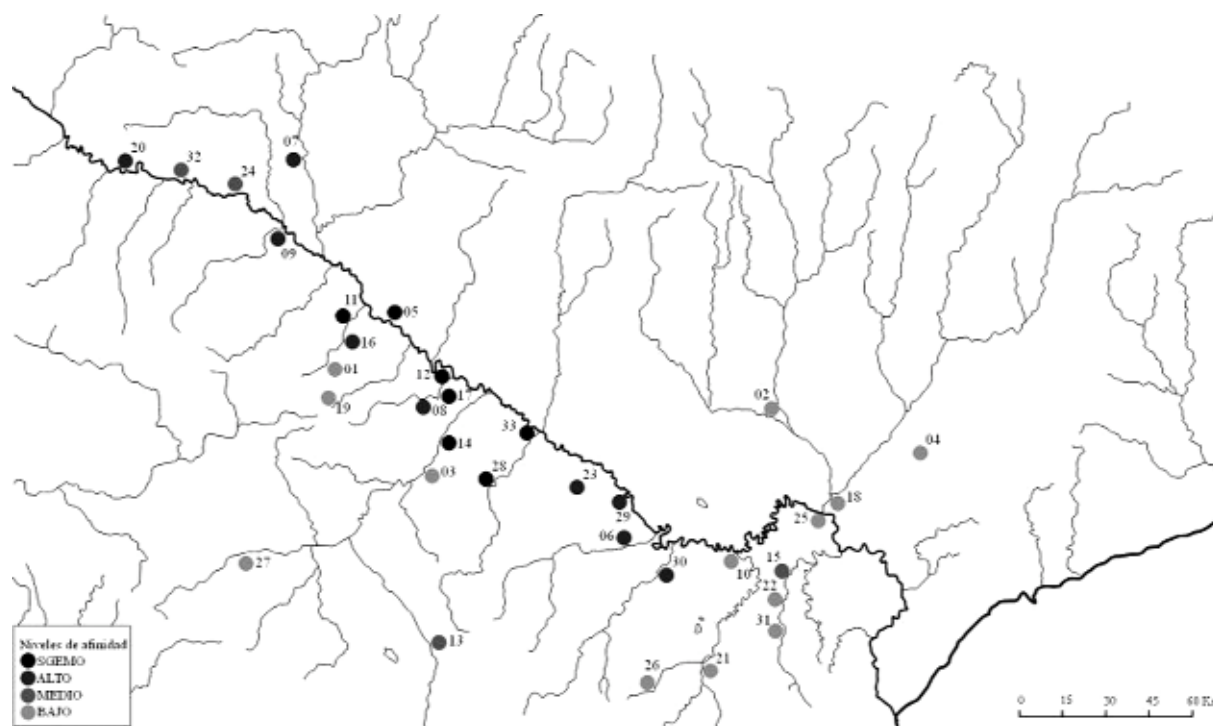


Figure 2. Level of affinity towards the "Western middle Ebro sub-group": 1. Inestrillas (Aguilar del río Alhama, La Rioja). 2. La Codera (Alcolea de Cinca, Huesca). 3. Cabezo Chinchón (La Almunia de Doña Godina, Zaragoza). 4. Els Vilars (Arbeca, Lérida). 5. El Castejón (Arguedas, Navarra). 6. Cabezo de Alcalá (Azaila, Teruel). 7. Las Eretas (Berbinzana, Navarra). 8. Cueva de Esquilar (Borja, Zaragoza). 9. La Torre de Campobajo (Calahorra, La Rioja). 10. La Loma de los Brunos (Caspe, Zaragoza). 11. El Castillo (Castejón, Navarra). 12. Alto de la Cruz (Cortes de Navarra, Navarra). 13. La Umbria (Daroca, Zaragoza). 14. Cabezo Ballesteros (Épila, Zaragoza). 15. Roquizal del Rullo (Fabara, Zaragoza). 16. Peñahitero (Fitero, Navarra). 17. Cabezo Morredón (Fréscano, Zaragoza). 18. La Serra del Calvari (La Granja d'Escarp, Lérida). 19. El Solejón (Hinojosa del Campo, Soria). 20. La Hoya (Laguardia, Álava). 21. Santa Bárbara (Mas de las Matas, Teruel). 22. San Cristóbal (Mazaleón, Teruel). 23. Los Castellazos (Mediana de Aragón, Zaragoza). 24. El Castillar (Mendavia, Navarra). 25. Los Castelletts II (Mequinenza, Zaragoza). 26. Loma del Roblar (Molinos, Teruel). 27. Cerro Ógmico (Monreal de Ariza, Zaragoza). 28. Cabezo de la Cruz (La Muela, Zaragoza). 29. Las Dehesas (Quinto de Ebro, Zaragoza). 30. Pompeya (Samper de Calanda, Teruel). 31. Tossal Montañés (Valdetormo, Teruel). 32. La Custodia (Viana, Navarra). 33. Zaragoza (Zaragoza, Zaragoza).

- Low level of affinity towards the "Western middle Ebro sub-group". Less than 30 % of "household" material culture is identical to the reference group.

The systematization of close associations, their assignment to a level of affinity category and the resulting drawing of maps offer a useful instrument in order to glimpse the existence in the past of more or less inter-related territorial links.

Aiming to provide a clearer cartographic representation it has been decided to demarcate the different affinity areas by means of drawing black lines. This permits to propose, in a completely provisory way, different areas.

- The "Logroño sub-group" would be westward from Cidacos river. It contains a lower proportion of cylindrical-necked globular vessel and maintains carinated bowls, tripartite types with angular pro-

files, inherited from the Later Bronze Age. It is pretty complicated to propose a hypothesis referring to the extension of this group due to the low quality of the archeological record. The level of affinity is middle.

- The "Western middle Ebro sub-group" would be eastwards, being especially well represented between the tributaries Alhama and Huerva, going deep 20 to 30 km southwards, never further.
- Eastwards could be found the "Eastern middle Ebro sub-group". In outline it could be proposed an extension between the tributaries Huerva and Martín where it seems to appear a relatively clear boundary with the Segre-Cinca interfluvium and Bajo Aragón cultural horizons. This sub-group level of affinity is high.
- As it has been previously stated, the groups located in Bajo Aragón, Segre-Cinca and even Sistema

Ibérico turn out to have a low level of affinity in regard to the “Western middle Ebro sub-group”.

The results of this research should be taken in a completely cautious way. As it has been stated, the archaeological record is still too poor to undertake a reliable study about stable marital areas in the middle Ebro during the Early Iron Age. Nevertheless this situation could change significantly in 20 or 30 years time as old and new archeological researches are published. With regard to the subject under discussion, it is subsequently presented a general view of the hand-built pottery uncovered in the Early Iron Age site Cabezo Morrudo (Rodén, Zaragoza) fire-destruction layer. This is a highly reliable close association that can be accurately dated. It contains an interesting material culture collection that can be compared with nearby close associations.

The author of this paper wants to take the most of this situation in order to thank Arqueología y Patrimonio Cultural, S.L. company the support shown at any moment to consult and utilize the Cabezo Morrudo (Rodén, Zaragoza) archaeological excavation report.

Cabezo Morrudo (Rodén, Zaragoza) and the “Eastern middle Ebro sub-group”.

Localization of the site and history of researches

The site is located in a hill next to the western Ginel river bank, a few kilometers upstream the mouth of this Ebro's southern tributary, near Rodén village.

