



## Exploratory Workshops Scheme

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(SCH)*

*Conference Awards*

## SCIENTIFIC REPORT

ICREA/ESF Exploratory Workshop on

# Late Roman Fine Wares: solving problems of typology and chronology

Barcelona, Spain, 5-9 November 2008

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1.

## **2. Executive Summary**

### **1.1. Organisation of the Workshop**

The workshop was organised as a joint venture between the European Science Foundation (ESF), through its *Exploratory Workshops Scheme*, and the Institució Catalana de Recerca i Estudis Avançats (ICREA), through the *Conference Awards* scheme. In this way two important scientific institutions were supporting the initiative with additional funding coming from the Universitat de Barcelona. Other support came from the Equip de Recerca Arqueomètrica de la Universitat de Barcelona; CERPOANTAR (HUM2005-00996/HIST) project, Ministerio de Ciencia e Innovación de España; and Centre Camille Jullian, Université Aix-Marseille/CNRS.

The workshop was convened by Miguel Ángel Cau and Paul Reynolds from the Institució Catalana de Recerca i Estudis Avançats (ICREA) and Equip de Recerca Arqueomètrica de Barcelona (ERAUB) and Michel Bonifay, Centre Camille Jullian, Université Aix/Marseille, CNRS. The meeting attracted 23 participants from several European and non European countries including the USA and Tunisia. The sessions were held at the old Historical Building of the University of Barcelona.

In order to prepare the ICREA/ESF Barcelona Workshop, previous meetings were held at Aix-en-Provence (France) (26<sup>th</sup> October 2008) and Barcelona (Spain) (3<sup>rd</sup> November 2008). At the first meeting 30 French pottery specialists discussed the dating of published Gallic contexts (according to a pre-established order) and presented unpublished deposits from Gallic sites of relevance to the themes of the Barcelona workshop. Indeed, some of this data was immediately incorporated into the Barcelona programme (dating evidence for fine wares, as well as 'Key Deposits'). The experience was also valuable to the convenors as it offered a chance to test and modify the format of the principal workshop prior to the event. In a similar fashion Spanish and Portuguese ceramicists presented new data from Spanish and Portuguese sites and their opinions on the dating of fine wares and listed Spanish deposits.

In the ICREA/ESF Exploratory Workshop the discussions were carried out on the basis of three main documents (A=Detailed Agenda, B=List of Contexts, C=Bibliography) prepared by the convenors, incorporating additional bibliography provided by the participants over the months prior to the workshop. As has been noted, the Agenda and List of Contexts were modified immediately prior to the meeting in order to add the new evidence provided by our French and Spanish colleagues. Throughout the proceedings the use and misuse of coinage was reviewed by Reece and Marot. Their input and interpretation was extremely helpful, as they are not involved directly in pottery studies, and they provided a counter-view of some of the problems posed in the workshop.

As the workshop was based on real discussion, the organisers recorded the sessions by audio, and some video images were also taken.

### **1.2. Relevance of the Topic**

Fine wares are key to the dating of Mediterranean sites of c. AD 200-700. The dating of ceramics and deposits in general is not a straightforward process. There is to some extent too much subjective reading of the evidence. An important aim of the workshop was to illustrate the full range of variants of specific forms, as well as to communicate the difficulties and flaws in the dating and interpretation of published deposits. A consensus over the typology and dating of these wares was urgently needed. The participants discussed published evidence and presented key new data from excavations in order to solve problems of typology and chronology of Late Roman Fine Wares. Moreover further

directions on Late Roman Fine Wares studies were debated and new directions of future truly international collaborative work have been opened.

### **1.3. Scientific Impact**

The workshop has made a major contribution to the dating of late antique Mediterranean contexts and to the definition of African Red Slip Ware, Cypriot Red Slip Ware and Phocian Red Slip Ware typologies and chronologies as the main Late Roman Fine Wares traded across the Mediterranean. The dating evidence and nature of the deposits as well as the main forms and variants for each ware were revised. In some cases, these revisions led to a major modification of the chronology of several contexts and also to the modification of the chronology of the forms. The modifications of the chronology can contribute to a better chronological assignment of many Mediterranean assemblages and sites and therefore it has a major impact in actual and future research on Roman to Late Antique Mediterranean Archaeology. The publication of these results would be a landmark for the study of Late Roman Fine Wares.

### **1.4. Outcomes**

#### **1.4.1. Short-Term**

A series of volumes is planned for 2009. In the short term 4 volumes are expected:

*Late Roman Fine Wares in the Mediterranean: a first revision.* This presents the results of the discussions held during the principal workshop and pre-workshop meetings on the typology and chronology of the three main ceramic classes under study (African Red Slip Ware, Cypriot Red Slip Ware and Phocian Red Slip Ware).

*Late Roman ceramic assemblages in the Mediterranean: a revision.* This volume will be devoted to the revision of the chronology of the main reference contexts. In this volume a short explanation of the contexts and their nature, external absolute or relative dating, ceramic composition with illustration of the fine wares, published and modified dating will be provided.

*New evidence on the dating of ceramic deposits in the Late Roman Mediterranean* will gather new evidence deriving from new contexts published by the scholars present in the workshop or by other scholars, including those who participated in the preparatory meetings held in Aix-en-Provence and Barcelona.

