

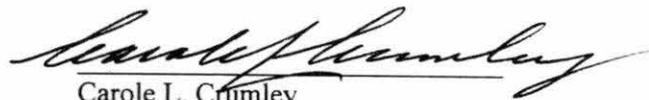
COMMON WARES:
APPROACHES TO A GALLO-ROMAN CERAMIC ASSEMBLAGE

Sara Bon

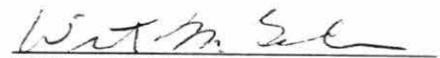
A dissertation submitted to the faculty of the University of North Carolina at Chapel Hill in partial fulfillment of the requirements for the degree of Doctor of Philosophy in the Department of Anthropology.

Chapel Hill
1999

Approved by:



Carole L. Crumley



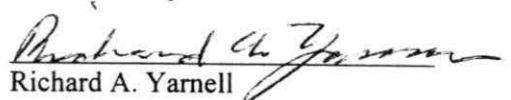
Wilbert M. Gesler



Thomas C. Patterson



Vincas P. Steponaitis



Richard A. Yarnell

Abstract

Sara Bon

Common Wares: Approaches to a Gallo-Roman Ceramic Assemblage

(Under the direction of Carole L. Crumley)

In spite of their prevalence on archaeological sites, utilitarian ceramics are very poorly understood for the Roman period in southern Burgundy. This dissertation addresses the category of *céramique commune* from the site *Lycée Militaire* in Autun (Saône-et-Loire) France. These utilitarian ceramics contribute to a study of the changing foodways of the indigenous population following the Roman conquest. In this portion of the dissertation, common wares are used as indicators of specific food behaviors which changed during the first three centuries A.D. The evolution of foodways in this context is indicative of cultural change which occurred independently of the political changes also wrought by Roman imperialism. Also presented here are descriptions of the forms and fabrics of vessels from the ceramic-producing workshops on the site, and from the stratified use contexts in the site's most completely excavated building.

The dissertation presents possible approaches for studying a ceramic assemblage for which there is not a regional typo-chronology in use, and places this study within the cultural matrix of Romanization.

© 1999
Sara Bon-Harper
ALL RIGHTS RESERVED

ACKNOWLEDGEMENTS

This dissertation research was supported in part by a grant (no. RK-20136-94) from the National Endowment for the Humanities, a Grant-in Aid of Research from Sigma Xi, The University of North Carolina at Chapel Hill's Graduate School On-Campus Dissertation Fellowship, and the Timothy P. Mooney Fellowship at the University of North Carolina. The Research Laboratories of Archaeology at UNC provided space and equipment during the past several years, resources which were essential to the preparation of this dissertation.

I would like to thank each member of my dissertation committee: Carole Crumley (UNC-CH Dept. of Anthropology), Vin Steponaitis (UNC-CH Dept. of Anthropology), Tom Patterson (Temple University Dept. of Anthropology), Richard Yarnell (UNC-CH Dept. of Anthropology), and Wil Gesler (UNC-CH Dept. of Geography). Their participation in my studies has strengthened my thinking on topics far from limited to this dissertation. I am grateful for their involvement. My very appreciative thanks to Carole Crumley for her generosity, shown in many ways throughout my years of study. Special thanks to Vin Steponaitis in particular for his guidance in methodology.

I would like to record here my most sincere gratitude to Pascale Chardon-Picault of the *Service Archéologique de la Ville d'Autun*, who did much more than permit my study of the *Lycée Militaire* collections, although that alone would have been enough. I am grateful for her support and encouragement.

This research is designed to serve as one individual step toward inter-site and intra-regional comparison in Burgundy. Hopefully it will be a tool for the identification, dating, and comparison of ceramics found in other excavations and on survey in the Arroux River Valley of Saône-et-Loire. The usefulness of this study is only actualized in the context of other research into the same and related topics, and without other studies like it and of a similar nature, it would be pointless. I recognize the expertise of the researchers who have furthered the study of Burgundian ceramics in many ways. Without their work, my research would not have been realized. Although I hope that the present work contributes to the shared knowledge of the subject, I acknowledge that for the most part it is they who have shared with me. My appreciation goes to the following members of the archaeological community in France for their help and at times encouragement throughout my years of study in Burgundy: Philippe Barral, Sylvain Collet, Fabienne Creuzenet, Paul Dameron, Luc F. dit Miret,

Franck Ducreux, Pascal Duhamel, Martine Joly, Jean-Claude Notet, and Anne Pasquet. In addition, I would like to thank Guy Alfonso who first showed me the site *Lycée Militaire*, taking the time during the course of excavation in the summer of 1993 to provide an extensive site tour. I gratefully acknowledge his work on the assemblage that I study here. My thanks are also due to the staffs of the *Service Archéologique de la Ville d'Autun* and the *Musée Rolin* for their assistance in my study of their collections.

The plans of the *Lycée Militaire* excavations and several ceramic profiles were adapted from originals prepared by the excavation and post-excavation teams of the *Lycée Militaire*. I am grateful to Pascale Chardron-Picault for allowing me to use them. Christopher Rodning digitised all the ceramic profiles presented here. My thanks to Chris for his precise and extensive work. If a picture is worth a thousand words, Chris has contributed much more than a small portion of this dissertation.

Steve Davis donated his time and expertise at several times in the preparation of this work. Kathryn McDonnell provided capable assistance at important points as well, and more than capable insight at times when I needed it. My thanks to Trawick Ward for providing words of encouragement, which were uncannily well timed. Thanks to Rick Jones for many helpful suggestions, particularly in the early phases of constructing this research. My heartfelt appreciation is for contributions from Amy Zoll. My work in general, including this dissertation, has benefited from her enthusiasm and encouragement.

My gratitude goes to those who fortified me in many ways during my *séjours* in France, especially the months during 1995 and 1996 when I gathered much of the data for this dissertation: Pierre and Christiane Law, Michel and Ghislaine Derry, Annie Liminet, Brigitte and Jean-François Rameau, and Lucien and Rose Dauvergne. The long winter spent in Burgundy was never grey in their company.

I am profoundly thankful for those who provided help during the many months I was out of the U.S. during the past few years, and during the brief times I was in Chapel Hill between these trips. Although their kindnesses were mostly in practical matters, these things sustained me more than they might know. I thank Melba Brandes, Tom Hargrove, Joe Herbert and Trish McGuire, Susan Kelly, Sarah and Scott Madry, Tom Maher, Tricia Samford, and Martha and Ken Temkin. I am fortunate to have many other friends and colleagues who offered direction and encouragement during this undertaking. I am grateful for the contributions, personal and professional, of all these individuals, those listed here and those left unnamed. Any faults in the current work are my shortcomings, not theirs. My deepest gratitude is to my parents, Peter and Marion Bon, for their continual support and belief in me.

for Nick

TABLE OF CONTENTS

	Page
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF ABBREVIATIONS	xv
I. INTRODUCTION TO THE RESEARCH	1
1.1 Culture Change in Late Iron Age Burgundy	1
1.1.1 <i>Ceramic assemblages from the Lycée Militaire</i>	3
1.2 The Context of the Late Iron Age	3
1.2.1 <i>The Aedui</i>	5
1.3 Factional Struggles	5
1.4 Roman Political Context	6
1.5 Cultural Incorporation	7
1.6 Changes Under Roman Rule	9
1.6.1 <i>Cultural change and social class</i>	9
1.7 Foodways and a Changing Society	10
1.7.1 <i>Specific-use vessels</i>	12
1.7.2 <i>Other sources of evidence</i>	12
1.7.3 <i>Understanding non-elite contexts</i>	13
1.8 The State of Archaeological Research	14
1.9 The Scope of the Current Study	16
II. THE CERAMIC ASSEMBLAGE FROM THE LYCÉE MILITAIRE	17
2.1 Céramique Commune	17
2.1.1 <i>Forms and fabrics</i>	18
2.1.2 <i>Questions of style, production, and distribution</i>	19
2.2 The Lycée Militaire Excavations	21
2.2.1 <i>The industrial quarter</i>	21
2.2.2 <i>Ceramic production</i>	22
2.3 Chronology at the Site	25

2.4 Assemblages from the Lycée Militaire	26
2.5 Methods of Study	27
2.5.1 <i>Céramique commune claire and sombre</i>	29
III. THE CÉRAMIQUE COMMUNE PRODUCED AT THE LYCÉE MILITAIRE	32
3.1 Functional Classes Defined.....	33
3.2 Description of Fabrics	36
3.3 The Ceramic Products of Ilot A	39
3.3.1 <i>The forms</i>	39
3.4 The Ceramic Products of Ilot C.....	43
3.4.1 <i>The forms</i>	43
3.5 The Ceramic Contents of Dépotoir 8043	46
3.5.1 <i>The forms</i>	47
3.6 The Organization of Production at the Lycée Militaire	47
3.7 Dating.....	48
IV. FUNCTIONAL CLASSES FROM USE CONTEXTS:	
COMMON POTTERY AS CULTURAL ARTIFACT.....	47
4.1 The Pax Romana	49
4.1.1 <i>The “maturation” of Romanized societies</i>	50
4.1.2 <i>“Amalgam” cultures</i>	51
4.1.3 <i>Romanization in foodways at the Lycée Militaire</i>	51
4.2 Vessel Counts.....	51
4.3 Changing Foodways.....	52
4.4 Functional Pairs.....	56
4.4.1 <i>Roman versus Celtic forms: bowls used for grinding</i>	56
4.4.2 <i>Roman versus Celtic forms: jars and footed cooking vessels</i>	58
4.4.3 <i>Explanations of the Patterns</i>	61
4.5 Vessel Classes by Context Types.....	62
4.5.1 <i>Comparison of context types</i>	63
4.5.2 <i>Percentages of vessel classes within contexts for each état</i>	64
4.5.3 <i>Dissimilarity between context types, within états</i>	66
4.5.4 <i>Dissimilarity across états</i>	68
4.6 Contributions of Context Types Within États.....	69
4.6.1 <i>État one</i>	70