It was discovered in 1998 by Arqueología y Patrimonio Cultural S.L. (from now on APC, S.L.) archaeologists during the surface survey works carried out in order to accomplish the “Environmental Impact

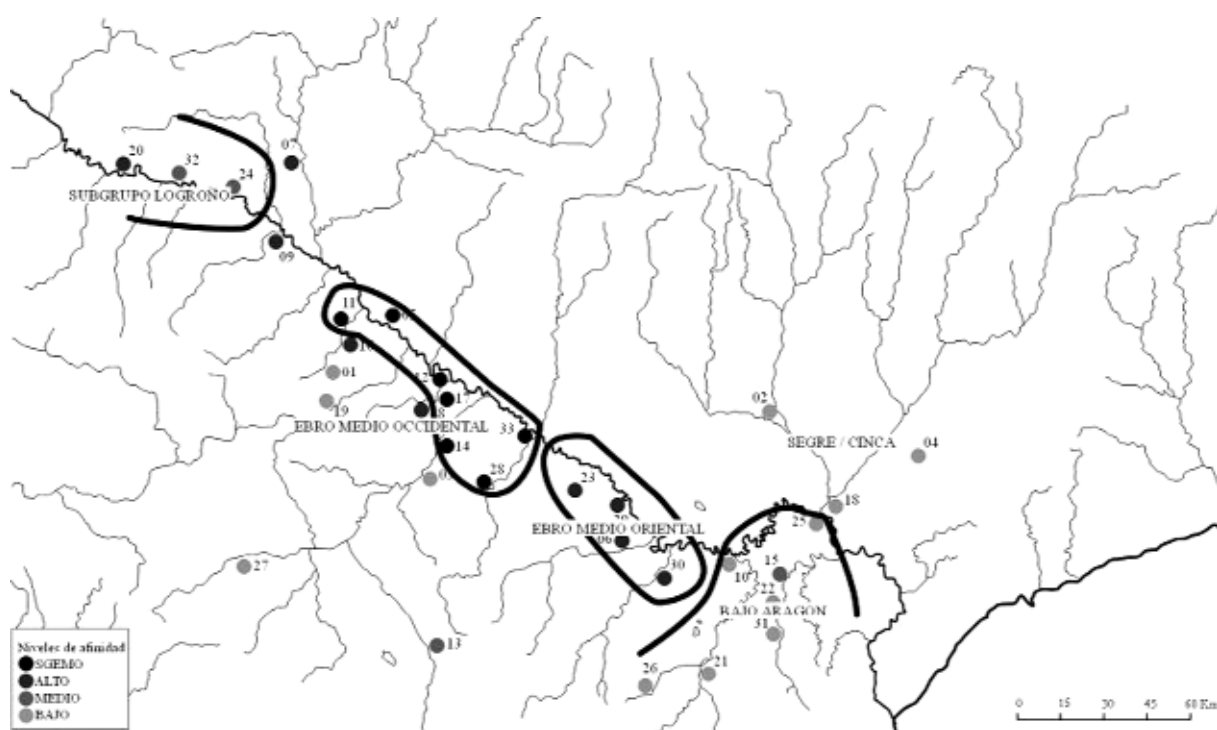


Figure 3. “Western and Eastern middle Ebro sub-group” delimitation suggestion: 1. Inestrillas (Aguilar del río Alhama, La Rioja). 2. La Codera (Alcolea de Cinca, Huesca). 3. Cabezo Chinchón (La Almunia de Doña Godina, Zaragoza). 4. Els Vilars (Arbeca, Lérida). 5. El Castejón (Arguedas, Navarra). 6. Cabezo de Alcalá (Azaila, Teruel). 7. Las Eretas (Berbinzana, Navarra). 8. Cueva de Esquilar (Borja, Zaragoza). 9. La Torre de Campobajo (Calahorra, La Rioja). 10. La Loma de los Brunos (Caspe, Zaragoza). 11. El Castillo (Castejón, Navarra). 12. Alto de la Cruz (Cortes de Navarra, Navarra). 13. La Umbría (Daroca, Zaragoza). 14. Cabezo Ballesteros (Épila, Zaragoza). 15. Roquizal del Rullo (Fabara, Zaragoza). 16. Peñahitero (Fitero, Navarra). 17. Cabezo Morredón (Fréscano, Zaragoza). 18. La Serra del Calvari (La Granja d'Escarp, Lérida). 19. El Solejón (Hinojosa del Campo, Soria). 20. La Hoya (Laguardia, Álava). 21. Santa Bárbara (Mas de las Matas, Teruel). 22. San Cristóbal (Mazaleón, Teruel). 23. Los Castellazos (Mediana de Aragón, Zaragoza). 24. El Castillar (Mendavia, Navarra). 25. Los Castelletts II (Mequinenza, Zaragoza). 26. Loma del Roblar (Molinos, Teruel). 27. Cerro Ógmico (Monreal de Ariza, Zaragoza). 28. Cabezo de la Cruz (La Muela, Zaragoza). 29. Las Dehesas (Quinto de Ebro, Zaragoza). 30. Pompeya (Samper de Calanda, Teruel). 31. Tossal Montañés (Valdetormo, Teruel). 32. La Custodia (Viana, Navarra). 33. Zaragoza (Zaragoza, Zaragoza).



Figure 4. Cabezo Morrudo (Rodén, Zaragoza) localization.

Study for the Project and Building of the Madrid-Barcelona-French Border High Speed Train Line. Stretch: Zaragoza-Lleida". All the information concerning the Environmental Impact Study was compiled in the report submitted the 30th October 1998 to the Gobierno de Aragón Culture Department. The site assessment and correction measures were compiled on the appropriate technical prescriptions by the Gobierno de Aragón Culture Department and they were included within the frame of the building work's environmental impact correction measures.

Afterwards, between 9th December 1999 to 22nd February 2000 and 2nd October 2000 and 26th

January 2001 the company APC, S.L. undertake archaeological excavations over the 1171 m² affected by the high speed train line building. The technical direction of the excavation is carried out by José María Viladés Castillo who counts on the groundwork direction of the archaeologists Rosa Blanca González Acón, Silvia Arilla Navarro, Amaya Marqués Bona and Eugenia Nasarre, as well as a topographic team and a 22 laborers team¹⁵.

In 2001 an exhaustive report of the excavations is submitted to the Gobierno de Aragón. Nevertheless, the researches remain unpublished, a part from a brief reference published a few years ago¹⁶.

15 (VILADÉS, J.M., et alii, 2001).

16 (VV.AA., 2007).

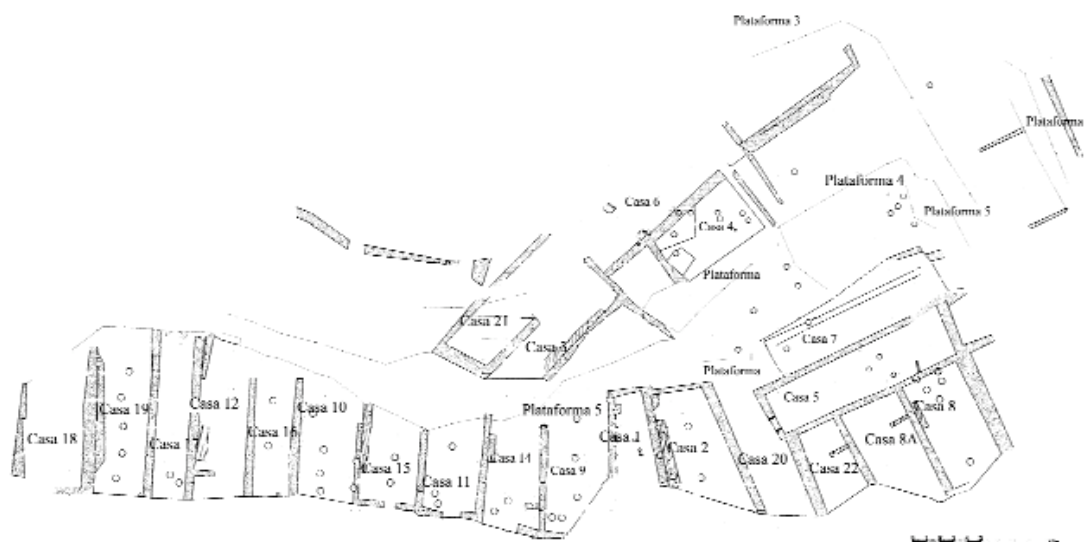


Figura 5. Cabezo Morrudo (Rodén, Zaragoza) archaeological excavation map. Source: VILADÉS, J.M., *et alii*, 2001.

Site's stratigraphy and chronostratigraphy

The area directly affected by the high speed train building was in a rather bad state of conservation due to, in the one hand, the natural soil erosion that acts intensely on slopes located in semi-arid regions and, in the other hand, the presence of 1936 to 1939 Civil War trenches, machine gun nests and shell-holes.

Nevertheless, the archaeologists were able to identify two phases, the first one developed during the Late Bronze Age and the second one, far better known, developed during the Early Iron Age. It seems that the hill was marginally occupied during the medieval times.