*Archaeometry of Late Roman Fine Wares in the Mediterranean.* This volume will incorporate all the published evidence and present essential new work in this field.

Also the submission of a COST action is planned.

#### **1.4.2. Longer-Term**

As a result of the workshop it was agreed that similar workshops be organised to discuss and clarify the dating and typologies of all other Mediterranean ceramic classes (that of amphorae and cooking wares being the most urgent). It was also agreed that the "team" should continue to work together integrating also other scholars.

## 2. Scientific Content of the Event

The Workshop was designed as an authentic workshop for real discussion on specific topics in order to solve the questions that will be the main theme of each session. No formal presentations were given but participants provided information on new ceramic deposits important for dating purposes, as well as new types and/or variants found in their excavations.

### 2.1. Introductory addresses

In the initial welcome, Jaume Bertran Petit provided us with a summary of the purpose and aims of ICREA, its principal and innovative goal being to attract scientific excellence to Catalonia. The programme has supported around 200 researchers from many different disciplines.

In the initial welcome address Miguel Ángel Cau focused on the idea that individual and isolated research is, or should be, no longer a characteristic of current and future research. In a globalised world and in the construction of a *European Research Area*, we need to combine our efforts in order to solve some of the important problems posed by Science. This was precisely the aim of the workshop of Barcelona as it has brought together and combines the effort of all the participants and varied initiatives of research in order to solve problems and explore future directions for the dating of Late Roman Fine Wares. It is essential that these complex problems be addressed, as these wares are fundamental for the dating of deposits and sites across the Mediterranean.

Raymond Brulet, ESF Representative explained the role of the ESF in Science and the role of the Humanities.

A second part was devoted to practicalities and the way of proceeding with the 3 days meeting. As it has been mentioned the meeting was organised on the basis of three main documents (A=Detailed Agenda, B=List of Contexts, C=Bibliography) prepared by the convenors with additions from the participants and additional documents of evidence provided by the later. Throughout the proceedings the use and misuse of coinage was reviewed by Reece and Marot. It was extremely helpful to have the view from them as they are not involved in pottery studies thus giving a counter-view of some of the problems posed in the discussions. Due to the fact that the meeting was based in real discussion, all the sessions were audio registered and some videos were taken.

### 2.2. Session 1. Revision of the main Mediterranean ceramic assemblages

The first session was devoted to a review of the main Mediterranean Late Roman contexts important for the dating of fine wares and therefore for the dating of archaeological sites. The participants had been provided well before the meeting with a list of the main contexts organised by regions across the Mediterranean (e.g. Spain, France, Italy, etc.). However, in the days before the Barcelona workshop the convenors prepared an alternative table, with the contexts organised in chronological order. The idea was to assess the contexts chronologically (regardless of the regional origin of the deposits) to demonstrate similarities and differences between contexts that could help to refine their dating. The fine ware composition of deposits could thus be demonstrated to shift progressively over the decades. In this way deposits that appeared to be particularly significant as chronological indicators could be identified. Participants received this table of contexts organised chronologically at the beginning of the session as the basis for discussion. It was agreed after some debate that the chronological approach would be applied, rather than the original format based on regions.

During the session each context was illustrated and discussed in order to agree on its date and to identify the types and variants that cause problems in the chronological assignment of particular deposits. By doing so, the chronology of some important reference contexts was modified and this will have major implications in future research. In addition, problematic types and variants were identified so that they could be discussed in greater detail in the following sessions of the workshop (Days 2 and 3 devoted to forms).

As had been the case in the two pre-workshops, a special effort was made to collate and have to hand in the room all the bibliography relevant to the subject in such a way that all the contexts and types and variants could be illustrated and the participants had access to them to discuss specific issues. Books, offprints and photocopies were therefore present to complement Document C, the Bibliographical list that had been sent to all participants beforehand. The projection of the documents was also possible due to the presence of an Opac Projector in the room.

Of the 300 contexts chosen to be of interest for their ceramic content, 150 were summarised and 50 were fully discussed during the session.

As had been hoped, this process was indeed successful in identifying what will in the future be regarded as key contexts for the dating of Late Roman fine wares, as well as identifying well known contexts that should be treated with more caution. Certain forms and variants were also identified as problematic and in need of further more detailed discussion in the following three sessions devoted to Typology and Dating.

The agenda of assemblages discussed and some of the most significant deposits identified were as follows:

Mid 2<sup>nd</sup> century AD: The Antonine Temple of Sabratha; Knossos-Sackett Antonine

Late 2<sup>nd</sup>-early 3<sup>rd</sup> century: Carthage Tomber Circular Harbour; Villa of Tolegassos.

Early 3<sup>rd</sup> century: Beirut BEY 045 natatio deposits; Brindisi Harbour; Knossos-Sackett Severan

Mid 3<sup>rd</sup> century: Beirut 006.5051; Benghazi; Cabrera 3 wreck (c. AD 265); Butrint Forum; Dura Europos (in situ deposits of 267).

The rarity of late 3<sup>rd</sup> to early 4<sup>th</sup>C deposits was noted:

Late 3<sup>rd</sup> century: Pollentia destruction of the Forum (270-280).