4.6.2 <i>État two</i>	71
4.6.3 <i>État three</i>	72
4.6.4 <i>Explanation of dissimilarity: sample size</i>	73
4.6.5 <i>Conclusions</i>	74
V. CONCLUSIONS	76
5.1 Ceramic Description.....	76
5.2 Ceramic Study as Cultural Interpretation.....	76
5.2.1 <i>Urban and rural patterns of Romanizations</i>	77
5.2.2 <i>Public and private spheres</i>	78
5.3 Directions for Further Research.....	78
5.4 The Place of Common Wares in Studies of Romanization.....	79
VI. APPENDIX A: THE CÉRAMIQUE COMMUNE PRODUCTS OF ILOT A.....	83
VII. APPENDIX B: THE CÉRAMIQUE COMMUNE PRODUCTS OF ILOT C.....	108
VIII. APPENDIX C: THE CERAMICS FROM DÉPOTOIR 8043	126
IX. APPENDIX D: CERAMICS FROM THE USE CONTEXTS AT THE LYCÉE MILITAIRE	137
X. WORKS CITED	203

LIST OF TABLES

Table 2.1	Chronology of Etats (or horizons) at the Lycée Militaire	25
Table 4.1a	Vessel Class Counts by Etat.....	53
Table 4.1b	Vessel Class Percentages by Etat	54
Table 4.2	Percentages of Vessel Classes by Context Type, Etat 1	65
Table 4.3	Percentages of Vessel Classes by Context Type, Etat 2	65
Table 4.4	Percentages of Vessel Classes by Context Type, Etat 2	66
Table 4.5	Dissimilarity Matrix Between Context Types in Etat 1	67
Table 4.6	Dissimilarity Matrix Between Context Types in Etat 2	67
Table 4.7	Dissimilarity Matrix Between Context Types in Etat 2	67
Table 4.8a	Dissimilarity Between Architecture Contexts Across Etats	68
Table 4.8b	Dissimilarity Between Destruction/Abandon Contexts Across Etats	68
Table 4.8c	Dissimilarity Between Dump Contexts Across Etats.....	68
Table 4.8d	Dissimilarity Between Feature Fill Contexts Across Etats.....	68
Table 4.8e	Dissimilarity Between Fill Contexts Across Etats	68
Table 4.8f	Dissimilarity Between Industrial Feature Contexts Across Etats ...	68
Table 4.8g	Dissimilarity Between Occupation Contexts Across Etats	69
Table 4.9	Dissimilarity Coefficients, Context Types and Combined Contexts, Etat 1	70
Table 4.10	Dissimilarity Coefficients, Context Types and Combined Contexts, Etat 2	71
Table 4.11	Dissimilarity Coefficients, Context Types and Combined Contexts, Etat 3	72
Table 4.12	Vessel Counts in Context Types	73

LIST OF FIGURES

Figure 1.1	The project area within the modern boundaries of France, and inset: Autun and Bibracte (present-day Mont Beuvray)	2
Figure 2.1	Plan of the Lycée Militaire excavations.....	22
Figure 3.1	Plate.....	40
Figure 3.2	Jar with oblique facet on interior of neck	41
Figure 3.3	Oval-mouthed vessel	42
Figure 3.4	Grinding bowl, production contexts, Ilot C.....	44
Figure 3.5	Large footed cooking plate with restricted opening, from production contexts, Ilot C	44
Figure 3.6	Goblet, production contexts, Ilot C	45
Figure 4.1	Battleship diagram of vessel class percentages, by état.....	53
Figure 4.2	(Graph) Conical bowls and <i>mortaria</i> , percentages in occupation phases	57
Figure 4.3	(Graph) Footed cooking vessels and jars, percentages in occupation phases	59
Figure 4.4	Percentages of vessel classes, états one through three.....	63
Figure 4.5	Histogram of dissimilarity coefficients between total of Etat 1 contexts and Etat 1 context types	70
Figure 4.6	Histogram of dissimilarity coefficients between total of Etat 2 contexts and Etat 2 context types	71
Figure 4.7	Histogram of dissimilarity coefficients between total of Etat 3 contexts and Etat 3 context types	72
Figure 4.8	Histogram of vessel counts in the context types of the three états	73
Figure A.1	Plates from Ilot A	84
Figure A.2	Plates from Ilot A	85
Figure A.3	Plates from Ilot A	86
Figure A.4	Inverted rim bowl from Ilot A	88
Figure A.5	Bowls from Ilot A.....	89

Figure A.6	Ilot A, marmite and jars.....	90
Figure A.7	Ilot A, jars.....	92
Figure A.8	Ilot A, pitcher and jars.....	94
Figure A.9	Ilot A, jars.....	96
Figure A.10	Ilot A, jars.....	97
Figure A.11	Ilot A, jars.....	98
Figure A.12	Ilot A, oval-mouthed jars.....	101
Figure A.13	Ilot A cruches	103
Figure A.14	Ilot A, miniature cruches, or unguentaria.....	105
Figure A.15	Ilot A, wide-mouth cruches	105
Figure A.16	Ilot A, lids.....	107
Figure B.1	Bowls, production contexts, Ilot C.....	109
Figure B.2	Vessels from production contexts, Ilot C.....	110
Figure B.3	Footed cooking vessels from production contexts, Ilot C.....	112
Figure B.4	Footed cooking vessels from production contexts, Ilot C.....	113
Figure B.5	Jars and small jar or goblet from production contexts, Ilot C.....	116
Figure B.6	Jars and goblet from production contexts, Ilot C	117
Figure B.7	Goblet and jars from production contexts, Ilot C.....	118
Figure B.8	Cruches and pitchers from production contexts, Ilot C.....	121
Figure B.9	Cruches from production contexts, Ilot C	123
Figure C.1	Vessels from dépôt 8043	127
Figure C.2	Mortaria from dépôt 8043.....	128
Figure C.3	Dolia, dépôt 8043.....	129
Figure C.4	Jars, dépôt 8043	131
Figure C.5	Jars, dépôt 8043	132
Figure C.6	Cruche and unidentified form, dépôt 8043	133
Figure C.7	Lids, dépôt 8043	134
Figure D.1	The Bâtiment Est of Lycée Militaire, showing ceramic production sites (*).....	136
Figure D.2	Etat zero.....	138
Figure D.3	Etat one, bowls	139
Figure D.4	Etat one, footed cooking vessels	140
Figure D.5	Etat one, jars.....	142

Figure D.6	Etat one, jar	143
Figure D.7	Etat one, jars.....	144
Figure D.8	Etat one, jars.....	145
Figure D.9	Etat two, bowls.....	147
Figure D.10	Etat two, footed cooking vessels	148
Figure D.11	Etat two, footed cooking vessels	149
Figure D.12	Etat two, footed cooking vessels	151
Figure D.13	Etat two, goblets or small jars	152
Figure D.14	Etat two, jar	153
Figure D.15	Etat two, jars.....	154
Figure D.16	Etat two, jars.....	155
Figure D.17	Etat two, jars.....	156
Figure D.18	Etat two, jar	157
Figure D.19	Etat two, storage jars	158
Figure D.20	Etat two, pitcher	159
Figure D.21	Etat two, incomplete pitcher (or possible jar).....	160
Figure D.22	Etat two, cruches	161
Figure D.23	Etat two, lids.....	162
Figure D.24	Etat three, plates and shallow dishes.....	163
Figure D.25	Etat three, conical bowls	165
Figure D.26	Etat three, conical bowls	167
Figure D.27	Etat three, bowls.....	169
Figure D.28	Etat three, footed cooking vessels	170
Figure D.29	Etat three, footed cooking vessels	171
Figure D.30	Etat three, footed cooking vessels	173
Figure D.31	Etat three, footed cooking vessels	174
Figure D.32	Etat three, vessels	175
Figure D.33	Etat three, jars and goblets	176
Figure D.34	Etat three, jars.....	177
Figure D.35	Etat three, goblets and jars	178
Figure D.36	Etat three, jars.....	179
Figure D.37	Etat three, jars.....	182
Figure D.38	Etat three, jars.....	183

Figure D.39	Etat three, jars.....	184
Figure D.40	Etat three, jars.....	185
Figure D.41	Etat three, jars.....	187
Figure D.42	Etat three, jars.....	187
Figure D.43	Etat three, storage jars	188
Figure D.44	Etat three, cruches	189
Figure D.45	Etat three, lids.....	190
Figure D.46	Abandon, bowls and mortarium	191
Figure D.47	Abandon, footed cooking vessels.....	193
Figure D.48	Abandon, footed cooking vessels.....	194
Figure D.49	Abandon, footed cooking vessels.....	195
Figure D.50	Abandon, footed cooking vessels.....	196
Figure D.51	Abandon, jars	198
Figure D.52	Abandon, jars	199
Figure D.53	Abandon, jars	200
Figure D.54	Abandon, jars	201
Figure D.55	Abandon, storage jars and lid.....	202

LIST OF ABBREVIATIONS

- BG Julius Caesar, *De Bello Gallico*
 translated by Carolyn Hammond, *Seven Commentaries on the Gallic War,*
 with an Eighth Commentary by Aulus Hirtius. Oxford University Press,
 Oxford (1994).

CHAPTER I: INTRODUCTION TO THE RESEARCH

CULTURE CHANGE IN LATE IRON AGE BURGUNDY

The late Iron Age was a time of significant change in the social systems of indigenous populations in Gaul. During the period before the Roman conquest, a combination of internal and external factors brought about changes in settlement patterns and increasing social complexity among Celtic peoples. Internal changes had been emerging in social and geographic reconfigurations since the end of the Halstatt period, and external sources of change included greater contact with Mediterranean cultures. The internal changes are often overshadowed by Gaul's annexation into the Roman Empire, which is commonly seen as an event primarily caused by Roman agency. To reconsider this period using the case study of the Aedui whose territory forms the *locus* of this dissertation research, Celtic agency before and after the conquest plays as important a role as Roman in the manifestation of changes to Celtic society. For reasons pertaining to trade, internal politics and the re-negotiation of land use and passage rights, the Aedui actively sought alliance with Rome. The creation of the Gallic province occurred through the actions of Roman politicians, particularly Caesar, and by the actions of those among the Celtic elite who opted for alliance with Rome during the century leading up to the Roman conquest. On the reverse side, the incorporation of non-Roman peoples by the Roman state also altered the contemporary definition of Roman culture. The process by which free Gaul became a Roman province saw not only the incorporation of the Celts into Roman social and political order, but also the incorporation of the Romans into the social and political order of the Celts.

The political changes that came with Roman rule occurred in the Celtic territories following Caesar's Gallic conquest of 52 BC and were furthered with the Augustan reforms of the following generation. Political change was imposed with the annexation of Gaul, and in the Aeduan case, with the movement of a Celtic populace from its traditional highland seat of power (the hillfort Bibracte) to a new location in the lowlands (*Augustodunum*, or by its modern name, Autun). This component of change appears not to have occurred by the choice of the Celts. Cultural change on the other hand as seen in methods of food preparation and cooking appears to have started earlier than political conquest and occurred at least somewhat voluntarily among Celtic peoples.