Cabezo Morrudo (Rodén, Zaragoza). Phase I. Late Bronze Age

The origin of the settlement takes place in the Late Bronze Age as it is indicated by the presence of layers dated to this chronological horizon sealed under the 5, 4 and 6 dwelling houses' clay floors and filling the space between walls and the natural subsoil platforms. Likewise, archaeologists ascertained the presence of decontextualized Late Bronze age shards in slopes and middens.

Cabezo Morrudo (Rodén, Zaragoza). Phase II. Early Iron Age

The building of a new Iron Age hillfort dismantled most of previous layers and features. In fact, the new features were laid out taking into account the hill topography. Thus, five artificial platforms were created start-

ing from the different natural ground strata. The dwelling houses have got walls made of rammed earth or adobe, with stone ground work. In some cases, the archaeologists have detected punctual reforms but they have not found any cases of dwelling superposition. Thus it seems that the Early Iron Age settlement had a relatively short life before being destroyed by fire.

An almost identical stratigraphic sequence is repeated in all the excavated Iron Age houses:

- Nivel a: Is the topsoil overburden. The compaction is loose and the color light beige. It is composed by clay and fine sand with medium and coarse pebbles. The inclusions are occasional, with small fragments of pottery and bone.
- Nivel b: Is the upper part of the destruction layer. The compaction is compact. Light brown to mid orange. It is composed by clay and fine sand with medium and coarse pebbles. The inclusions are moderate with rubefacted debris and pottery shards.
- Nivel c: Is the low part of the fire-destruction layer. The compaction is loose and the color mid grey to mid brown. The inclusions are frequent with rubefacted debris, charcoals, soot and burn, as well as pottery shards.
- Nivel d: It is the dwelling clay floor.
- Nivel e: Gypsum natural subsoil¹⁷.

The end of the hillfort should be analyzed in regard to the destruction horizon that surely occurs during the

¹⁷ (VILADÉS, J.M., *et alii*, 2001).

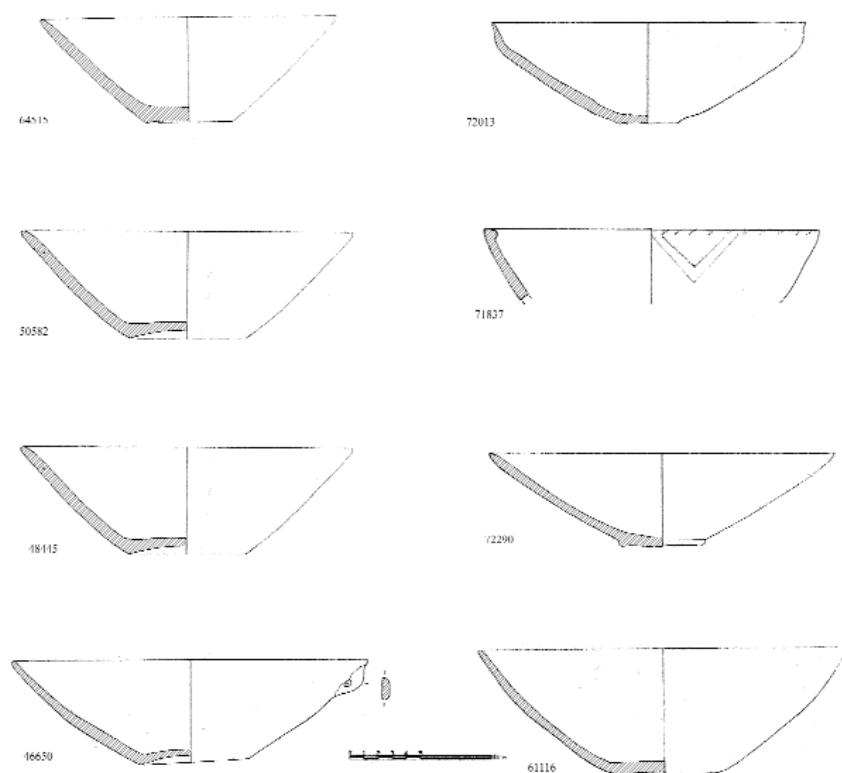


Figure 6. Plates. House dwelling 2: 6116, 72290, 72013, 71837. House dwelling: 46650. House dwelling 9: 48445. House dwelling 14: 50582. House dwelling 16: 64515.

7th and 6th centuries B.C. in the Ebro Valley, as authors have stated¹⁸.

One of the better known and studied destruction layer assemblages is Cabezo de la Cruz (La Muela Zaragoza) Phase III. As a result of the Iron Catastrophe, the radiocarbon dating for the end of Phase III and thus, the settlement's destruction by fire, offer a rather reduced accuracy and the dating ranges from 590 B.C. to 520 B.C. Once calibrated, this values spread showing a highest probability fan between 650 cal BC and 550 cal BC¹⁹. Moreover, when Cabezo de la Cruz (La Muela Zaragoza) Phase III is destroyed by fire, the very first Iberian wheel thrown pottery has not still arrived to the hillfort. This type of container arrives to the area immediately afterwards.

Regarding the Cabezo Morrudo (Rodén, Zaragoza) Phase II destruction layer it should be highlighted the existence of Iberian wheel thrown pottery in the adjacent houses 8, 8A and 22. The percentages of the three houses wheel-work amongst the whole types of wares

is, respectively, 14.6 %, 12.5 % and 3.6 %. This fact indicates an incipient arrival of commodities, inside Iberian wheeled-ware containers, hoarded by a reduced group of households. In the rest of the excavation just a reduced number of decontextualized wheeled-ware shards have appeared, as a result of dragging processes.

Consequently, it seems appropriate to propose for Cabezo Morrudo (Rodén, Zaragoza) Phase II destruction layer a similar chronology to Cabezo de la Cruz (La Muela Zaragoza) Phase III destruction layer (650 cal B.C. to 550 cal B.C.) or, more appropriately, a slightly lower chronology.

Domestic labor and hand-made pottery in Cabezo Morrudo (Rodén, Zaragoza). Phase II

The following work has been carried out on the basis of the vessel sample designed by APC, SL archaeologist and presented in the archaeological excavation report²⁰. The original designs have been

18 (BURILLO, F., 1990, PICAZO, J. V., RODANÉS, J. M., 2009, RODANÉS, J. M., PICAZO, J., 2002, TRAMULLAS, J., ALFRANCA, L. M., 1995).

19 (PICAZO, J. V., RODANÉS, J. M., 2009).

20 (VILADÉS, J.M., et alii, 2001).

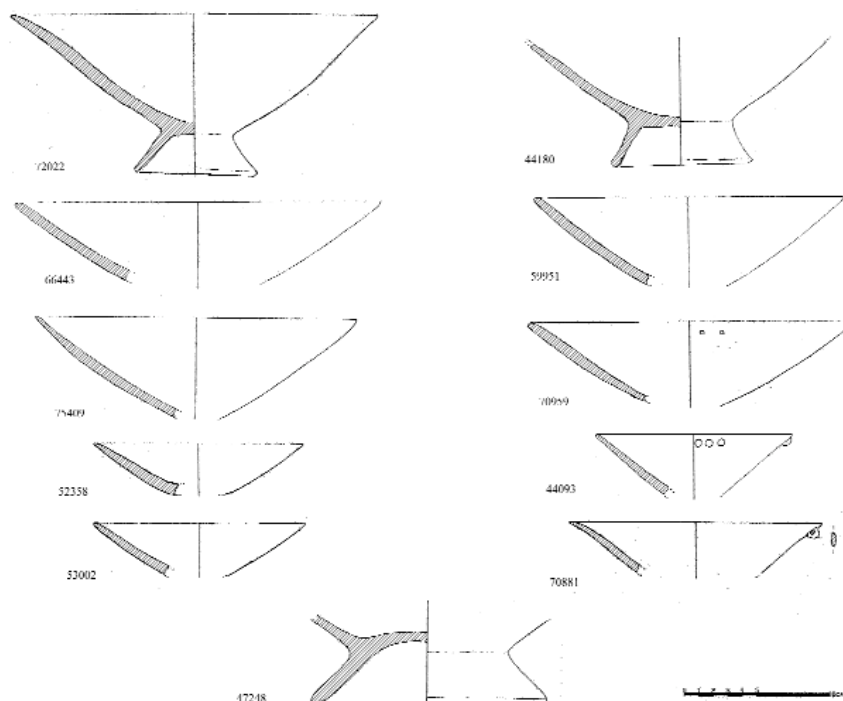


Figure 7. Footed plates. House dwelling 1: 52358, 53002. House dwelling 2: 72022, 70881, 70959. House dwelling 3: 47262. House dwelling 10: 44093. House dwelling 13: 59951. House dwelling 20: 75409. House dwelling 22: 66443.

slightly retouched by means of graphic design information programs, in order to adapt them to the needs of this paper.