Early 4<sup>th</sup>C: Palatine East; Beirut 006.2349.

Mid 4<sup>th</sup> century: Arles fire (unpublished); Kourion AD 365/367 earthquake: the presence of later material than that of the earthquake was signalled; Beirut 006 mid 4<sup>th</sup> century Portico noted; Draria el Achour (Algeria).

Late 4<sup>th</sup>C: Carthage Deposit 14; Carthage Circus; Caesarea Harbour; Beirut 006.9429, 9430 et al.; Yassi Ada 1.

Early 5<sup>th</sup>C: Beirut 006.13017 (several contexts). It was discovered that there are fewer contexts available of this period than was thought. Ordonna cistern; Clos de la Lombarde (Narbonne).

Mid 5<sup>th</sup>C: Marseille Bourse period 1; Schola Praeconum 1: the integrity of this deposit was discussed; Vila-roma 2 (Tarragona): the Vandal or pre-Vandal date of this assemblage was discussed; Drammont E; Hotel Dieu (Narbonne); Sa Mesquida (Mallorca).

450-500: Torre Audiencia 1; Carthage Deposit 27; San Giovanni di Ruoti (now re-dated); Es Castell (Ibiza); Marseille Bourse Period 2A; Bon Jesus (Marseille); Pompeii eruption deposits: cf presence of 'developed' ARS 104A suggests a later date than that suggested (AD 472)?; Corinth Assemblage 2.

#### 6<sup>th</sup> century

Early 6<sup>th</sup> century: Butrint 1422 and others; Saraçhane church construction 524-525; Casa Vestali (Rome).

525-550: Ciudadela de Roses (Context 14 to 17); Antioch 527 earthquake was added; Carthage Michigan; Cartagena Theatre Phase A.1.; Butrint 1152; Beirut AD 551 earthquake deposits; Benalua deposit (mid 6<sup>th</sup> century); Sainte Propice; La Palud Wreck; Paphos Garrison Camp, was added, but not discussed; fort on Black sea added, but not discussed; Knossos pit.

550-575: Butrint 1676 and other; Carthage Kobat Bent-el-Rey (mid 6<sup>th</sup>); Carthage Michigan Deposit 7 (mid 6<sup>th</sup>); Cartagena: the dating was revised; Saranda Kolones.

Late 6<sup>th</sup> century: Beirut 006.5503; Corinth Assemblage 3; Cartagena Phase 9.2.; Carthage Michigan context 29; Benalua (Alicante); Butrint 3105.

7<sup>th</sup> century: Cartagena Phase 10.2 and Malaga, final Byzantine in situ deposits (c. 625); Tocra Period 3 (first half of the 7<sup>th</sup>); Chios in situ finds (AD 3<sup>rd</sup> quarter of the 7<sup>th</sup>); Saraçhane Deposit 30 (c. AD 655-670); Crypta Balbi (c. 690).

### 2.3. *The Typology and Dating of Late Roman fine ware forms*

#### 2.3.1. *African Red Slip Ware*

##### a) Sources

- The session opened with a discussion of the merits and flaws of the Carandini-Atlante nomenclature of ARS wares (A1, A2, C1-5, D1-D2 and E), as this has been widely adopted by specialists in order to attribute (regional) sources to ARS. Should this be retained? It was decided that where these divisions can be equated with specific products, these would be retained (A1-A2; C1-2; C5), but that C3-C4 were not so clearly identifiable. The latter, dating to the 4<sup>th</sup> and 5<sup>th</sup> centuries, were presented by Carandini as chronological evolutions, but in reality the range of characteristics of ARS over this period is not so straightforward.
- Where products and specific variants can be assigned to specific workshops-centres these need to be described and illustrated.
- Attention was drawn to the products of Sidi Khalifa that cannot be classed as either ARS C or D. In fact this underlines one of the flaws of the Atlante classification of wares into broad regional classes.
- The new category 'A3' can be given to fine fabric (west-central Tunisian?) versions of ARS A forms.
- It was agreed that one aim of future research should be to provide macroscopical definitions of the specific products of all the workshops of ARS. This should enable us to redefine the regional classes of ARS more accurately.
- Certain products not clearly identified in John Hayes' *Late Roman Pottery* (hence, LRP) or the *Atlante* need to be presented and described (e.g. Reynolds 1987, Ware 1). The existence of a wide range of ARS 'A/D' fabrics (in other words, various sources producing ARS 31-33 et al.) needs to be presented and the wares described (cf. the products found at Butrint). The possible origins of A/D ware(s) were discussed but the problem could not be resolved.

- Though ARS 105 is generally considered to be a north Tunisian form (e.g. in the *Atlante*), the possibility that it was produced on the central Tunisian coast needs to be explored (cf. the Leptiminus survey).

#### **b) Forms**

Following the initial grouping of deposits according to likely chronological order (based primarily on trends in the presence and absence of forms-variants), it was possible to make some suggestions and corrections to the accepted date ranges of a wide range of forms and variants of LRP.