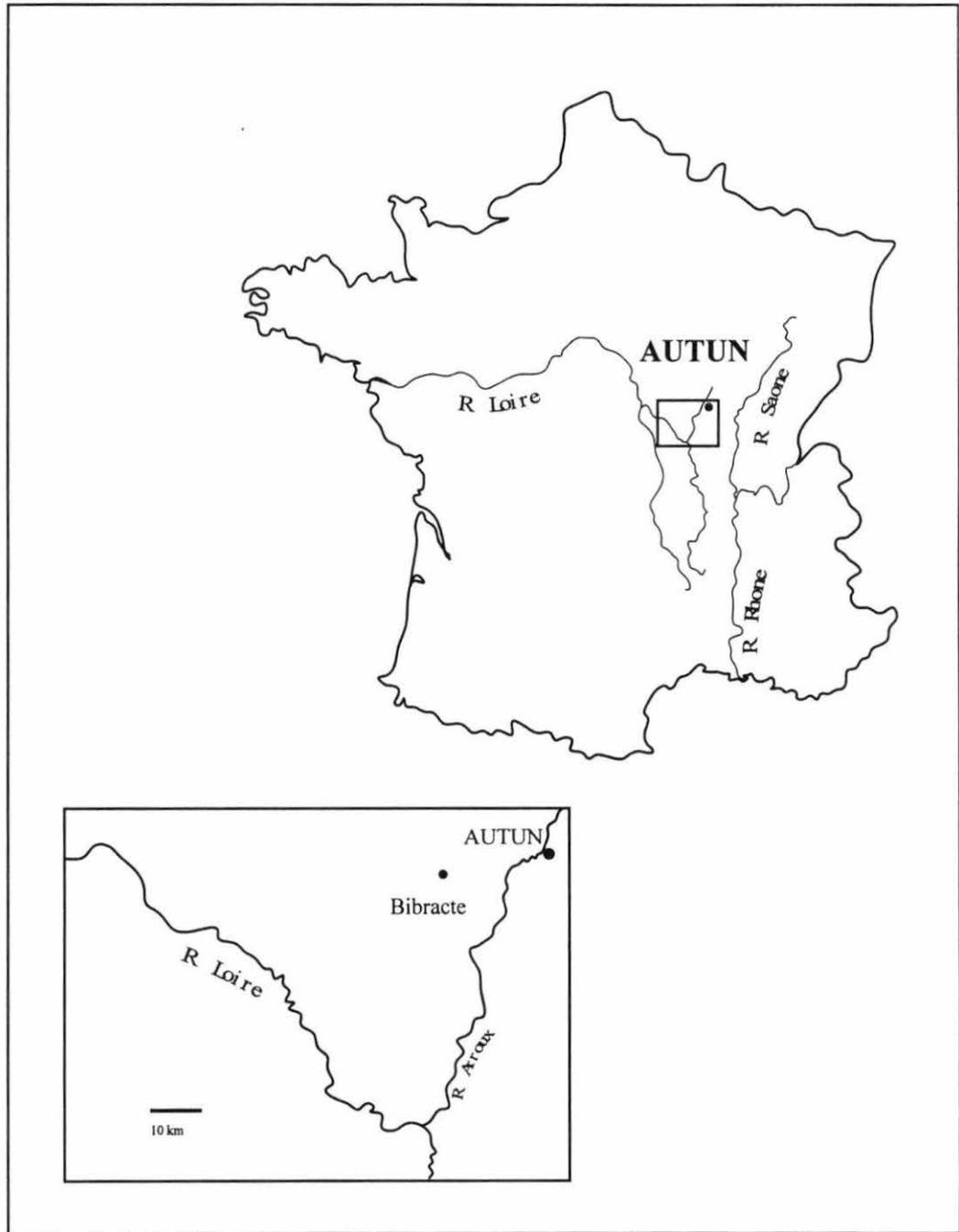


Figure 1.1: The project area within the modern boundaries of France, and inset: Autun and Bibracte (present-day Mont Beuvray)

Cultural changes included a long period of shifting patterns including the adoption of Roman habits of daily life by Celtic peoples living in the newly annexed territories. There was an initial

Cultural changes included a long period of shifting patterns including the adoption of Roman habits of daily life by Celtic peoples living in the newly annexed territories. There was an initial Celtic resistance to Roman political domination, but an initial acceptance of Roman foodways as is evidenced in the common ceramic assemblage. The change then continued very slowly through three centuries in an increasing Romanization of foodways. In this study in eastern central France, cultural change is identified in non-elite segments of the Gallo-Roman population that were not necessarily involved with the machinations driving political change. The analysis of a common ware ceramic assemblage in the following study recognizes cultural changes in foodways and traces them through the third century AD in an ethnically Celtic population during Roman rule.

Ceramic assemblages from the Lycée Militaire

The locus of the study is the site of the *Lycée Militaire* in the city of Autun, in the modern French *département* of Saône-et-Loire in southern Burgundy. This site revealed two ceramic-producing workshops identified from kiln structures and pottery dumps, and a third dump not associated with a kiln structure. All of these ceramic dumps included kiln wasters. The ceramics found in the dumps are presented here in a description of the common ware ceramic productions from the *Lycée Militaire*. In addition, the site provides contexts of the use of these vessels and also ceramics produced elsewhere. A large subset of the ceramics from the use contexts is analyzed in this study. The selected subset is the use-contexts of the *Bâtiment Est*. This is the one building on the site that was exposed in its entirety, and its common ware ceramic assemblage, also presented descriptively in this study, forms the basis of the functional analysis of ceramic vessels, interpreted in the changing foodways of the population.

THE CONTEXT OF THE LATE IRON AGE

In early Greek writings, the Celts or *Keltoi* were identified as much by their collective differences from Mediterranean societies as by their internal uniformity. By the late Iron Age, the Gallic Celts (or Gauls), the Belgian Gauls, the Germanic peoples, and the Galatians were identified by Rome as distinct groups. At this time the Gauls, the Celts of what is now France, were organized in independent polities, but reaching beyond these loyalties they did have a sense of ethnic identity and larger intercommunication based on a commonality including language, beliefs, and customs (cf. Dyson 1985:141; Sinnigen and Boak 1977:212). The individual polities that functioned separately also came together in alliances over trade routes and land use rights, and in political and religious contexts (such as the Council of All Gauls).

early Iron Age, an increasingly centralized settlement pattern had been defined by growing population centers, which then declined in importance in the La Tène period (Wells 1990:446-7).

In the La Tène period Celtic populations spread throughout Western and Central Europe and into Asia Minor. This expansion included a phase of Celtic migrations from regions north of the Alps into southern and eastern Europe that occurred between 400 and 200 BC (Goudineau 1990:33; Wells 1990:447). These movements brought about increasing contact between the Celts and the peoples of the Mediterranean, including antagonistic interactions such as the Celts' sack of Rome in 390 BC and their attack on the Greek sanctuary at Delphi in 279 BC. In Italy the evidence supports pugilistic interactions between the Celts and Etruscans in the Alps and the Apennines (Mansuelli 1991:5). But elsewhere in the Mediterranean Greek and Celtic interaction had developed differently during these centuries into sustained and regular co-existence. For example, in the third century BC the long-established Greek colony of *Massalia* at present-day Marseille was a thriving center of commerce crucial to trade in the Western Mediterranean (cf. Wells 1980:62-70). Through the corridor of the Rhône, Southern Gaul was already participating in the economy of the Mediterranean, while north of Provence, there was more indirect trade of Mediterranean luxury goods. By the mid second century BC even the northernmost Celtic tribes were influenced somewhat by the trade of exotic prestige goods from the Mediterranean that augmented the changes in Celtic social order that became visible in the archaeological record during the last 150 years BC (Haselgrove 1996:168).

From about 200 BC we observe the emergence of the *oppidum* in Western Europe. The appearance of *oppida* in some ways illustrates the changes in Celtic society at that time. This new settlement type reflects the changing social structures and perhaps the need for defended population centers. The largest of these defended hill sites had large populations and the spatial organization indicative of urban centers. There has been much debate about the nature of these *oppida* or hillforts (cf. Guilbert 1981), but it is clear that these fortified population centers served as administrative and in some cases manufacturing centers that were increasing in importance into the contact period (cf. Crumley and Marquardt 1987:618; Wells 1990:448-9) as well as functioning as defensive and strategic strongholds. These sites illustrate the development of craft specialization and administrative and commercial activities that were to play a significant role in central Gaul's contact and trade interests with the Mediterranean, particularly Rome. This increase of craft specialization and commerce is also linked with an emerging middle class whose participation in an increased production and trade of goods, especially in long-distance trade with the Mediterranean, afforded them avenues to power formerly reserved for the aristocracy (Crumley 1987:410). This middle class of artisans, merchants, and bureaucrats added a third class to the traditional two class system of elites (military and druidic) and common people, and was made up of individuals taken from the lower

class as the opportunities developed for achieved status through craftsmanship and trade (Crumley 1974:76-77).

The Aedui

The Aedui were a powerful Celtic polity occupying a large territory including the modern French *département* of Saône-et-Loire. Their territory was bounded by both the Saône and the Loire, and the Aedui seem to have held a considerable amount of control throughout the region, including the clientage of several of their neighbors (Crumley 1987:406-7). In the pre-conquest period, the Aedui practiced mixed agro-pastoralism, including the production of livestock (cattle, pigs, and sheep) for trade. They also mined metal ores and traded in the products of their enamel and metalworking. They participated in commerce with the Mediterranean, although to a lesser extent than did their neighbors to the south, the Arverni, whose social structure by that time was more heavily dependent upon the elites' control of Mediterranean prestige goods.

FACTIONAL STRUGGLES

The control of strategic paths of trade was essential in the growing importance of long-distance trade to the new social structures among Celtic peoples. At some stages neighboring powers were able to reach cooperative agreements about the control of parts of certain trade routes (eg: Crumley 1987:406-7). Elsewhere, there was vehement struggle over the control of these routes. In addition to fighting for these issues of control, there was added unrest in the form of population movements. At the time, population pressures to the east and northeast led to migrations into eastern Gaul by groups of people in search of land. These groups were in search of land for settling and posed a significant threat to the Celtic peoples already occupying territories in Gaul. These threats combined with factional attempts to control strategic paths of trade created a volatile situation. This inspired some of the Gaulish peoples to appeal to Rome to act on behalf of its Celtic allies.