It has been decided to utilize the functional-based classification proposed for the research of Cabezo de la Cruz (La Muela, Zaragoza) artifacts. This classification defines four basic categories: group, type, sub-type and variant²¹, (PICAZO, J. V., RODANÉS, J. M., 2009).

1. Table wares

The problems posed by proposing a function for prehistoric containers, who very probably were multi-functional in most cases, have been highlighted by authors²². Even though, the assemblage presented here seems adequate to eat, drink, pour liquids or semi-liquids and serve food.

1.1. Plate

Sub-type I.1.A. Truncated-cone shaped plate

Those plates are truncated-cone shaped with a very open shape. The range of maximum diameter

defines two types of plates: medium-sized and small-sized plates. Middle-sized plates have a diameter of 21 cm to 26 cm and ca. 7.5 cm height and small-sized plates have a diameter of 14 cm to 15 cm and ca. 7.5 cm height.

Nearly all of the designed plates are very similar to truncated-cone shaped plates in Cabezo de la Cruz, (La Muela, Zaragoza) Phases II and III²³ and Alto de la Cruz, (Cortes de Navarra, Navarra) Phase IIb²⁴.

The exceptions are plates 72013 and 71837 from Dwelling House 2. The first one refers to immediately later shapes, well represented in Necrópolis de la Atalaya, (Cortes de Navarra, Navarra)²⁵. This fact gives a new argument to continue proposing for Cabezo Morrudo's destruction layer a slightly lower date than Cabezo de la Cruz Phase III destruction layer date. The plate 71837 have no parallels comparable to Cabezo de la Cruz, (La Muela, Zaragoza) Phases II and III and Alto de la Cruz, (Cortes de Navarra, Navarra) Phase IIb associations.

There are no geometrical decoration patterns on the underside of the plates base made by means of

21 (PICAZO, J. V., RODANÉS, J. M., 2009).

22 (PICAZO, J. V., RODANÉS, J. M., 2009). 23 (PICAZO, J. V., RODANÉS, J. M., 2009).

24 (MALUQUER, J., 1958 y MALUQUER, J. et alii, 1990).

25 (CASTIELLA, A., 2005).

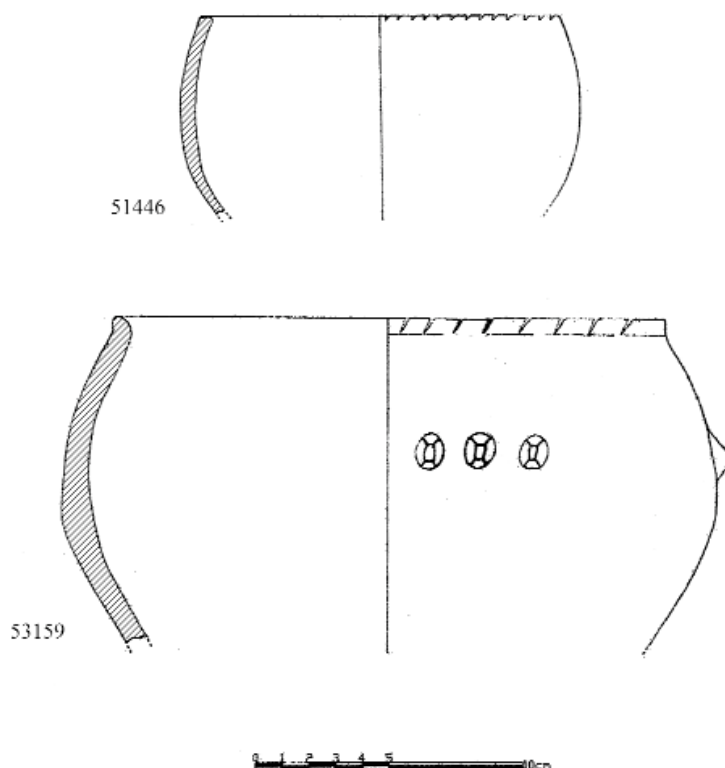


Figure 8. Rounded profile bowls. House dwelling 1: 53159. House dwelling 11: 51446.

smooth furrowed decoration or pre-firing incisions, as it is indeed usual in lower Huecha and Huerva course associations²⁶ and even Ebro downstream²⁷.

Sub-type I.1.A. Truncated-cone shaped, footed plate

Truncated-cone shaped, fineware footed plate have been uncovered in, at least, three houses. In Cabezo de la Cruz this shape is located in just one of the excavated dwelling houses²⁸.

Type I.2. Rounded profile bowl

Two rounded profile bowls have been designed in APC, SL report. This is a rather infrequent type in upper and middle Ebro associations, where liquid or semi-liquid nourishment ingestion seems to have been carried out mainly using cylindrical-necked globular cups. Nevertheless, parallels can be found in Alto de la Cruz, (Cortes de Navarra, Navarra) Phase PIIb 2B1 and 2B2 sub-types²⁹.

Rodén's rounded profile bowls have rims with

notched lips and applied decoration. This kind of decoration is widely spread throughout the fire-destruction layer hand-built wares.

Type I.4. Cylindrical-necked, globular cup

This type is defined by a closed shape, being the most characteristic feature the presence of a cylindrical neck, frequently slightly everted, and globular shoulders. The surfaces are burnished. Three sub-types have been defined, depending on its capacity.

Sub-type I.4.A. Small-sized, cylindrical-necked globular cup

The range of maximum diameters varies between 6 cm and 11 cm, in most cases between 6 cm and 7 cm. The heights vary between 6.5 cm and 9 cm but, in general, heights are around 7 cm.

It seems that, pretty frequently, the dimensions of the vessels reflect a process of standardization carried out within the household cluster. Thus, House dwelling

26 (PICAZO, J. V., RODANÉS, J. M., 2009, MALUQUER, J., 1958, MALUQUER, J., et alii, 1990, ROYO, J.I., 2005).
27 (FERRERUELA, A., ROYO, J.I., 1985).

28 (PICAZO, J. V., RODANÉS, J. M., 2009).
29 (MALUQUER, J., et alii, 1990).

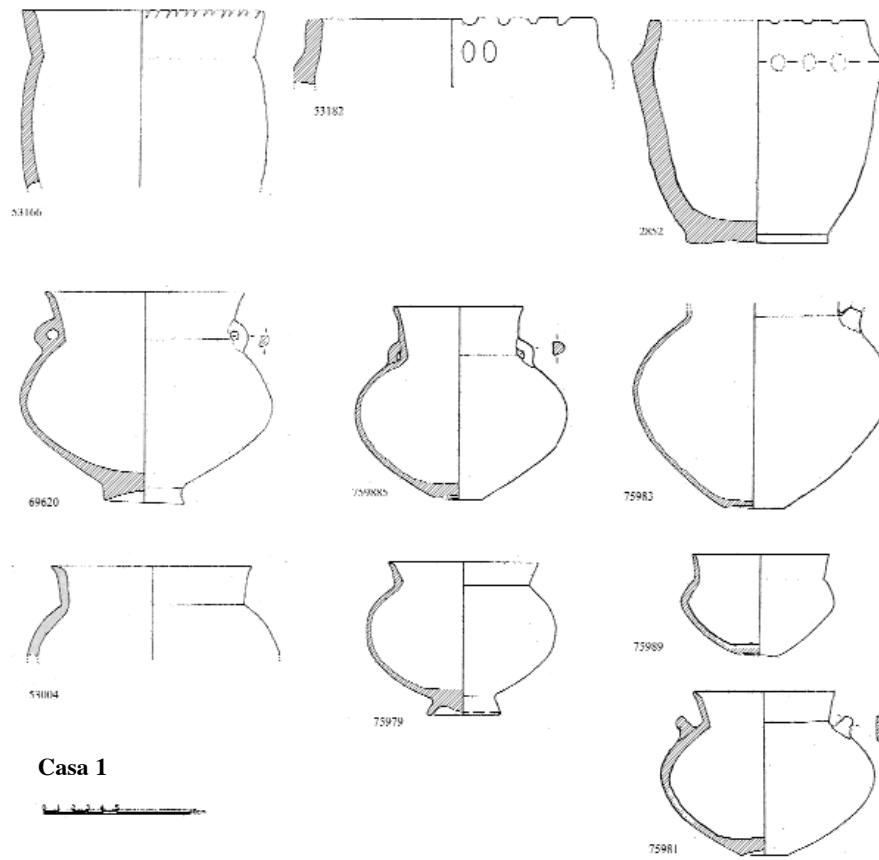


Figure 9. Cylindrical-necked, globular cups. House dwelling 1.