- The session began with a reassessment of the dating of the latest series of ARS A products (ARS 8B, 9B, 10B, 14 and 15), with evidence for the production of the majority of these shapes well into the 3<sup>rd</sup> and 4<sup>th</sup> centuries being presented.
- An earlier starting date for ARS A/D than that of the early 3<sup>rd</sup> century proposed in LRP cannot be ruled out, based on the evidence from Sabratha.
- It was found that there is no evidence for a starting date for ARS C prior to the 3<sup>rd</sup> century.
- The dating of ARS 58 and its relationship to ARS 32/58 was discussed.
- The end date of ARS 67 proposed in LRP (460-490) was discussed: there is now further evidence to support this rather late date (its absence in Beirut after 450 is due to the distribution of ARS following the Vandal conquest, and not its actual production date).
- Attention to specific variants and the importance to their identification were underlined, as was also the importance of providing adequate illustration of both forms and their variants.
- One of the principal outcomes of this workshop will be the identification, description and, hence, clarification of specific variants as well as forms that have been incorrectly identified in publications, or for which there is confusion about what specific shape the LRP type piece actually refers to (e.g. ARS 79).
- The range of ARS 61B and 87 variants can now be more clearly identified and dated to specific decades of the 5<sup>th</sup> and sixth centuries.
- One of the significant results of the workshop was the clarification of the typological evolution of ARS 109 through the late 6<sup>th</sup> to late 7<sup>th</sup> centuries.
- There was considerable debate over what 'ARS 94' actually refers to: it should not be confused with ARS 98.
- The extent to which our concept of a form is affected by the variants or sources of that shape that were marketed to one region but not another was also underlined (this was indeed the case with ARS 73 and 94).
- The dating of forms can also be influenced by regional trends in their distribution (the drop in ARS exports to Corinth and Athens in the late 4<sup>th</sup> and early 5<sup>th</sup> century is not paralleled in Beirut, and this could affect our understanding of the peak in exports of these forms). See above, the case of ARS 67.
- It was agreed that the full range of closed ARS forms should be illustrated (many of these were unknown in LRP). It was also agreed that, where possible, all the examples of ARS appearing in LRP, or at least their equivalents, should be illustrated.

#### **2.3.2. Phocian Red Slip Ware**

The session opened with an update on the current evidence for the main production sites of the ware, sources of a large percentage of distance exports (Phocaea/Fokaia, Çandarli, Gryneon, and one other unidentified product), as well as 'satellite' centres whose products travelled only rarely (e.g. Ephesus, Pergamum).



The possibility of a break or not in the production of Çandarlı Ware and PRS resulted in a heated debate in which it emerged that that key data on production trends at the major centres of Fokaia and Gryneon is still to be processed and that the 'excavation histories' of the major Asia Minor cities that should have been able to provide key dating evidence for the identification of a possible mid Roman phase of production (Pergamum, Ephesus, etc) have obliterated what would have been an invaluable resource.

It was agreed that we must ask our Turkish colleagues who have excavated the kiln sites at Fokaia to contribute to the discussion. Similarly it was clear that we would all benefit from Maurice Picon's input on the chemical analyses of PRS of samples from Gryneon (stored at the Laboratoire de la Maison de l'Homme, Lyon).

The following session discussed the dating of the principal PRS forms. The LRP dating of PRS forms was presented in each case and any new data was brought to light.

Some of the highlights of these discussions are as follows:

- It is clear that the historical interpretation and dating of specific deposits, of the Athenian Agora ('Alaric destruction' levels) and S. Giacomo di Schiavoni in particular, have influenced the dating and re-dating of PRS 1 and 2, with a lean towards a much later, 5<sup>th</sup> century date for PRS 2 than that proposed in LRP (these amendments are to appear in John Hayes' forthcoming volume on the Late Roman fine wares of the Athenian Agora, illustrations of which he was able to show us). Further discussion, however, based on deposits of Argos and Beirut, as well the redating of S. Giacomo di Schiavoni at this workshop on Day 1, allowed us to reaffirm the original dating of PRS 1 and PRS 2 in LRP.
- It also emerged during this discussion, as well as the following on CRSW, just how different the distribution patterns of early to mid 5<sup>th</sup> century ARS were in the eastern Mediterranean (e.g. rarer in Athens and Corinth, than in Beirut) and how this can affect our dating of deposits. The presence or absence of CRSW, also determined by regional distribution trends (e.g. rare in Athens, Corinth; common on the Levantine coast and northern Egypt) also affects 'reading' and dating of deposits.
- The dating and typology of the long-lived and complex form PRS 3A-H resulted in considerable debate. It was generally agreed that, as presented in LRP, PRS 3 remains a difficult form to classify when faced with the identification of rims 'in the field'. It was unanimously agreed that the publication resulting from this workshop should provide a better illustrated, comprehensive guide to the form and its complex development.  
John Hayes' presence was invaluable to us as he explained the factors that governed the definition and dating of specific variants. The degree to which some were considered part of a 'linear' sequence or were simply parallel products from several contemporary workshops was outlined.
- Though a simplification of the PRS 3 variants into 5<sup>th</sup> century and 6<sup>th</sup> century types was suggested, this was contested.
- The importance of the variant PRS 3G (not actually illustrated in LRP) for the dating of mid 6<sup>th</sup> century deposits and for our understanding of the evolution of PRS 10 from it (not greatly discussed in LRP) was affirmed.
- Both Butrint and Beirut emerged as new key sites for the dating of 5<sup>th</sup> and 6<sup>th</sup> century PRS. Problems in the interpretation and dating of the 'Antioch 526 earthquake' deposit were also aired. Several other new key deposits were also signalled (En Boqeq; Black Sea forts).
- Richard Reece provided us with his interpretation of the coin evidence accompanying the Agora deposits of c. 450-475 (those lacking coins of Zeno) and illustrated the extent to which the presence or absence of specific coins in

deposits may or may not be significant for their dating in different sectors of the eastern Mediterranean, according to the varying regional supply of coinage.