The Aedui had been Roman allies from about 121 BC when they took Rome's side during a struggle over control of the Rhône Valley. This conflict was between the Aedui's southern neighbors on the west bank (the Arverni, who were allied with Rome) and the east bank (the Allobroges) of the Rhône (Sinnigen and Boak 1977:176). With the support of its Celtic allies, Rome was victorious. The Allobroges defeated, the Aedui retained privileged status with Rome until nearly a century later when their allegiances were ultimately tested by the Gaulish uprisings led by Vercingetorix in 52 BC. As a privilege of the position of *Socii Romani*, the Aedui could draw upon military aid from Rome. This was crucial at times in the shifting alliances based on positioning for land and control of strategic river valleys. They requested help when the Sequani, their neighbors to the east, enlisted the help of

the Germanic Suevi to fight against the Aedui in return for a promise of lands. At that time, Rome's attentions were focused elsewhere, and without military assistance from Rome, the Aedui were defeated in 61 BC.

In 58 BC Rome did mobilize its military in the territory of the Aedui. Rome's interest in its own holdings at this time coincided with an Aeduan need for protection of their territory from pillage by the migrating Helvetii. This group had planned to move from their homeland in present-day Switzerland, west through Gallia Narbonensis, to Cisalpine Gaul. When Caesar's troops refused them passage through the threatened Provence, their alternate route included a march through Aeduan territory. Rome's quick response was prompted by several factors, including protecting its trade route through the Rhône Valley, and avenging the death of Caesar's father-in-law's grandfather in battle with one of their factions (BG I.12). The defense of these territories, including that of the Aedui, was Caesar's foundation for his campaign in Gaul. This campaign, which began in 58, would not end until all of Gaul and a great portion of Britain became Roman provinces. Caesar's Gaulish campaign was to form the remainder of his career by affording him personal gain and great public honor.

ROMAN POLITICAL CONTEXT

When Caesar was elected consul with responsibility first for Cisalpine Gaul and Illyricum, and then Transalpine Gaul, the system of personal achievement in the realms of military exploits and personal reputation was the driving factor in his career. Caesar, following the demands of the *cursus honorum*, was ready to prove himself as heroic leader, both military and civil. So when the Helvetii made it known that their proposed path of migration to the west cut a swath through the territory of the Aedui, then Roman allies, Caesar saw fit to involve his troops in the first of his Gallic battles for personal advancement as well as protection of Rome's allies. This led to campaigns throughout Gaul and Germany in the 50s BC, and eventually to the annexation of the remainder of the Western provinces.

Caesar's conquest of Gaul, beginning with his campaign of 58 BC, was an important achievement that made him successful over his rivals for control of the Roman government. Caesar's eventual triumph as ruler of the Roman world altered the nature of the Roman state. The system created by Caesar and sealed with the succession of his heir Augustus was an essentially monarchical government and a distinct divergence from Rome's former republican ideals (Beard and Crawford 1985:1). The focus of the Empire was quite different from that of the Republic. Its efforts were no longer the nearly constant wars of expansion, but the retention of the provinces that had been conquered during the preceding centuries. The success of the Empire lay in its ability to both incorporate its provinces and allow them to retain the structure of their pre-Roman social systems,

even within the realm of Roman government. This flexibility in incorporation is often credited with the relatively peaceable incorporation of non-Roman peoples into the Empire. While some changes were mandated, other aspects of Celtic culture were allowed to remain undisturbed. The subsequent cultural changes that occurred in native societies were apparently the choices of individuals and communities to adopt Roman ways of living or to forge new ones in combining their traditional systems with imported Mediterranean ones. This process of non-homogenous culture change is the process of Romanization.

CULTURAL INCORPORATION

In the last decade a considerable body of research has advanced our understanding of the processes of Romanization and created an informed discussion about the social dynamics that preceded and followed the military campaigns (eg: Blagg and Millett eds.1990; Bon and Wise 1996; Crumley and Marquardt, eds. 1987; Dyson 1985; Metzler et al., eds. 1995; Roymans, ed. 1996). Regional variation in the responses to Roman domination is a major consideration in these studies.

In some areas of Western Europe such as the Rhône Valley, the introduction of elite trade goods began early with contacts between the Celtic peoples and the Greeks and Etruscans. The degree of social complexity among the indigenous peoples prior to contact had a significant influence on how the indigenous society related to Roman presence, including trade and eventually conquest.

Many scholars have concluded that the presence of an indigenous elite was an essential element for the Romanization of native peoples in the Western Provinces. Prior to conquest, these elites became incorporated within the trade of Roman prestige items. Their participation in the trade of these goods furthered their standing within their own societies and strengthened the power base of the aristocracy as a whole (Haselgrove 1996:168). By acquiring prestige items and then trading them according to traditional paths (Roymans 1996), the Celtic elite introduced Roman elements to all classes of their societies, and then became dependent on the Roman system to support their own status. This long-distance trade contributed to the social stratification that had been emerging throughout the pre-Roman Iron Age, and then became an avenue for the entry of Roman social order into indigenous societies. By the late pre-conquest period, participation in Roman trade and Roman ways of dressing and dining were important to a Celtic leader's personal success, and it became in his own self interest to uphold the Roman social order. Rome's method of political inroad was to set up an indigenous elite whose interests were then Rome's interests (Dyson 1985:160; Haselgrove 1990:45). Celtic social structure was the key element in the success of Roman culture among those peoples because it provided a system similar to the Roman one that was easily incorporated into the social and political organization that the Romans sought to impose on its conquered peoples.

1990:45). Celtic social structure was the key element in the success of Roman culture among those peoples because it provided a system similar to the Roman one that was easily incorporated into the social and political organization that the Romans sought to impose on its conquered peoples.

In traditional Celtic society there already existed a social structure that was similar enough to the Roman one to allow the integration of the two in Gaul. In spite of the forcible annexation of Gaul after the defeat of the Celts at Alésia, there was an element of Celtic agency in the cultural process of Romanization. The Romans exploited the Celtic elite, using them as vehicles for the spread of Roman culture through indigenous populations. But from the perspective of both cultures, the Celts used the Romans as a component in their own social system. In particular, the patron-client relationship of the *Socii Romani* benefited the Celts on their own terms.

Patron-client relations

It was the essential parallelism of patron-client relations in the social structure of both the Celts and the Romans that allowed an incorporation of each into the other's social systems. The patron-client system existed in both the Celtic and Roman worlds and was fundamental to the ordering of public and private life in these societies (Crumley 1987:416-417; Sinnigen and Boak 1977:43). Each of these involved a system of patronage and protection in exchange for service or loyalty. Celtic social structure was one structured around leaders who accepted the loyalty of a semi-military retinue and provided protection in exchange (Roymans 1996). Common people were allied with a leader who relied on their military and financial support when needed. Smaller elites were similarly allied with greater ones. In such a way power may have been nested on local and regional scales, and used at those scales as necessary, or called upon as needed.

In Rome, an elite individual's personal success and power as a leader was furthered by a retinue of supporters or dependents whose numbers enhanced his prestige and reputation. These dependents gathered information and performed services in war, politics, and the private realm as appropriate for their patron. The greater was the man, the more were his followers --an effect that snowballed, increasing his importance. The Roman patron, whether political figure or private citizen, returned a service to his followers in the form of protection, including legal protection, and favors both political and financial (Sinnegen and Boak 1977:43-44).

When the Aedui were allied with Rome during the pre-conquest period, it was in exchange for the protection provided by a greater depth of military power that could be used in conflicts with other Celtic polities when in need. The Aeduan position of "Friends of Rome" was in keeping with the patron-client system in both societies. The Aedui, according to their traditional system, applied to the next greater level of military leader for alliance and protection in return for military and financial

CHANGES UNDER ROMAN RULE

The defeat of the Celts in Caesar's military campaign of 52 BC probably had an impact on some levels of society more than on others. The new system of political control was one step removed from the Celtic elite, but only one *more* step removed from the Celtic commoners. The Augustan reforms of the following generation probably had a more sweeping impact on all the peoples of the conquered provinces. It was in these acts of consolidation and administrative tightening that the lives of ordinary citizens were most affected. The most obvious of these changes in the Aeduan territory was the movement of the population from the former seat of power to the new site in the adjacent lowland alongside the Arroux River, an event that began between 16 and 13 BC.

The Celtic capital was in Burgundy at the hill fort known as Bibracte, which was in the territory of the Aedui. Bibracte was the venue for the Council of All Gauls, and was clearly a seat of cultural, religious, and economic power. Under the Augustan administrative reforms of the new Gaulish provinces, *Augustodunum* was founded. It appears as though the city was created *ex nihilo* with orthogonal planning, in an area of 200 hectares (Chardron-Picault 1996:36; Rebourg 1993a:32). At this time a transferal of the population of Bibracte to *Augustodunum* was begun (Chardron-Picault 1996:36). This movement of people from Bibracte was not completed in the time of one generation, as portions of the *oppidum* were inhabited into the second quarter of the first century AD.

Cultural changes and social class

The Celtic elite had a defining role in the Romanization of their societies, both pre- and post-conquest. During the contact period, they accepted Roman intervention in their intra-polity affairs, and both they and the emergent middle class fostered their trade relations with Rome. The trade in prestige goods contributed to the social status of both groups. The elite were a group whose power was traditionally dependent at least in part upon the control of access to high-status trade items, and the existence of the new middle class was closely tied to the demand for specialized goods in long distance trade.

The re-ordering of urban settlements, often in new sites as in the case of the Bibracte population, had an impact on all classes of society. Other than that, we cannot presume to know exactly what changes in the daily lives of ordinary people were wrought by the new ordering of affairs of state in that the elites answered to another tier in the system. There is archaeologically and textually a gap in the understanding of how this period of Romanization was experienced by the very ordinary citizens, those called the *Plebs* by Caesar. Ceramic studies are one of the means by which we

textually a gap in the understanding of how this period of Romanization was experienced by the very ordinary citizens, those called the *Plebs* by Caesar. Ceramic studies are one of the means by which we can approach the experiences of all classes of society, and it is hoped that this study is most telling about the lives of ordinary participants in the daily life of *Augustodunum*.

FOODWAYS AND A CHANGING SOCIETY

The study of foodways is one approach to the daily life of ordinary denizens of a society. Anthropologists have long since identified ethnic markers in foodways, and have considered the procurement, preparation, and consumption of food as telling indicators of cultural association. Eating and drinking are essential in any household and community not simply for sustenance, but also as activities of gathering, regeneration, and social grouping. The foods that are selected (or available), the ways they are transported and stored, and the manner in which they are prepared (including cooking), served, and eaten, are all frequently if imperfectly captured in the archaeological record. These studies have taken place in many archaeological contexts, where food remains have been studied by paleobotanists and zooarchaeologists. Similarly, several studies have called upon ceramic vessels as artifacts of food preparation, and used the study of these assemblages to reveal patterns in food habits (cf. Bats 1988).