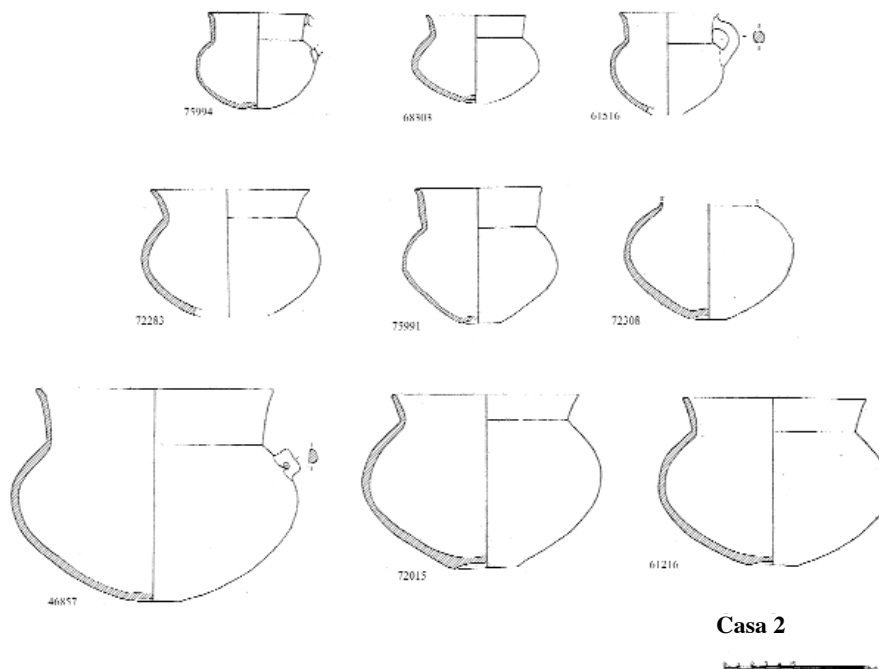
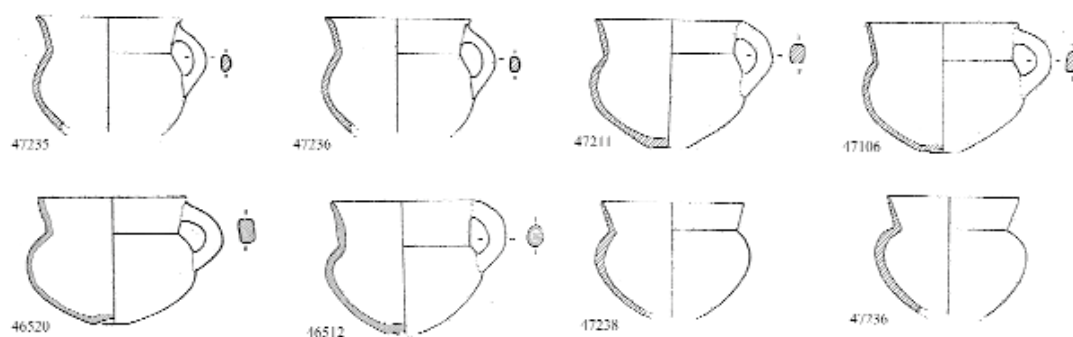


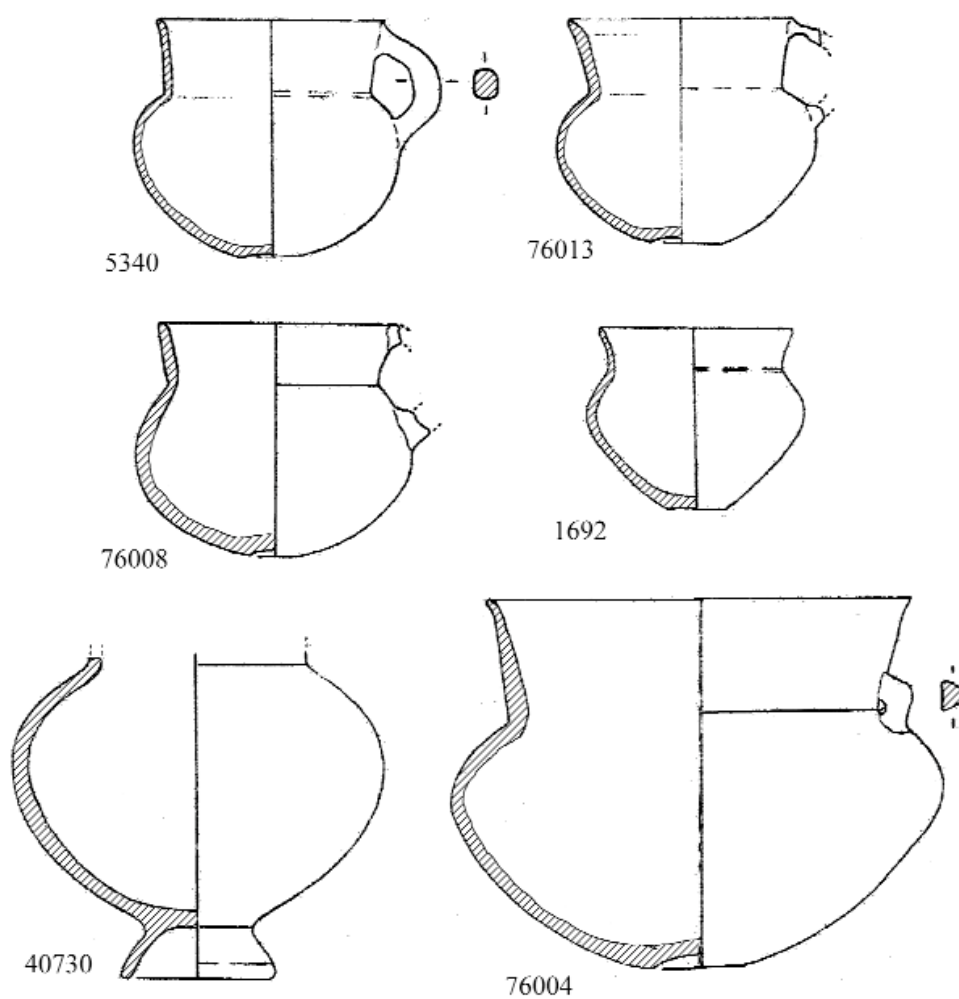
Figure 10. Cylindrical-necked, globular cups. House dwelling 2.