- Whereas the dating of PRS 10 remains solid, there was some discussion of the end-date of the form and PRS in general – late 7<sup>th</sup> or 8<sup>th</sup> century? – versus problems of ‘residuality’ in such late contexts, based on new evidence from Kythera and Pseira.

### 2.3.3. Cypriot Red Slip Ware (CRSW) and related products

At the outset of the session the fundamental new work of Henryk Meyza on CRSW was presented. It is clear that the forthcoming volume of the Workshop will have to incorporate this new data, particularly in view of the fact that it offers forms and variants absent in LRP that now provide the earlier (4<sup>th</sup> to 5<sup>th</sup>/6<sup>th</sup> century) precursors of what were essentially 7<sup>th</sup> century forms in LRP (forms 7, basins as CRSW 11; closed form 12), as well as some quite unconnected shapes not encountered in LRP. New dating evidence was presented for specific forms that were rare at the time of LRP and hence poorly dated (CRSW 4, 6, 8).

#### a) Origins and wares

- The session opened with a discussion of the origins, if not multi-regional origins, of CRSW and its southern Anatolian counterparts or contemporaries. This theme of the ‘classic’ Cypriot ware (of LRP) versus the Anatolian wares produced at various centres (perhaps Perge, certainly Sagalassos, and at least one other unidentified source) ran throughout the session, often resulting in heated debate. Convincing arguments for the Cypriot origin of the CRSW of LRP were presented. It was agreed that the other likely Anatolian products need to be defined macroscopically and archaeometrically, and their typologies illustrated. The cooperation of our Turkish colleagues in this future endeavour is crucial.

#### b) Forms and dating

- The date of each form and variant of CRSW was discussed with respect to the dating presented in LRP: there are really no significant changes. As we have said, it will be necessary only to add on the earlier development of what were essentially the latest stages of the development of CRSW 6, 7, 11 and 12.
- There is a need, nevertheless, to look more closely at the date of the introduction of CRSW 2 and its relationship to ARS 84.
- The 6<sup>th</sup> century sequences in Beirut, notably those of the AD 551 earthquake, as well as those prior to and following this historical event, allow us now to illustrate far more clearly the linear development of CRSW 2 and its successor CSRW 9, as well as Form 5.

### 3. Assessment of the Results, Possible Outcomes and Contribution to the Future Directions of the Field

A full session led by Miguel Ángel Cau was devoted to future directions. The results of the Workshop are relevant in three different areas. First, for the dating of reference contexts widely used for scholars for dating their ceramic assemblages and sites. Second, for the dating and typological definition of the African Red Slip Ware(s), traded throughout the Mediterranean and beyond. Third for the dating and typological definition of the principal, traded eastern fine wares, Late Roman C/Phocean Red Slip Ware and Late Roman D/Cypriot Red Slip Ware. In fact these three ceramic classes are among the most important dating elements in Mediterranean Late Antiquity.

The dating evidence and nature of the deposits as well as the main forms and variants present in the main ceramic assemblages were reviewed. In some cases, these revisions

led to a major modification of the chronology of several contexts. These modifications can contribute to a better chronological assignment of many Mediterranean assemblages and sites. The fact that flaws and contradictions have been identified will help other researchers by signalling which contexts should not be used as references for comparative purposes, or at least identifying those contexts that should be assessed with a relative degree of confidence.

First, some problems of terminology were outlined. It was agreed that the nature of the context and site formation leading to its composition were important. The importance was also established regarding the existence or not of external factors for the dating of the contexts: presence of coins, inscriptions, historically dated contexts-events, and so on, or if the context was dated solely on the base of the ceramic evidence. The care with which the coin evidence should be read and interpreted, primarily according to specific regional supply, use and discard, was highlighted and put into practice.

A major problem was addressed in the sense that it was agreed that there is still an important lack in the definition of the production centres and their macroscopical, petrographical, chemical and technological features. The participants recognised the important role that Archaeometry should play in future research in order to define the productions with a more solid basis, with the aid of techniques originally important from Experimental Science and nowadays fully established within archaeological practice.

Some problems in the definition of the wares and the use of the establish wares definitions and descriptions, especially for African Red Slip Ware were highlighted. Two clear groups of researchers were identified at the meeting. One that used the Lamboglia-Carandini system with definition of African Red Slip Ware A, A/C, A/D, C1-5, D1-2 and E. A second group that had problems in using this system and was much more confident with the descriptions derived from the fundamental work of J. Hayes in Late Roman Pottery. There were also others who saw problems in the unclear definition and classification 'in the field' of some of the Carandini categories , notably C3 and C4.