Food behavior as recorded in vessels

Roman and Celtic foodways traditionally used differing means of food preparation, and the two groups had different repertoires of food preparation and serving vessels. The appearance of certain classes of vessels on Celtic sites has often been cited as indicating the adoption of Roman foodways, an event that occurred on many Gaulish sites prior to Roman conquest. These classes of vessels included tablewares such as Campanian and later *Terra Sigillata*, which were part of the early trade in prestige goods. They rapidly came into use by all classes of society and are found in contexts other than the residences of elites. It is often noted that the appearance of Roman tablewares marked the adoption of individual eating and drinking vessels at the table, whereas the Celtic custom had been for individuals to partake of the meal from a communal vessel (e.g. Okun 1989:122-3). However, the lack of evidence of tablewares in the ceramic collections from the Iron Age should not be assumed to represent a case in which no tablewares at all were used. It is realistic to note as Barral has done that vessels for individual eating and drinking as well as serving may have occurred in non-ceramic media in the pre-Roman period (1994:48). The use of non-ceramic materials is supported by ancient authors' remarks on the Celts' use at the table of baskets and bronze vessels as well as ceramic and wood items (Bats 1988:212).

social context of wine consumption (cf. Dietler 1990). Smaller vessels for the storage, serving, and perhaps more local scale transport of wine also appear in abundance throughout the Roman period.

The presence of the Roman form of grinding bowl, or *mortarium*, indicates the adoption of Roman food preparation methods, which included the grinding and mixing of aliments, a process that has not been attested to in Celtic food preparation methods, either from textual sources or by the presence of specialized vessels. As the Romans sometimes did, the Celts may have used other vessels such as wooden platters or basins to mix ingredients (Bats 1988:63), or they may have used their classic large ceramic bowl form, one with a simple inverted rim, although none of the Iron Age forms have been noted as having internal grit that would indicate definitively that grinding was one of their uses (Okun 1989:120).

The most common vessels in the Celtic food preparation repertoire were ovoid jars that were placed directly in the embers, set above the embers upon clay grates or rings of clay, or were left on the edge of the hearth for a slow, perhaps untended type of cooking (Bats 1988:216). Ovoid jars were also used for storage and perhaps the transport of traded foodstuffs such as grain-based products and foods preserved by salting or pickling (Barral 1994:48; Bats 1988:216). The Celtic diet was heavily dependent on meat and grains. Meat came from both game and domestic animals (Bats 1988). Meat was cooked either whole or in pieces skewered directly over a fire, or boiled in water in the ubiquitous ovoid pot. Fish, like meats, were grilled. We have a rare detailed glimpse of a specific Celtic recipe in ancient authors' notes that fish was seasoned with salt, vinegar and cumin (Bats 1988:212). Ovoid jars were also used to cook porridges made of the common grains, which were often barley and wheat as well as at least one example from the millet family (Vanderhoeven 1996:209).

The Roman diet was also largely based on grains, with ample textual evidence for the predominance of the porridge-like grain mixtures that were the staple foods in the countryside and among the urban poor (Bats 1988:62). In addition there were breads usually made of wheat flour, but also of barley and millet. These were more common in cities than in rural contexts and were made both in the household and in professional bakeries (Bats 1988:62).

In contrast to the Celtic assemblage, the Roman ceramic repertoire included a suite of specialized vessels for the preparation and cooking of these foods. There were footed cooking vessels that were used over hot embers, or perhaps even flames, and low plates, which may have been used for baking or frying, as well as including a variety of jars and lids.

Specific-use vessels

While there was some degree of overlap in both the foods and the vessels of these two cultures, there is a marked difference between the specialization recorded in the Celtic and Roman cooking assemblages. Compared to the ceramic assemblages from Roman contexts, the Celtic kitchen lacked specialized vessels such as lids and colanders. Some of these functions may have been borne by the unspecialized kitchen equipment that does appear in these collections. For example, plates or bowls may have doubled as lids or have been used in combination with other vessels in place of colanders (Barral 1994:48; Musée des Beaux-Arts et d'Archéologie 1992:219). Specialized vessels may also have been present in other materials such as wood, glass, or metal (cf. Barral 1994; Joly 1994).

Other sources of evidence

Archaeological research presents information about foodways both from the remains of the foods themselves and the vessels used in their transportation, storage, preparation, and serving. In spite of the research that has elucidated the foodways of both cultures (cf. Musée des Beaux-Arts et d'Archéologie 1992:174-298), our knowledge of Roman cooking habits is much greater than our knowledge of Celtic ones. For studies of Roman foodways, we benefit from textual evidence, most particularly the cookbook by Apicius, preserved in transcriptions made during late antiquity. The Roman writer Apicius not only provides for us instructions on the preparation of individual dishes, commentary on meals to take particular delight in, and on suggestions for serving, he also makes regular mention of the various vessels used in the kitchen (Edwards 1984:xvi-xvii). Both from his usage, which in the manner of a cook writing for an experienced audience, is at times ambiguous (Vehling 1977:26-28), and also almost certainly due to some flexibility in the application of these names in general, it is sometimes difficult to be precise about which forms belong with which names (cf. Vehling 1977). Complete household assemblages such as those from Pompeii (e.g. Anecchino 1977) have provided opportunities to correlate names with vessels. Bats' study is the most thorough to date in combining the written and archaeological evidence to discuss the literary names of both cooking and table wares with the actual vessels, ceramic and in other materials (Bats 1988). As a result of his discussion, many vessels can be identified by their Latin names, and their primary and sometimes secondary uses can be provided from an emic standpoint rather than our relying on our outsiders' interpretations or those of ancient Mediterranean authors.

Mediterranean writers occasionally recorded their observations about Celtic foodways, both the foods themselves, and the ways in which they were prepared and consumed. These writings provide some narrative to accompany the archaeological evidence for non-Mediterranean foodways,

but it is likely that in these anecdotal notes Greek and Roman authors often emphasized the unusual within Celtic culture, or the differences from their own culinary practices.

The textual and archaeological evidence, as unbalanced as it is in favor of details of Roman foodways, offers us a view of Roman cooking and food preparation that appears considerably more elaborate than what the evidence has shown us of Celtic cooking. While the surviving record, both written and ceramic, indicates that the Roman period seems to bring to Gaul a more complex set of foodways, it is also likely that to a certain degree the complexity of Celtic habits may be lost to us because an oral tradition and a collection of non-ceramic vessels have not survived.

Archaeological contexts provide some evidence for the changes that occurred in food preparation and serving in the early Roman period. One researcher surveyed an assortment of temperate European sites and was able to interpret habits of food preparation and serving (Okun 1989). She concluded that new habits such as the adoption of individual table wares such as cups and dishes occurred in some segments of society, while some retained traditional practices of communal vessels, while still others combined traditional and Mediterranean table habits (Okun 1989:125). In addition, it appears as though the new methods of food preparation and cooking that were introduced did not replace the former methods, rather they supplemented them, with the two traditions subsequently co-existing (Okun 1989:122).

Understanding non-elite contexts

One of the greatest contributions of these studies is that they examine Romanization in non-elite contexts. In contrast to the written sources that fuel discussions of governments and elite classes, the study of daily household equipment provides a window into the activities of ordinary citizens. The changes that took place at one level of society are not necessarily the same as those that occurred at another. To trace the changes in the lives of people of non-elite classes, ceramics provide a minimally biased form of evidence. We have already noted that there is considerable material lost from kitchen and dining assemblages in non-permanent materials such as wood, glass, metals, and basketry. In spite of these handicaps afforded by an imperfect record of behavior, the data have the benefit of being a class of artifacts that does not consider only the elite classes of society. Ceramics are a body of evidence that treats both the rich and the poor, and in light of this factor ceramic assemblages from non-elite contexts are an appropriate medium in which to pose questions of cultural change under the rubric of Romanization.

THE STATE OF ARCHAEOLOGICAL RESEARCH

The ceramic data for this project come from Autun, in the *département* of Saône-et-Loire, Burgundy, where I studied the collections from a recently-excavated site, *Lycée Militaire*. The ceramics are from a large, heterogeneous category of utilitarian wares, or *céramique commune*. The larger perspective of this study is addressing the cultural questions about changes in foodways during the Gallo-Roman period. However, it is evident that there are even more urgent tasks to be considered in southern Burgundy. In particular, there is no synthetic chronology or typology of the common wares from the region. With a notable lack of current resources, the identification and comparison of common wares from surface surveys and excavations is done only piecemeal, from consultations with experts, with unpublished manuscripts, or using the few figures in site reports that are devoted to ceramic illustration. The greatest *lacuna* in the archaeology of southern Burgundy is the lack of reference resources for the identification and dating of common wares. Without a regional typo-chronology of common wares, it is difficult to fully address the cultural questions of changing foodways. The first step toward investigating culture change in the region must be in gaining an improved understanding of the forms, fabrics, and dating of common wares and the construction of chronological comparisons across a variety of sites in the region.

A shortage of stratified sites, a territoriality over research topics and formerly, a tendency toward non-stratigraphic excavations has produced an archaeological situation that has not been conducive to inter-site studies. Recent exceptions have brought about increased research on these topics. The greatest advances have been made in the investigation of production sites and the distribution of their goods. Ceramic production sites and the variety of forms produced in Gallo-Roman Burgundy are currently active topics of study, as evidenced by the 1996 meetings of the *Société Française d'Etude de la Céramique Antique en Gaule (S.F.E.C.A.G.)*. The annual special topic was Gallo-Roman ceramic production in Burgundy. These papers saw the introduction and description of various pottery production sites in the four *départements* of Burgundy, including the materials presented in depth in Appendices A-C.

From elsewhere in France there are two published regional typologies of utilitarian ceramics, those by Santrot and Santrot for Aquitaine (1979) and by Tuffreau-Libre for the north of France (1980). These compilations are useful in the identification of forms, but there are not enough of these studies or similar works to determine whether there is a correlation between dates and types in different regions, or even in adjacent locales.