Casa 3



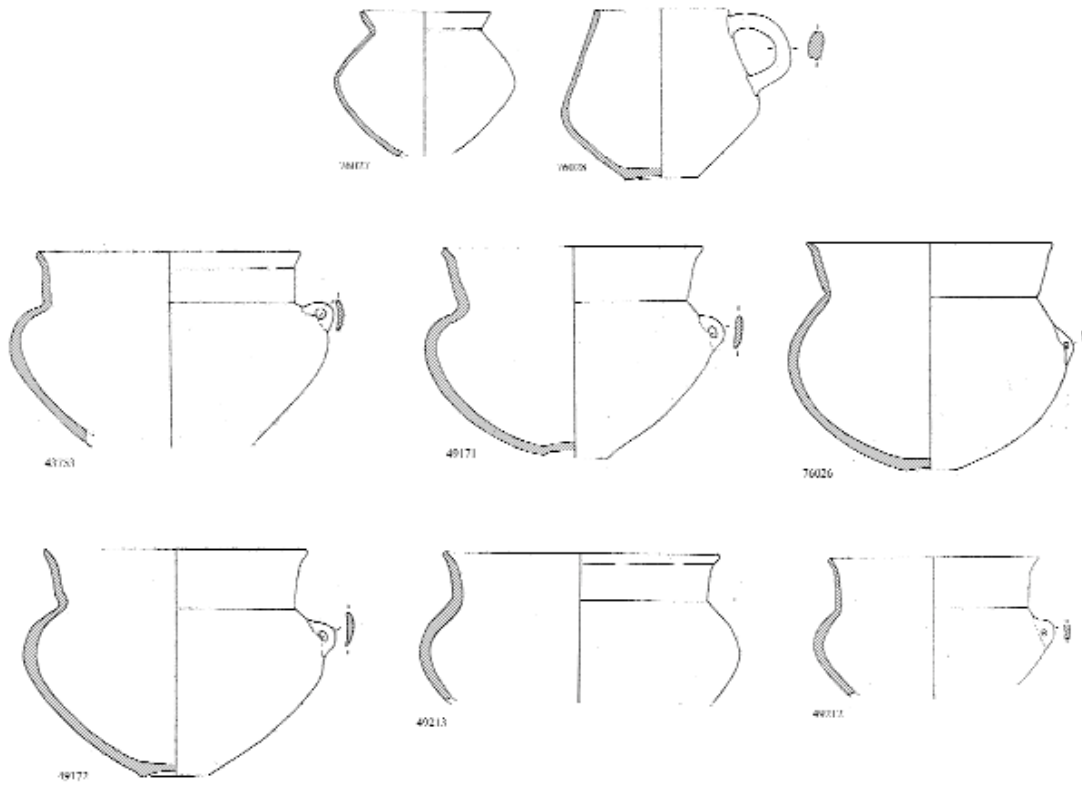
Figure 11. Cylindrical-necked, globular cups. House dwelling 3.



Casa 9



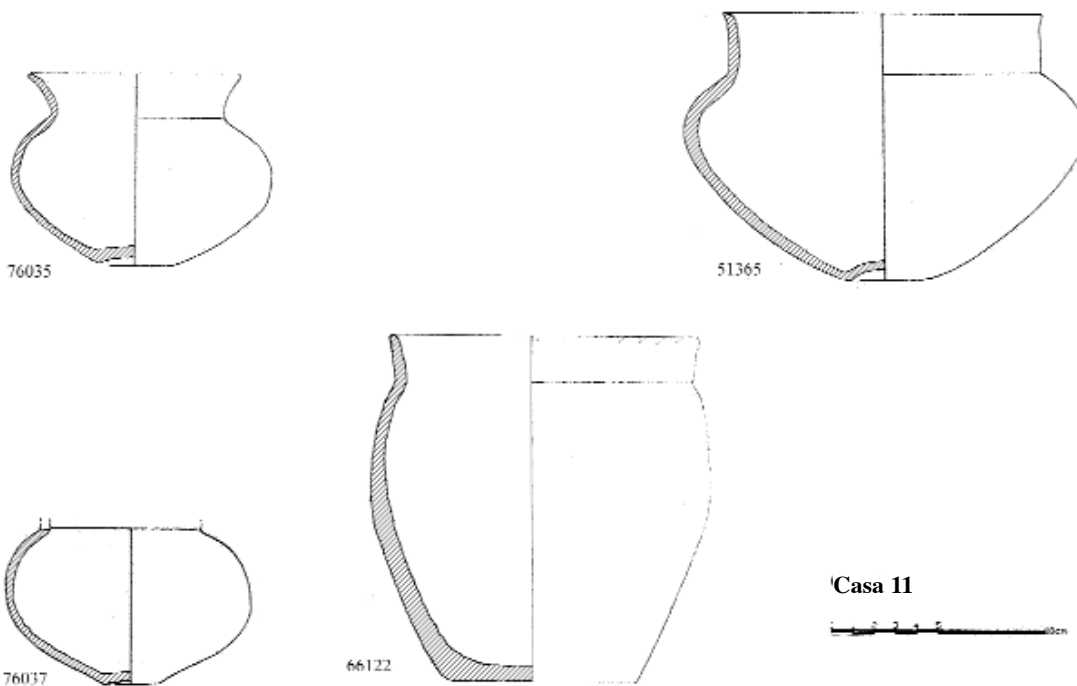
Figure 12. Cylindrical-necked, globular cups. House dwelling 9.



Casa 10



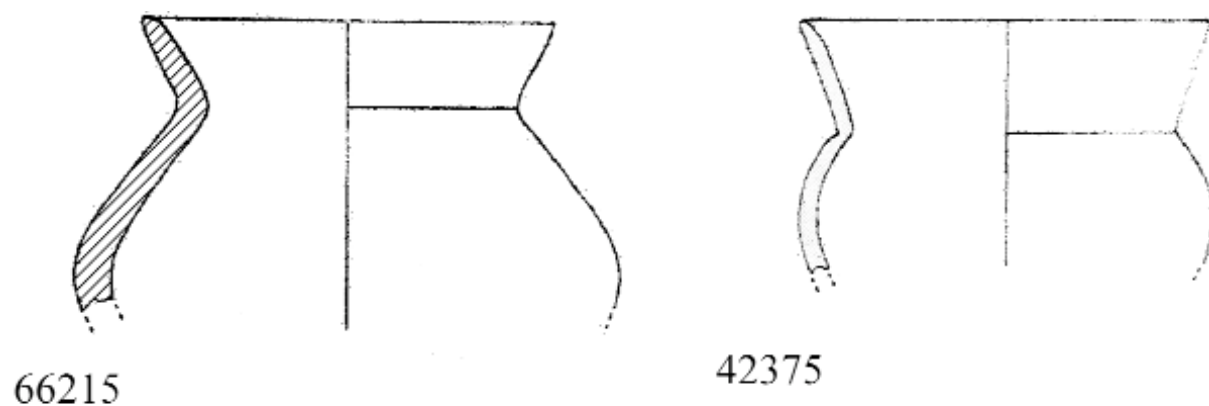
Figure 13. Cylindrical-necked, globular cups. House dwelling 10.



Casa 11



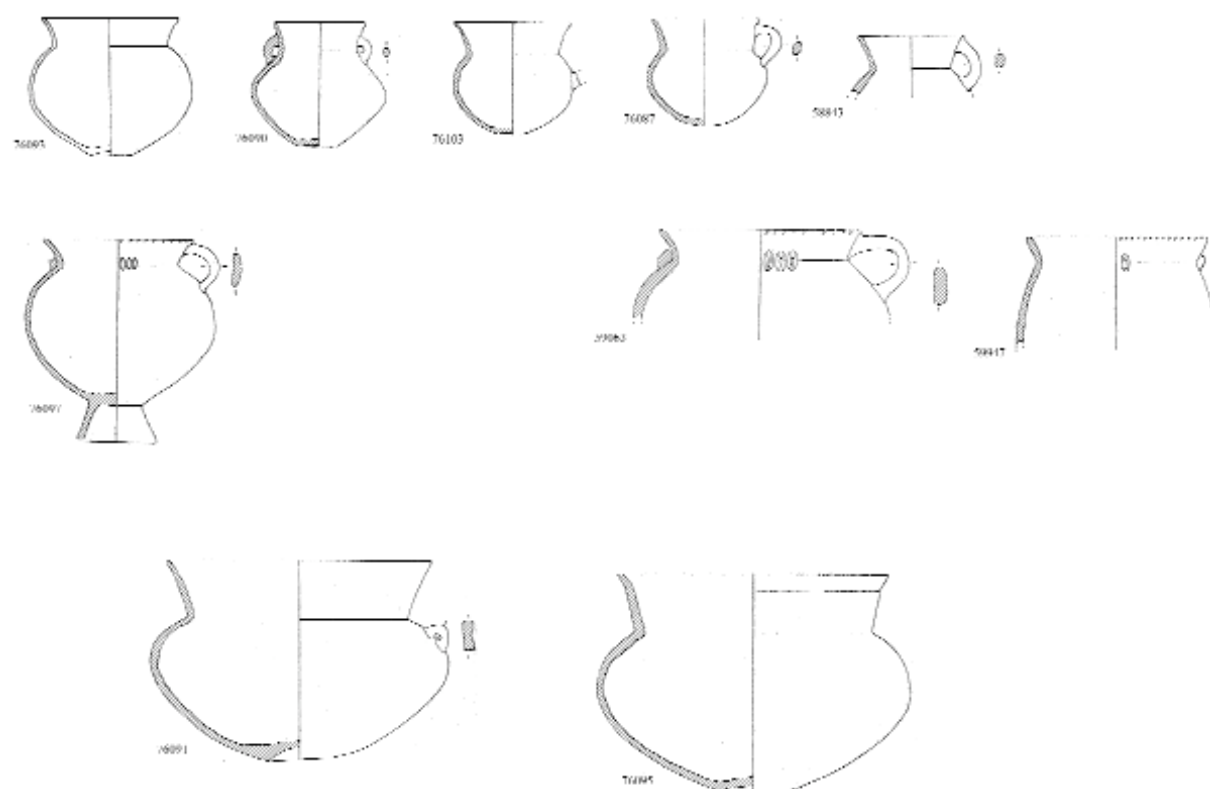
Figure 14. Cylindrical-necked, globular cups. House dwelling 11.