It is clear that we may use what has already been constructed (LRP and Atlante), but at the same time we need to introduce a more comprehensive, back to basics approach based on the characterisation of production centres in terms according to wares-fabrics and their specific range of forms and variants. However, the way forward is to describe the actual complexity of production centres, just as it is, and not attempt to summarise and reduce to a homogeneous group the essential details that in fact characterise each production centre. We may in the end be able to group regional workshops, but we must do this only once the details are established. The problem has been one of the simplification of complex data.

- For this purpose there is an urgent need for an extensive programme of archaeometrical characterisation of the productions.
- There is urgent need to advise the Mediterranean governments where the productions centres are located (e.g. Tunisia, Turkey) to facilitate the collaboration in order to undertake an extensive programme of location of workshops, archaeometrical characterisation and definition of typology and chronology. This could be explored as truly international-national partnerships collaborating with the particular countries. In fact, the participants were keen to ask the ESF if it could play this intermediate role, especially in the case of Turkey and Tunisia. We need to advise the Culture Ministers of these countries on the clear importance of their territories for our understanding of ceramic production of pan-Mediterranean significance.

- There was a strong feeling that what has been done in Barcelona for Late Roman fine wares should now also be done for other ceramic classes, such as cooking wares, amphorae, lamps or coarse wares for instance.
- Moreover, participants agreed that the main aim of future research should be to define and clarify the material culture of the Mediterranean as a whole, including also other ceramic classes and objects of daily life.
- This, it was agreed, should be done by establishing a 'Research Network for Roman and Late Roman Mediterranean Material Culture'.
- Participants agreed, also following the advice of the ESF representative, Raymond Brulet, that Barcelona, in view of its significant Mediterranean position and for other reasons, would be a perfect place to lead and provide initiative for a major programme devoted to the gathering of raw data and coordinating studies of 'The Material Culture of the Mediterranean of the Roman to Late Antique Periods: 1<sup>st</sup> century BC to 7<sup>th</sup> centuries AD.'
- There was a strong belief that future work should focus in a long term, trans-national project, truly collaborative and able to promote interaction and synergy, incorporating initiatives that may have already started on an individual basis. There was a strong positioning of the scholars in the sense that this research on material culture is a fundamental tool both for the dating and interpretation of the nature of the archaeology of archaeological sites (excavations), and, of course, for our reading and understanding of trends in trade, trade routes and the economy across the Mediterranean and beyond (the Black Sea and sites on the Atlantic).
- It was also agreed that a "project" of such magnitude should be considered as a "bottom-up", basic primary research providing fundamental data and should be continuously updated in order to define the wares, their compositional, typological and chronological features that characterise the Mediterranean koiné. It is work to be carried out now that lays essential solid foundations for future work and the younger generations that are just beginning to contribute to this field.

### Outcomes

#### Short-Term

In the short term, the 'team' agreed on the publication of 4 distinct volumes arising from the work carried out during the pre-Workshops and Workshop meetings.

A first volume *Late Roman Fine Wares in the Mediterranean: a first revision*, should include an practical and updated approach to the definition of the three main ceramic classes wares (African Red Slip Ware, Cypriot Red Slip Ware and Phocian Red Slip Ware), their typology and chronology. The work will be an updated version of the fundamental work of John Hayes: *Late Roman Pottery* (1972).

A second volume, *Late Roman ceramic assemblages in the Mediterranean: a revision*, will be devoted to the revision of the chronology of the main reference contexts. In this volume a short explanation of the contexts and their nature, external absolute or relative dating, ceramic composition with illustration of the fine wares, published and modified dating will be provided. This will be done for each of the chosen contexts that represent the most important contexts of the Mediterranean that have been traditionally used to date other contexts. The volume will also highlight lesser known contexts of relevance for the dating of fine wares.

A third volume, *New evidence on the dating of ceramic deposits in the Late Roman Mediterranean*, will gather new evidence deriving from new contexts published by the scholars present in the workshop or by other scholars, including those who participated in the preparatory meetings held in Aix-en-Provence and Barcelona.

A final, fourth volume will be devoted to 'state of the Art' of *Archaeometry of Late Roman Fine Wares in the Mediterranean*. This volume will incorporate all the published evidence and present essential new work in this field. For this purpose it is clear that the necessary funds need to be sought.

Also in the short term some of the participants agreed on their full disposal to establish a permanent collaboration and to explore funding possibilities to carry on with the research project. In the short term a COST Action in order to coordinate the initiatives already existing and to prepare the long term activities seems to be a plausible initiative, as this was also pointed out by the ESF representative as well as the possibility of holding a major conference in order to obtain more data on the subject.

#### *Longer-Term*

As a result of the workshop it was agreed that the same sort of revision of core published and unpublished data should be carried out for other ceramic classes. Therefore a similar series of workshops should be held on the production, typology and chronology of other ceramic classes (amphorae, cooking and other kitchen wares, lamps, etc). The clarification of the dating of Roman Fine Wares is a first step in a much longer process.