In spite of the incomplete state of regional typo-chronologies, there is a rich and active discipline of archaeology in Burgundy. There are numerous researchers focusing exclusively on ceramics, including Gallo-Roman utilitarian ceramics for the Arroux River Valley or adjacent

regions. For consumer contexts, several sites have been published in detail, and their descriptions significantly aid the identification of ceramics from Saône-et-Loire (Joly 1990) and the other three *départements* of Burgundy (Joly 1994b, 1995).

Study in the region may be working toward a synthesis of the knowledge held by various researchers working in the field. The works on regional ceramics that might be used to identify and compare local finds are those that include ceramic collections from multiple sites. While the knowledge of local and regional ceramic types, forms, and distribution is vast in the many centers of archaeological research, the methods of sharing comparative data have been increasing only in recent years, and do not yet include a single typo-chronology. The non-accessibility of regional ceramic knowledge restricts studies of Gallo-Roman common wares to the more superficial identifications. The unavailability in published format of detailed regional studies and most significantly a lack of central type-collections presents singular difficulty in creating accurate inter-site comparisons.

The published literature in ceramic studies emphasizes summaries of ceramic assemblages from individual sites. In general, site reports are widely available, but unless they are specifically ceramic studies, they are usually limited in the amount of description they afford, both in details of fabric and surface treatment, and vessel form illustrations. An exception to that comes from the neighboring *département* of Franche-Comté as the recent catalogue of the exhibition of a major excavation in the heart of Besançon. This volume provides a thorough ceramic typology and numerous drawings of common wares as well as analysis of the other classes of materials from the multi-component site (Musée des Beaux-Arts et d'Archéologie 1992). At present, researchers of Burgundian sites cite similar vessel forms as they appear in the smaller publications or the unpublished manuscripts. It is necessary to leave open questions of parallel dating until more regional or large-site works are published. At the moment, exact fabric identification between collections must also wait until more detailed descriptions become available, a movement that is likely to happen sooner rather than later.

Collaboration galvanized by Martine Joly in the past several years has worked steadily toward amassing the data necessary for a regional understanding of ceramic production and distribution. At this point, ceramic study in the region as a whole is but one step away from synthesizing the individual research projects into an analysis of the forms and fabrics of the utilitarian wares found in the region (*S.F.E.C.A.G.* 1996; Joly 1994a, 1994b). It is no surprise that the force behind this progress is the individual who has created the geographically closest regional typology of Gallo-Roman common wares, that from eastern Burgundy (Joly 1993). New studies revealing the productions and distributions of Burgundian ceramics will allow the production of more detailed site reports and a greater understanding of ceramic sources and dating at consumer sites.

SCOPE OF THE CURRENT STUDY

In the following chapters I present the forms and fabrics of many of the utilitarian vessels found at the *Lycée Militaire* in Autun. My study includes the ceramics produced at the site and also ceramics from use or occupation contexts. I identify the kiln products in use contexts on the site, contributing to the construction of a chronology of their manufacture. This will enhance the understanding of Autun as producer site, adding to the work that has already been done. This is not the regional reference work that is needed for ceramic studies in the region. Rather, it is a descriptive study of one assemblage that may be useful both for identifying and dating common wares.

This ceramic study has a significant descriptive component, and also offers a functional analysis of everyday artifacts to reveal patterns of social change or stasis. In the analysis of cultural change, I study vessel function within the assemblage. This part of the research examines the common wares from the use contexts only. This allows me to investigate patterns in foodways at the site during the several centuries of its occupation.

To understand ceramics as indicators of the foodways of a population, ceramics are considered in their role as artifacts of everyday life, recording the behaviors in which they were used. These basic tools were intended for specialized use, particular forms for particular culinary tasks. To study them in this light allows us to glimpse these patterns of behavior, and view them as they change in the assimilation of Roman ways by Gallic peoples. Specifically in the contexts studied here, these are the habits of common people. By studying an ordinary class of artifacts in a non-elite quarter of a Gallo-Roman city, the discussion of Romanization is removed from the realm of the indigenous elite and into the context of a Celtic middle class, most likely made up of artisans and people of similar status. The work looks at cultural change in the private sphere and stands as an alternative to studies in Romanization that emphasize the public sphere and elite classes.

By approaching the ceramics in several different ways, I explore the methods of studying a collection for which there is not an accepted regional typology. I first discuss the ceramics that were produced in kilns on the site, and then I conduct a functional study of all the common ware vessels in the use contexts in one of the buildings of the same site. In this section of the research I identify changes in the frequencies of vessels with identifiable food-related uses. This points to changes in foodways and the cultural changes associated with Roman imperialism in Gaul. My hope is that this research will contribute to the current interest in Burgundian ceramics, not only with its detailed descriptions, but also by experimenting with ways of using the data to reveal cultural patterns associated with the use of these artifacts.

CHAPTER II: THE CERAMIC ASSEMBLAGE FROM THE LYCÉE MILITAIRE

CÉRAMIQUE COMMUNE

The vessels included in this research are a large collection of ceramics from the Gallo-Roman period at the site of the *Lycée Militaire*, Autun. These ceramics are a portion of the entire ceramic repertoire from the first three centuries AD, and belong to a category called *céramique commune*. This class of utilitarian vessels contained over 26,000 sherds (11,500 from use contexts, 15,500 from productions).

The category of *céramique commune* is not easily defined, but is one of the underlying categories, which determines how archaeological ceramics are perceived in Gallo-Roman studies.¹ It is a catch-all category that likely comes from what was leftover when antiquarian interest was in the remarkable and aesthetically interesting ceramics that formed the basis of most early studies and descriptions. Wherever its origin, it is also a vital concept in modern French archaeology and has delineated my subject and the material I was given access to for study in France. It is part of a theoretical and practical division that includes the partitioning of work among specialists, usually between those studying *céramique fine*, *céramique commune*, and *amphorae*.

In anglophone archaeology, we do not have a single equivalent term for *céramique commune*. Especially used in the U.K., there is an English-language category of “coarse wares” that is limited, at least conceptually, by its reference to the texture of fabric, whereas *céramique commune* may at times include vessels of a wide variety of fabric textures. In the current study, fabric texture is not a defining factor in this as other definitions of *céramique commune*. Notably, ceramics with finely-textured fabrics—fabrics often identical to those of so-called *céramique fine*--like handled jugs or bottles (*cruches*, or in British archaeology “flagons”) made with the same fabrics as local *sigillata*-imitations, are often if not always included in *céramique commune*, as they are in this study.

Céramique commune is a group distinguished from *céramique fine* by various criteria, which need not all be in effect at the same time. Sometimes the crucial delineation is the exclusion of finely-textured fabrics, sometimes the exclusion of table service, or table service of particular quality.

¹ Equivalent terms are used elsewhere in European Roman studies. For example, the class *ceramica comune* in Italy bears essentially identical implications.

To be strictly functional, “utilitarian ceramics” covers the general idea if not the complete range of vessels included in this category. It seems that for the current needs, “common wares” the most direct translation of *céramique commune*, embodies the essence of this category.

More than anything, in this study the definition of the category *céramique commune* or in direct translation, common wares, is one that includes the ceramics that have been less studied because they are locally used and produced, and are usually plain or undecorated. It has been the fine wares with their greater aesthetic appeal and more easily datable characteristics that historically have attracted most interest, and it is the line between these two groups of less- and more-studied assemblages that delineates my study. The fine wares are those that have been emphasized in much of the research to date and have contributed particularly in chronological and stylistic studies. This study examines the under-studied class of *céramique commune* and its elements of everyday table wares, cooking and food preparation vessels, and storage jars.

From my study are excluded those widely recognized ceramics produced according to supra-regional styles: *terra sigillata*, *métallescente*, other fine-walled table service, *terra nigra* (often included in the category of *céramique commune*), and *amphorae*, both in their original productions and in their local versions. I exclude them because they are made according to a template of production that is larger than either local or regional and therefore they have drawn attention on a wider scale. They are produced following supra-regional dictates of style, and are intended for participation in a long-distance trade.

Forms and fabrics

The variety of fabrics and the variety of forms of common wares is great. There are the general categories of table wares, food preparation and food cooking vessels, and storage containers. With the exception of *cruches* that also appear in the categories of table or serving vessels and storage, the category of transport is not addressed here. Although some jars and the *cruches* were used for transportation of foodstuffs (particularly liquids), the principal member of this group is the *amphora* that is not included in the study of *céramique commune* since it comprises its own specialist topic.

Table wares include plates, bowls, goblets (although the majority of these occur in fine wares), *cruches* and pitchers. Food preparation vessels are primarily bowls and *mortaria* (a Roman form of grinding bowl). The most prevalent cooking vessel is the jar, but there are also plates, footed plates, taller footed vessels also known as *marmites*, lids, and some pitchers, a category that at times shows sooting, which is evidence of having been used over a fire for the heating or cooking of

liquids. Storage vessels include *dolia* in the Roman tradition that are very large and globular in form and that generally are composed of a fine-grained oxidized fabric. There are also storage jars in the Celtic tradition, which are large ovoid to globular in shape and that may be hand built and occur with a limited number of rim forms. Ovoid jars were probably also used for the transportation of foods, but it is likely that these were the same individual vessels that were used for cooking. *Cruches* may also be considered storage vessels, in that they held liquid contents, usually wine, and also held these contents until their consumption,

The definition of *céramique commune* employed here is constructed according to certain criteria that are valid for the study at hand, but that globally have no more absolute validity than any other definition of common ware. Other archaeologists undertaking my study would likely define term *céramique commune* differently or not find it either necessary or useful to define the category at all. I do so here to not contradict an implicit understanding of the category, but rather to clarify the limits of my own study and for the benefit of an audience of varying backgrounds.

Questions of style, production and distribution

There are arguments that could be brought both for and against the definition proposed here. For example, there are styles that uniformly occur in certain fabric types, such as the orange *cruche* with its finely-textured fabric, consistently included within the category of *céramique commune*. These seem to be produced locally, presumably for local use, according to non-local patterns of color and form, yet they are included in my study. In this case it is because of their traditional inclusion in the category, and subsequent relative lack of documentation. Certainly there are also forms of cooking plates (and cooking pots, and storage jars) that were influenced by trends of style that may have been larger than local or regional in scope, but these are only vaguely attested, and not studied to the degree that the table wares and amphorae have been. In a general sense, the well-studied wares included in other specialist studies are excluded from this examination. My emphasis in scrutinizing the common pottery is to concentrate on the wares that have not been studied in great detail and that might be best understood from a close look at the local and regional scales. This is probably the most significant definition of the category of *céramique commune*. It is the one that defines the topic of this study.