Casa 12



Figure 15. Cylindrical-necked, globular cups. House dwelling 12.



Casa 13



Figure 16. Cylindrical-necked, globular cups. House dwelling 13.

Casa 16

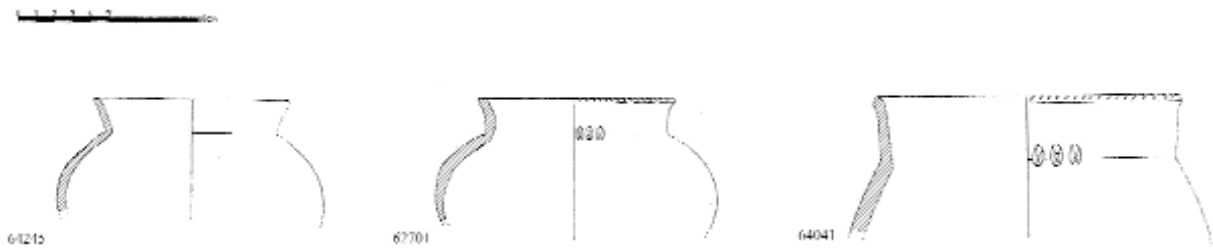
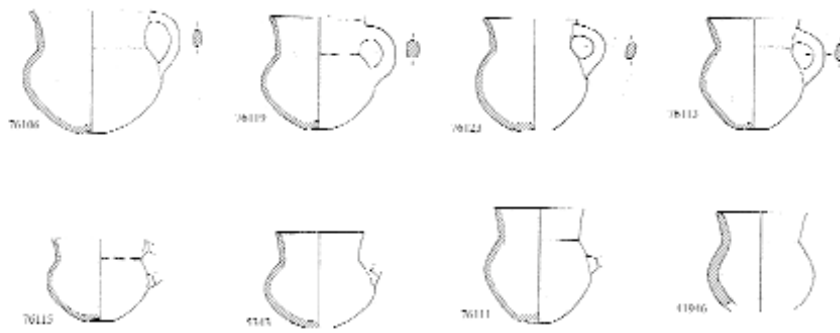


Figure 17. Cylindrical-necked, globular cups. House dwelling 16.



Casa 17

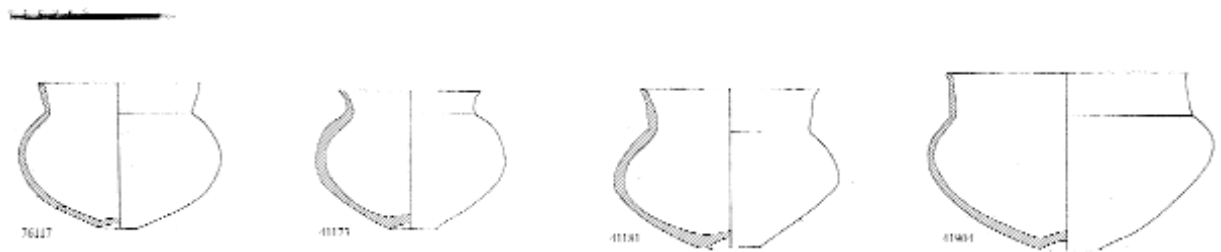
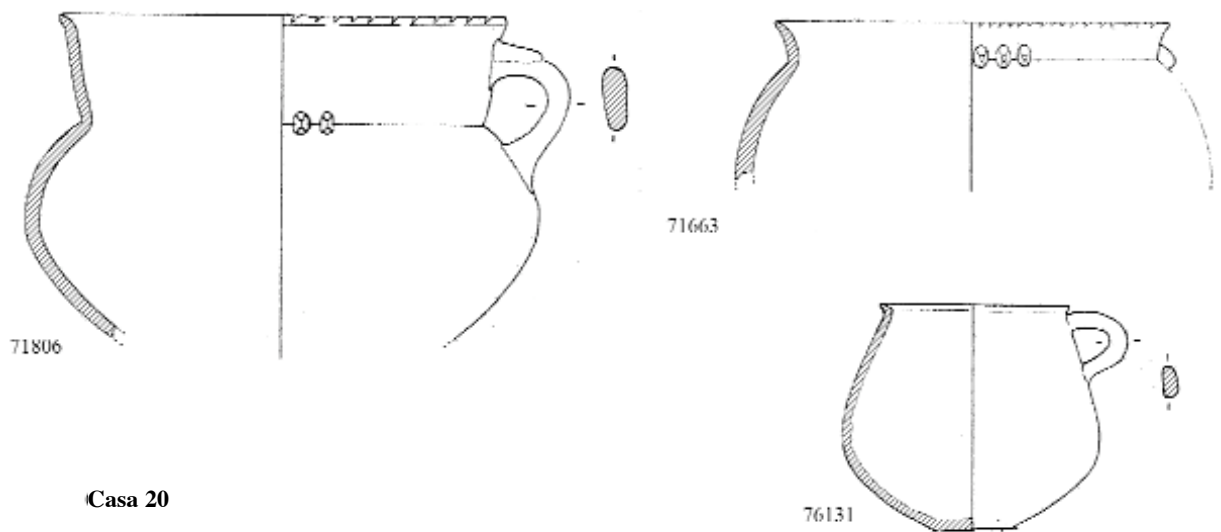


Figure 18. Cylindrical-necked, globular cups. House dwelling 17.



Casa 20

Figure 19. Cylindrical-necked, globular cups. House dwelling 20.

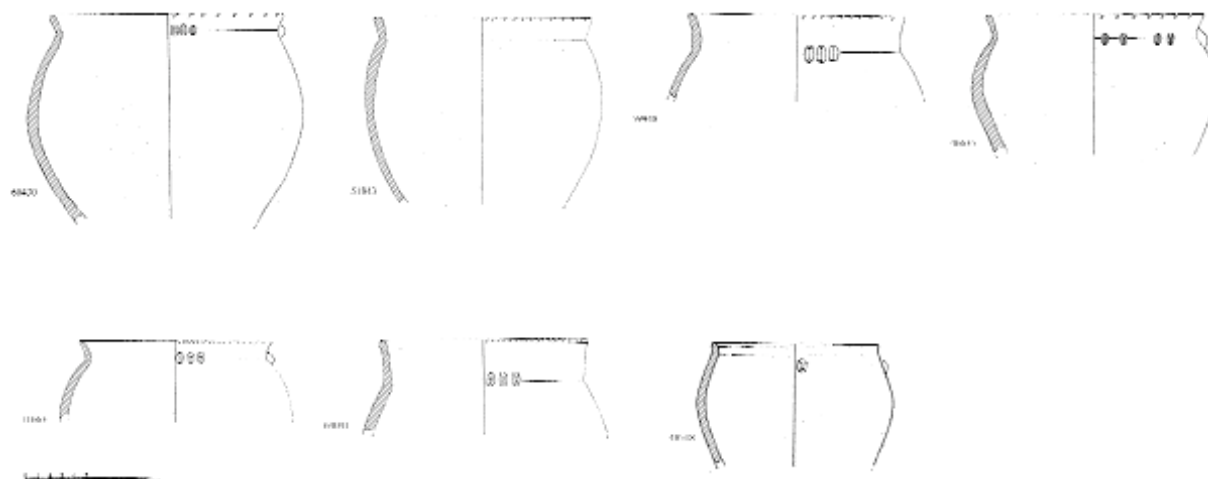


Figure 20. Cooking wares. House dwelling 3: 46635, House dwelling 9: 48518, House dwelling 11: 51843, House dwelling 13: 60430, House dwelling 16: 64041, House dwelling 20: 71663.