The participants were keen on maintaining a permanent collaborative link. For this purpose a European Research Network was seen as the most appropriate way of proceeding towards a common specific project. This initiative should be an initial step for the creation of a Centre of Excellence on Roman to Late Antique Mediterranean Pottery Studies or more broadly on Material Culture in general. The idea is to coordinate all the initiatives already existing in pottery studies from the Roman period to Late Antiquity, integrating scholars and teams towards a common goal. The centre should play a coordinating role and support any initiatives. Also, due to the nature of the teams involved in this centre, it could cover all aspects of pottery studies and/or material culture, including laboratory analysis, as some of the partners are in fact archaeometry laboratories.

In this sense, it was agreed that there is an urgent need to increase the archaeometrical characterisation of pottery and that a major coordination of research units in this subject is also a major goal for the long term. This will have to be done by a collaborative work of harmonisation of methodologies and an intercalibration programme for those laboratories working on the chemical characterisation. The idea is to form a core of laboratories working within this larger programme. This would be the scientific analysis section of the project. A truly international-national partnership with Tunisia and Turkey is aimed for the full characterisation of ARS, Çandarlı/PRS and CRS/Southern Anatolian wares and production sites.

The ultimate goal is to create an Encyclopedia of Mediterranean Pottery for the Roman and Late Antique periods. This is necessary to put into order present and future ceramic research (typology, chronology, characterisation of wares) across the Mediterranean. In the same way that other sciences have developed their taxonomical classification systems such as Botany or Zoology, this has still not been done, or even attempted, for ceramic studies on a broad and truly integrated scale. As in the case of the Human Genome project where truly international research has been developed involving a large number of laboratories and individuals, this is equally necessary for an in depth and

holistic classification of Mediterranean wares due to their complexity. This would be a long term project of basic research, continuously updated and using the possibilities offered by Information Technologies applied to the dissemination of results.

This Encyclopedia or Thesaurus would form the basis of all future research on Roman to Late Antique Mediterranean ceramics. Some of the scholars attending the meeting would like to go beyond these aims and proposed an even wider initiative, that of the full classification of all material culture. This would necessarily comprise, apart from pottery, artifacts made of glass, metalwork and stone.

#### 4. Final Programme

##### Wednesday 5 November 2008

afternoon *Arrival*

##### Thursday 6 November 2008

###### SESSION 1

09.00-09.30 **Registration and welcome**

**Welcome led by Miguel Ángel Cau** (Research Professor ICREA/UB)

- **Miguel Ángel Cau** (Research Professor ICREA/UB)
- **Jaume Bertranpetit** (director of ICREA, Institució Catalana de Recerca i Estudis Avançats)

09.30-10.30 **Introduction**

**Raymond Brulet** (Standing Committee for the Humanities). **Presentation of the European Science Foundation (ESF)**

**Miguel Ángel Cau** (Institució Catalana de Recerca i Estudis Avançats – ICREA, Barcelona, ES), **Practicalities and Scientific Introduction**

10.30-11.00 *Coffee break*

11.00-13.30 Working Session: **Mediterranean Late Antique ceramic deposits, Introduction by Miguel Ángel Cau followed by general discussion lead by Michel Bonifay**

13.30-15.00 *Lunch break, Restaurant Canela*

###### SESSION 2

15.00-17.00 Working Session: **Mediterranean Late Antique ceramic deposits**

17.00-17.30 *Coffee break*

17.30-19.00 Working Session: **Mediterranean Late Antique ceramic deposits**

19.00-19.30 **Visit to the *Paranimf* and Library of the University of Barcelona**

19.30-20.30. **Discussion**

20.30-23.00 *Dinner offered by the Universitat de Barcelona (Restaurant Racó d'en Xesc)*

##### Friday 7 November 2008

###### SESSION 3

09.00-10.30 Working Session: **African Red Slip Ware, Introduction by Michel Bonifay** (Centre Camille Jullian, Maison Méditerranéenne des Sciences de l'Homme, CNRS, Aix-en-Provence, FR), followed by general discussion

10.30-11.00 *Coffee break*

11.00-13.30 Working Session: **African Red Slip Ware**

13.30-15.00 *Lunch break, Restaurant Canela*

###### SESSION 4

15.00-17.00 Working Session: **African Red Slip Ware**

17.00-17.30 *Coffee break*

17.30-20.00 Working Session: **African Red Slip Ware**

21.00 *Dinner Restaurant Mamá Café*

### **Saturday 8 November 2008**

#### **SESSION 5**

09.00-10.30 Working Session: **Late Roman C/Phocean Red Slip Ware and Late Roman D/Cypriot Red slip Ware, Introduction by Paul Reynolds** (Institució Catalana de Recerca i Estudis Avançats – ICREA, Barcelona, ES), followed by general discussion

10.30-11.00 *Coffee break*

11.00-13.30 Working Session: **Late Roman C and Late Roman D**

13.30-15.00 *Lunch break, Restaurant Canela*

#### **SESSION 6**

15.00-17.00 Working Session: **Late Roman C and Late Roman D**

17.00-17.30 *Coffee break*

#### **SESSION 7**

17.30-20.00 **Future directions in pottery studies and resolution through a joint statement, Introduction by Miguel Ángel Cau** (Institució Catalana de Recerca i Estudis Avançats – ICREA, Barcelona, ES)

20.00-20.30 **Closing of the workshop by Miguel Ángel Cau, Paul Reynolds, Michel Bonifay**

21.00 *Dinner Restaurant Can Culleretes*

### **Sunday 9 November 2008**

morning *Departure*



## 5. Final List of Participants

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Excused

- Prof. M. Fulford could not finally attend due to an unavoidable meeting extremely important for British Universities
- Prof. Stefano Tortorella was not able to attend due to an important meeting in Syria.
- Dr. Xavier Aquilué, had other unavoidable commitments due to his position as director of the archaeological site of Empúries.
- Dr. Josep Maria Macias had some family problems.