The production and distribution of common pottery are among the patterns that may provide evidence about the social and economic interaction of people on local and regional scales (Adan-Bayewitz 1993). Through the excavation of kilns and pottery workshops, more is known about ceramic production technology in Gaul (Duhamel 1978/9), but less about the distribution of common

wares within that province. Most if not all Roman-period pottery was produced in workshops by full-time specialists. However, it is possible but not widely attested that the occasional production of common wares at the household level by non-specialists or part-time specialists did occur during this period, particularly in remote rural areas.

The trade of fine pottery often encompassed a scope of supra-regional or even continental proportions. These vessels sometimes traveled great distances, participating in large trading networks and following styles that are defined also supra-regionally or at very broad scales. Less is known about the patterns of common pottery distribution. Some research indicates that in the Roman period common wares were also produced for export and were indeed traded widely (Adan-Bayewitz 1993). The detection of far-flung patterns of common ware distribution challenges the accepted wisdom that many local workshops produced pottery for limited consumption in the immediate vicinity (cf. discussion in Joly 1996:133).

There are a variety of possible scales of distribution for the common pottery of any given area during the Roman period, in a range from household to supra-regional. It is likely that combinations of local and regional patterns occurred, and not always in a consistent fashion. We find evidence that common pottery was produced alongside the pottery that belongs to supra-regional styles and distribution. Currently we do not know, at least in Burgundy, whether these two lines of production utilized the same lines of distribution, but new attention to the question indicates that at least sometimes there was long-distance trade of vessels classed as *céramique commune*² (Joly 1996:133). Researchers have long concluded that the fine wares were used both locally and widely and that the common wares were limited to local distribution because of the cost and breakage involved in transport, making it hardly profitable to trade widely what could be produced as effectively locally. Often embedded in this assumption is that the relative value of the common pottery made it less profitable an export item than the fine wares. Further research projects such as Adan-Bayewitz' may support or repudiate this assumption in various contexts in the Roman world. But the state of research in many areas, the present research area included, does not allow us to study the scale at which common pottery was produced or consumed. First, we need to be able to identify the forms and fabrics according to their place and date of manufacture in order to address these

²In contrast to the majority of undecorated and sometimes nondescript vessels that make up the category of *céramique commune*, both of the wares (from Autun and Trouhaut) used to support these conclusions are particularly distinctive examples of *céramique commune*. For example, the Autun vessels are elaborately decorated with a complicated stamped pattern and a brilliantly metallic mica slip. The lids from Trouhaut are also highly decorated with a relief pattern. Some of the current research by Joly and others makes it likely that soon the state of recognition of the rough cookwares will be such that we can determine whether they too are found at great distances from their sites of production, and it will be possible to make wider statements about the trading of *céramique commune* in general.

questions. Answers to these questions can come only via careful studies of particular pottery productions and their distributions. Current research in Burgundy, especially that mentioned previously (Joly 1992; *S.F.E.C.A.G.* 1996) is gradually building the archaeological knowledge of these topics.

THE LYCÉE MILITAIRE EXCAVATIONS

The archaeological excavations on the site of Autun's military high school, the *Lycée Militaire*, cover approximately one hectare within the present day city. This is a portion of the ancient city that was excavated completely in preparation for a new building on the grounds of the school. The archaeological investigation was conducted under the direction of Pascale Chardron-Picault of the Service Archéologique de la Ville d'Autun in 1992 and 1993.

The site is within the southwest extent of the ancient city walls and neighbors several extant Roman monuments, including the Flavian-period theater, and the amphitheater of similar or somewhat later date, both standing within several hundred meters (Rebourg 1993a:72, 76; Rebourg 1993b). The site is bordered on the west by Autun's long-since identified *cardo maximumus*, one of several main thoroughfares of the Roman city. The ancient landscape of Autun is known from numerous sites (Rebourg 1993a), but the *Lycée Militaire* is by far the most thoroughly excavated and largest of these. It is arguably the most important site excavated in and around Autun. Many smaller sites have been investigated, but since the *Lycée Militaire* is the largest excavated site, and is one excavated by professional archaeologists under good conditions of time and weather. For these reasons, the *Lycée Militaire* stands to offer the best and most complete evidence to date about Gallo-Roman Autun.

The industrial quarter

The site *Lycée Militaire* covers a portion of an industrial quarter in the ancient city of *Augustodunum*. Its first phase of occupation corresponds very nearly to the founding of the city in the late first century BC. The city was founded during the reforms of that period by the Emperor Augustus, and involved the re-settling of people from their former *oppidum* Bibracte (at present-day Mont Beuvray) into the lowlands adjacent to the Arroux River. This first phase of occupation left no traces of industrial activity at the site, and most archaeological evidence of the first horizon, or *état* comes from occupation levels not associated with architectural activity. Early in the first century AD occupation became denser, and there were metallurgical activities of considerable importance. Bronze and iron working both occurred during this period, although the interaction, if any, of these

two industries is not understood. The bronze artifacts include fibulae, some of which continue a typological tradition from the previous century at Bibracte. The iron industry is identified through the presence of iron slag. A third production, that of bone-working, is also attested. There are other examples in the region of an association between bone and metal working, presumably in the production of items composed of both substances (Chardron-Picault and Ducreux 1993).

Ceramic production

According to stratigraphic interpretations of the site, ceramic production at the *Lycée Militaire* began in the mid second century AD and continued through the third century AD. The activity of this horizon corresponds to a period of intensification of settlement in Autun, visible on this and other sites. This was the period when the city took on its urban character, including the building of monuments in central locations and the filling in of previously undeveloped spaces within the city walls (Rebourg 1993b:69).

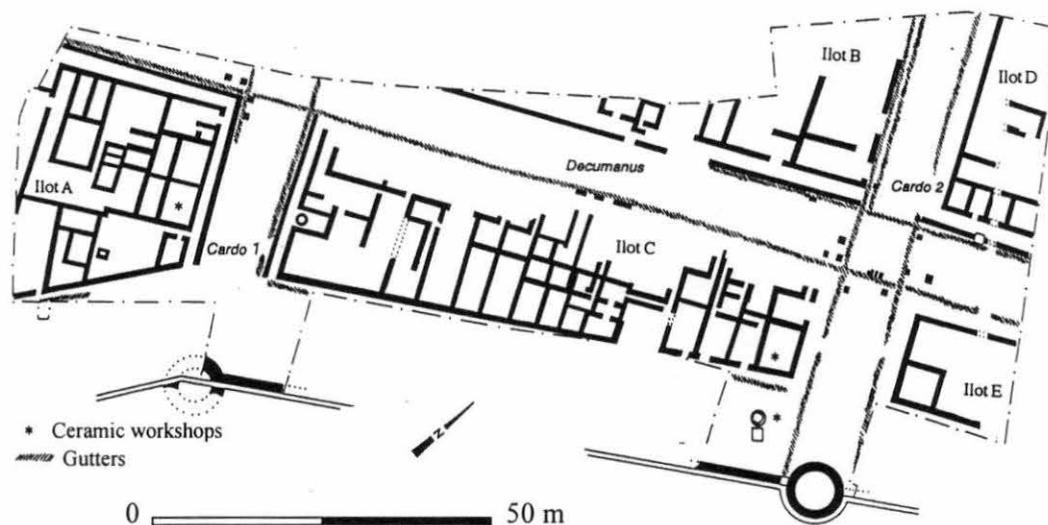


Figure 2.1: Plan of the Lycée Militaire excavations

At the *Lycée Militaire* there were two sets of ceramic-producing kilns that appear to have belonged to two separate workshops. They are in neighboring but not adjacent city blocks (*Ilots A and C*). Their products are known from the ceramic sherds, including kiln wasters, that were used to fill the kilns when they ceased operation. It has been implicitly assumed by all researchers involved (cf. Alfonso, forthcoming; Creuzenet, forthcoming) that the kilns were filled with their own products

at the time of abandonment, and therefore that the sherds were produced in the kilns they were associated with at the time of excavation. I do not dispute this interpretation in my analysis, but I have noted several instances when there was overlap or correlation between vessel forms found in the two workshops. The fills contain numerous kiln wasters (some misshapen vessels, and many over fired sherds) attesting to their association with pottery workshops, but the locus of the primary deposition kiln material (the original kiln dump) is still unknown. Since the workshops have limited space for the dumping of production mistakes, it is likely that these sherds were originally dumped outside the workshop. As fill for the kilns at the end of their use-lives, the sherds were brought from nearby kiln dumps, and are thus present in the workshops as secondary deposits. Their locus of primary deposition was most likely a spot convenient to the potter, and that spot remains unidentified.

The use of once-dumped material in the fill of out-of-use features is a frequent element in urban contexts. In an urban setting, there is by necessity a re-use of limited space. The repeated clearing and filling of an area is likely to re-deposit originally discarded material. When the fill precedes a building phase, it often happens that the material used for leveling represents the refuse from the most recent phase of occupation, that was on top of the handiest midden. In this manner, the chronological integrity of the fill deposits may be fairly good. If this applies to the kilns of *Ilots A* and *C*, then a the sequence of fills of the kilns may be relevant. This is compromised, however, by the unanswered question in these contexts as to whether the filling of all the kilns occurred at once, or more likely, whether each were abandoned and filled at separate points in time. This critically influences interpretation of the kiln products, implying whether the fills are from the final phase of production or whether they are diachronic samplings of the workshops during their entire periods of production. Based on the premise that the kilns were used successively (Creuzenet 1996:33), it is likely that they were filled at the end of each one's use life, and therefore represent different moments in the larger period of ceramic production at the two workshops.

Apart from tentatively describing the sequence of fills from the kilns, the only definitive way to answer these questions would be to locate the original dump(s) from which the fills were drawn. This might provide stratigraphic relationships among forms, and indicate whether the workshops functioned independently of one another. Since there is no chance of further excavation, I hope that the careful study and presentation of these sherds can lead us in the right direction about understanding the organization of ceramic production on the site. Specifically, this research will elucidate the chronology of the specific forms by identifying them when they occur in use contexts,

and it will provide as much description and graphic representation as possible for use in future studies of the material.

In addition to the workshops identified from their kiln structures, the *Lycée Militaire* revealed another pottery dump within the city walls. This deposit is referred to by its stratigraphic unit number, US 8043. The dump has not been associated with a kiln or workshop, although examination within this study ascertained that the collection from the dump does contain kiln wasters. It poses the same questions of organization of labor and production as do the two workshops. Similarly, the forms and fabrics of the vessels from the dump are summarized herein.