3 produces cups with 8 cm maximum diameter and 7 cm of height. House dwelling 9 seems to prefer 7 cm maximum diameter and 7 cm to 7.5 cm high. Finally, House dwelling 8 handmade 6 cm maximum diameter cups.

As it could be seen, this kind of vessel is very common within the Upper and middle Ebro group. Nevertheless, it could be appreciated in Cabezo Morrudo a wide-spread presence of morphologic bias-

es typical from the eastern area of the group. This phenomenon has been previously highlighted in other associations belonging to the same cultural horizon, as, for instance, Los Castellazos (Mediana de Aragón, Zaragoza)³⁰, Pompeya (San Per de Calanda, Teruel)³¹, and Las Dehesas (Quinto de Ebro, Zaragoza)³².

These biases consist on more stylized shapes, slightly everted cylindrical necks and a generalized presence of handles between the rim and the begin-

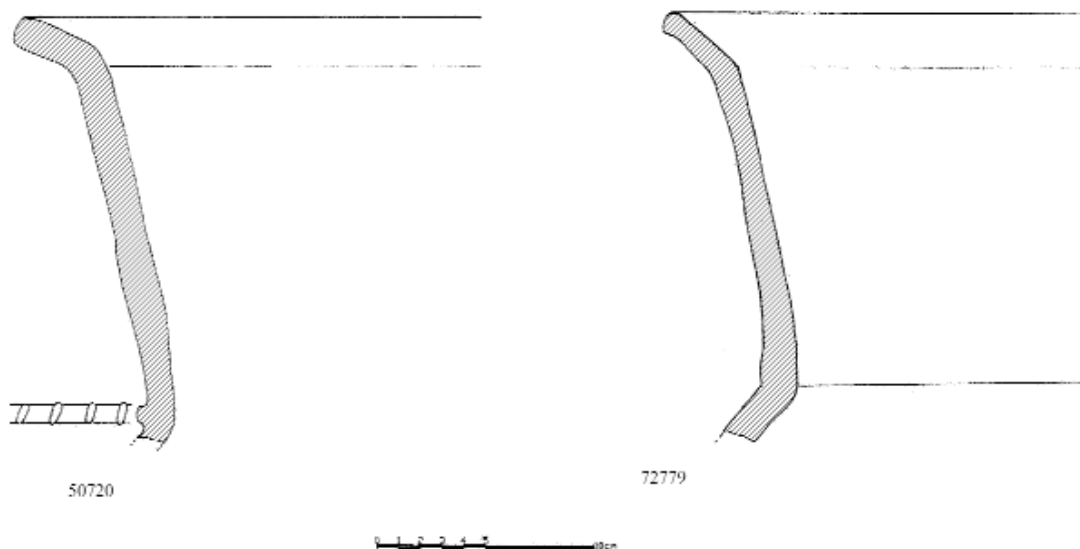


Figure 21. Storage jars. House dwelling 8: 72779. House dwelling 11: 50720.

30 (MAESTRO, E., 1988, 1994, 2005).

31 (BLASCO, M.C., MORENO, G., 1972).

32 (FERRERUELA, A., ROYO, J.I., 1985).

ning of the shoulder. This characteristic could be related to a generalized kind of liquid nourishment ingestion in the Ginel-Martín interfluve.

Sub-type I.4.B. Medium-sized, cylindrical-necked globular cup

The range of maximum diameters within medium-sized cups varies between 11 cm and 17 cm. The height ranges between 9 cm and 15 cm.

Again, this type of shapes are related to Cabezo de la Cruz, (La Muela, Zaragoza) Phases II and III and Alto de la Cruz, (Cortes de Navarra, Navarra) Phase PIIb associations. Even though, most of Rodén's cylindrical necks are slightly everted and only House-dwelling 17 place completely its hand-made wares amongst the typical lower Huecha and Huerva valley parameters. On the contrary, House 13 and House 20 show vessels with a very evident local bias in terms of decoration, with notched rim lips and applied decoration.

Sub-type I.4.C. Large-sized, cylindrical-necked globular cup

On this third sub-type the range of maximum diameters varies between 17 cm and 19 cm. The heights vary between 14 cm and 16 cm. Again most of Rodén's cylindrical necks are slightly everted in comparison to upstream associations.

Type I.5. Slightly convex-shaped cup with slightly everted neck

This type of cup appears sporadically in five dwelling houses and it has not been found in Cortes de Navarra and La Muela. It has notched rim lips and, in some cases, applied decoration.

Type I.6. Slightly convex-shaped cup with incurving neck

Again, this is an infrequent type, represented exclusively within House dwelling 1 assemblage. No parallels have been found in other Early Iron Age upper and middle Ebro group studied associations.

Type I.7. Carinated cup, tripartite types with angular profiles

This cup shows shape similarities with regard to Late Bronze Age cups, infrequent in Iron Age associa-

tions. In Cabezo de la Cruz (La Muela, Zaragoza) the type appears very sporadically in Phase III and, probably, in Phase IV³³ and in La Codera (Alcolea de Cinca, Huesca) seems to be a relatively well represented type in layers radio-carbon dated to late 7th century to early 5th century³⁴. Indeed, geographic vicinity with Cinca lower valley communities could explain the sporadic presence of this cup type in Cabezo Morrudo's house-dwellings 10 and 12

2. Cooking wares

This group is composed by "s" shaped cooking pots with notched rim lips and applied decoration.

Type 2.1. "S" shaped cooking pot

This type was found by archaeologist in, at least, house dwellings 3, 5, 9, 11, 13 and 17. It should have been a generalized cooking utensil not only in Cabezo Morrudo but also in other similar cultural horizon's settlements, as finds undertaken in Alto de la Cruz PIIb show³⁵.

Scored ware with fingertip impressed collar cooking pots, generalized in the middle Ebro valley and part of Navarre in the mid-5th century³⁶ have not been reported in Cabezo Morrudo. This type is not found in Cabezo de la Cruz (La Muela, Zaragoza) Phase IV, dated to the end of the 6th century BC to early 5th century BC.

3. Storage jars

This group is represented by large cylindrical-necked shards showing a series of shape and decoration characteristics that makes them fit within the Upper and middle Ebro group pottery typology.

General considerations

As it has been highlighted by authors, the study of prehistoric and protohistoric ethnicity is a thorny and enormously complicated issue.

As far as the following working hypothesis are correct for Early Iron Age middle Ebro peasant communities: 1st The largest part of hand-built wares is made within the household and, 2nd A generalized exogamy takes place within more or less established marital territories, as previously stated, if these working hypothesis are correct, the research of domestic assemblages constitutes nowadays one of the best tools in order to study the ethnicity of peoples settled in the Ebro valley during the Early Iron Age.

33 (PICAZO, J. V., RODANÉS, J. M., 2009).

34 (<http://www.lacodera.net/>).

35 (MALUQUER, J, et alii, 1990).

36 (BURILLO, F., ROYO, J.I., 1996, ROYO, J. I., BURILLO, F., 1997, PÉREZ, J. A., 1990, CASTIELLA, A., 1988, 2005).

A part from the controversial subject of protohistoric ethnicity, it seems highly probable that the peasant communities settled in the Ebro area, between the lower course of Alhama river and the lower course of Martín river were connected by a series of privileged ties, probably constituting a more or less established marital territory.

Within the frame of this territory two areas could be distinguished in terms of household-made material culture: the western middle Ebro, between the Alhama river and the Huerva river, and the eastern middle Ebro, between the Huerva river and the Martín river. Cabezo Morrudo (Rodén, Zaragoza) Phase II would be completely inserted in this last area.

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