## 6. Information on Participants

Country of Origin	Number of participants	Male	Female
Spain	4	3	1
UK	4	3	1
France	3	1	2
Germany	1	1	0
Austria	1	0	1
Denmark	1	1	0
Greece	1	0	1
Italy	2	1	1
Belgium	2	2	0
Poland	2	1	1
Slovenia	1	0	1
Tunisia	1	1	0
USA	1	0	1
	24	14	10

Table 1. Country of origin of the participants (including ESF- Representative), number of participants and gender.

Age Group	30-39	40-49	50-59	60-70
Number of participants	2	4	13	4

Min: 39.00000  
Mean: 53.30435  
Median: 55.00000  
Max: 70.00000

Table 2. Age of the participants organised by age group and statistics (n=23, not including ESF representative)

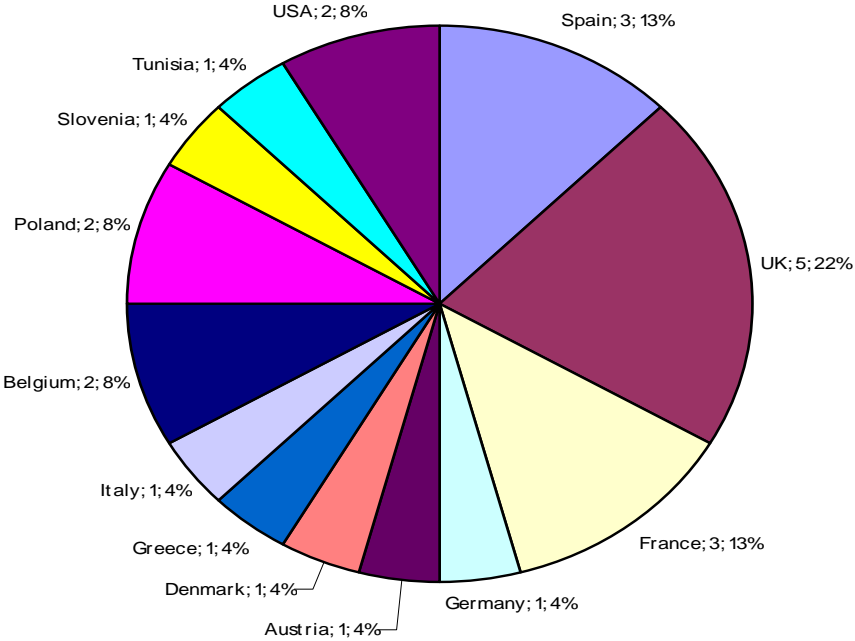


Figure 1. Researchers represented by each country of nationality expressed in total number and %; n=24 (including ESF representative)

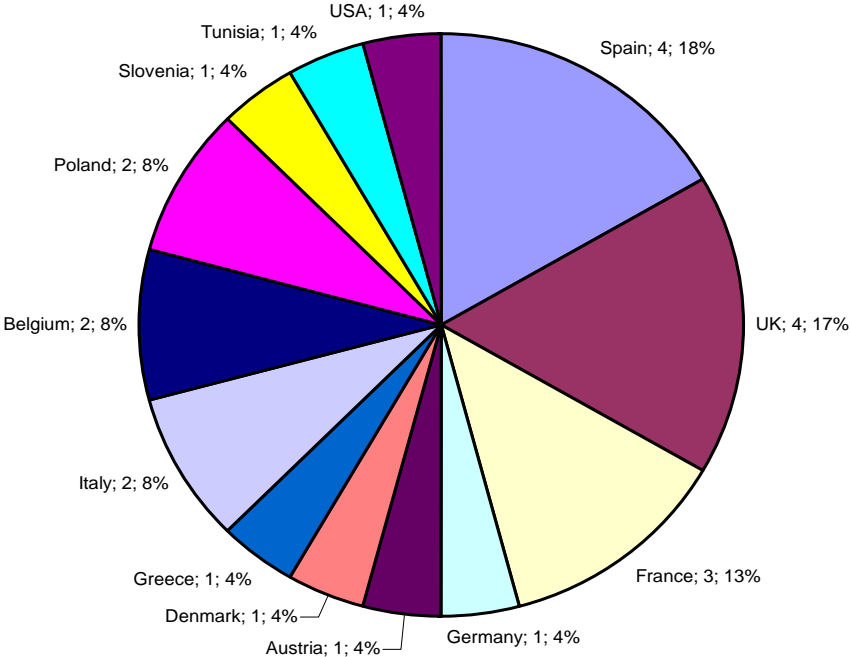


Figure 2. Researchers represented by each country of origin of the institution to which they belong expressed in total number and %; n=24 (including ESF representative)