It is surprising that the ceramic kilns are located within the city walls. It is more often cited that Roman cities kept their dangerous and noxious activities outside the enclosed space in order to avoid the risk of fire and to keep their denizens from the less pleasant products of industry such as smoke and smell. Although there are cases that attest to ceramic production *intra muros* in Roman contexts (Cerulli Irelli 1977), these are balanced by a longstanding interpretation of a Roman preference for the separation of potteries and dense habitation. In Autun it appears that the original layout of the city allowed ample room for growth within the walls. The city did not densely occupy all of the space within its enclosure,³ seemingly leaving room around at least this edge for activities that appear within the walls, but in many other Roman cities are placed outside the city walls. The other identified ceramic production site in Autun was also located within the confines of the city. Like the *Lycée Militaire* ceramic workshops, the *Rue des Pierres* workshop was placed at the edge of the city structures but within the city walls, and it formed a part of an artisanal quarter of Gallo-Roman Autun (Creuzenet 1996:34).

The kilns in the *Lycée Militaire* workshops are within the city walls and within the grid system of the city blocks. Even more surprisingly, these were indoor kilns. The two kilns from *Ilot A* are inside a room alongside the first *cardo* while three of *Ilot C*'s kilns are within a room occupying the southeast corner of that block. A fourth kiln from *Ilot C* utilizes an exterior space outside the building but within the perimeter of the city wall (Creuzenet 1996). It seems an appropriate question to ask whether the kilns and the rooms existed together, or whether the kilns preceded the rooms. Based on the stratigraphy of the rooms, the excavators of the site have stated that the kilns and the rooms are contemporary. The buildings date from considerably before the beginnings of ceramic production at the site, a fact that supports this conclusion.

³ The presence of open spaces was apparent in domestic contexts as well as in the areas eventually developed for commercial uses, as the houses of Augustodunum had room for sizeable yards or gardens (Rebourg 1993b:69).

CHRONOLOGY AT THE SITE

The portions of four city blocks that were not under modern buildings were excavated, and one block, *Ilot C* was completely excavated. Stratigraphic analysis of these contexts has established a complete relative chronology assigning each stratigraphic unit to an *état* or horizon (zero through three, plus in some areas destruction and abandon). Some *états* were further broken down into phases (a, b, and c). The absolute dates for the relative chronology were provided by Creuzenet's study of the *céramique fine*. She inventoried 783 sherds pertaining to a minimum of 542 vessels from *Ilot C*.

État zero contains a majority of material from the Augustan period from which time there were no structures on the site; the material was deposited early in the reign of Tiberius (AD 14-37); essentially, this horizon is equivalent to the first quarter of the first century AD. *État* one covers approximately the years AD 50-90. *État* two is approximately the second half of the second century AD. *État* three is approximately equivalent to the third century AD. *Abandon* is the horizon of abandonment that occurs at least as late as the third century AD, with some ceramic material from the end of the century, and some that is most commonly found in fourth century contexts in the region. The dating of the abandonment of the site coincides with a larger period of crisis and abandonment in and around Autun that took place in the third quarter of the third century AD (Rebourg 1993b:70). The period of decline beginning during the AD 270s is also evident elsewhere in Gaul, marking the end of a cohesive period of Roman governance.

Table 2.1: Chronology of *États* (or horizons) at the *Lycée Militaire*

Etat	Chronology
Abandon	late third to fourth centuries AD
3	third century AD
2	second half of second century AD
1	approximately AD 50-90
0	first quarter of first century AD

Not surprisingly, analysis of the material was hampered by a significant factor of residuality within the assemblage (Creuzenet, forthcoming). This is a factor of the intensive use of urban space and the punctuation created by episodes of building. It is particularly problematic that the chronology produced by the fine ware dates contains gaps, most notably that between *états* one and two. The cited residuality certainly influenced this outcome. The role of the repeated episodes of building and

re-building that formed the relative sequence appears to play a key role in this element of residuality. Further work on the study could provide an interesting analysis of urban site formation and its influence on artifact assemblages, particularly this very question of residuality. As it stands, Creuzenet's work provides a series of dates that are eminently useful in site interpretation, and also in the following approach to the common pottery, and therefore form the basis of this and future studies.

ASSEMBLAGES FROM THE *LYCÉE MILITAIRE*

The ceramic assemblage from *Lycée Militaire* consists of approximately fifty thousand sherds. The *céramique commune*, *céramique fine*, and *amphorae* had been apportioned to their respective researchers, Guy Alfonso, Fabienne Creuzenet, and Fabienne Olmer. The quantities of *céramique fine* and *amphorae* were small enough to allow complete inventories, whereas the volume of *céramique commune* was so great that only certain rooms and all of *état zero* were inventoried (manuscript, *Lycée Militaire*). This work was done by Guy Alfonso. In addition to this survey of the use contexts, the two identified ceramic workshops from the *Lycée Militaire* had already been subjected to a study and inventory by Alfonso, although the ceramic dump US 8043 was not included as a possible kiln dump. These sherd counts description of the productions of *Ilots A* and *C* will be published by Alfonso in the forthcoming volume covering the excavations of the *Lycée Militaire* (Alfonso, forthcoming).

In addition, an overview of the *Lycée Militaire* productions and a synopsis of the counts has been published in a discussion of ceramic production in Autun (Creuzenet 1996). That paper presented the ceramic productions of the *Lycée Militaire* and also discussed the other site of ceramic production that has been identified at Autun. The other site, *Rue des Pierres*, was excavated during a brief campaign of salvage archaeology in 1987. Unfortunately, due to the difficult conditions of the excavation and the lack of post-excavation work (Creuzenet 1996:25) the site has until now made very little contribution to the larger understanding of production in the region.

Although my research into the material associated with the kilns uses the same data as Alfonso's inventories, my identification of vessels from the production contexts of *Ilots A* and *C* as well as those from the suspected kiln dump US 8043 were made from my own study and description of the production assemblages. I will present my own general descriptions of the products of *Ilots A* and *C* here, since this is the basis of their identification within use contexts. Since Alfonso's study includes the essential summaries and will be published in detail, I will not re-do his counts or attempt a definitive descriptive statement about the productions.

The mass of sherds from use contexts is so great that it was not feasible to study them all in detail within one dissertation. With the help of Chardron-Picault and two of the archaeologists collaborating on the *Lycée Militaire* research, Fabienne Creuzenet and Franck Ducreux, I selected one building to study in its entirety. This is the *Bâtiment Est* of *Ilot C*. In addition to being a completely excavated building in the one completely excavated block, it produced the largest mass of sherds of any of the buildings.

METHODS OF STUDY

For each of the rooms in *Bâtiment Est*, I examined the complete collection of *céramique commune* as defined above to exclude *amphorae* and *céramique fine*. There were 11,684 sherds belonging to a minimum vessel count of 1,378. I looked at them with naked eye and with a 10x magnification (hand lens) and recorded information regarding color, firing atmosphere, surface treatment, temper type and size, and type of vessel. I counted all the sherds and tallied the numbers of each portion of vessel (e.g.: rim, base, body, handle). I figured minimum number of vessels from diagnostic sherds, almost always rims, but occasionally handles or spouts, as appropriate. I drew each of the diagnostic sherds that were larger than one inch if they could not be correlated with one of the already drawn profiles or with one of Alfonso's types. This made a file of approximately one thousand drawings. The end result of these methods was a complete database of all the forms and fabrics present among the *céramique commune* in the *Bâtiment Est*.

I did not use a pre-established typology in my study of this assemblage. In the study of collections for which there are established types it is convenient to collect data as tallies of these pre-established types according to stratigraphic unit, or if these are too large, according to unit of collection, such as bag, and then re-grouped into total numbers of types according to stratigraphic unit. This assemblage, however, had a large number of unknown (or more correctly, unpublished) types, and I wanted to collect data at a finer level of detail than had previously been done. I felt that this was necessary because there is not an accepted (published) typology for the region that is specific enough for re-identification by another researcher. So I collected the data according to each sherd or group of similar sherds so that I could group them into types later, or describe them in as many types as necessary.

I followed the example provided by the researchers working at Mont Beuvray on the Iron Age ceramics from Bibracte (Barral and Luginbühl 1994). This is a method of sorting and recording ceramics from an assemblage for at least part of which there is not a regional typology. The procedure essentially consists of a key that guides the user through choices such as variables of

surface treatment and method of modeling (ie: wheel turning or hand building). At the end of the string of choices, the ceramics that belong to known types (such as Campanian A or B) are identified by their characteristics, and those that do not belong to major accepted types are described with a code of letters indicating fabric and surface treatment.

I adapted this method to fit the Autun ceramics. My result was a chart providing choices for oxidized or reduced fabrics (*pâte claire* or *pâte sombre*, the latter elsewhere called *pâte grise*), a subjective aspect of the fabric that could be *fine*, *mi-fine* (somewhat fine), or *grossière* (essentially rough or crude), a measured size of temper corresponding to invisible or very fine, less than two millimeters, between two and five millimeters, and greater than five millimeters. In general, I did not observe the very largest temper grain, but used the second or third largest. In the rare incidence of a temper grain larger than five millimeters, I noted whether it was a unique grain of that size. After these characteristics, I noted surface treatment that included the application of a mica layer, slip, paint, smoothing or polishing, burnishing, and smudging (surfaces reduced in contrast to fabric). In addition, I noted decoration such as combing or stamping, and made special notes if the vessel was hand turned, or if the core of the fabric was markedly a different color from the rest of the clay body (creating a “sandwiched” look, called *zonée*).

I also included temper type and fabric color in my observations. There was a remarkable homogeneity of inclusions. The most common was a rounded to sub-angular with red nodules, most likely a form of iron. The visual observation of this trend is supported by a petrographic analysis done by a laboratory in Dijon on the *Lycée Militaire* ceramics (Geokit 1995). The fourteen sherds sampled by Geokit had the following inclusions: granite, quartz, feldspar, mica, iron oxides and ferrous aggregates, alluvial clay nodes (potentially grog) and occasional phytoliths and diatoms (Geokit 1995:7). Geokit concluded that the beige to orange color range in the assemblage was produced through the quantity of iron oxides in the clay body (Geokit 1995:9).

In my observations, the instances of grog were especially common in *mortaria*. There were also occasional cases of white nodules that remain unidentified. It is firmly established in the archaeology of the region that there is no calcareous component to the local clays, and therefore local fabrics. Since some of the local fabrics do contain white inclusions, I question what they are, if the non-calcareous tenet holds. I conducted some hydrochloric acid tests, and each time they produced results negative for calcareous content consistent with the accepted wisdom stating that the local clays are in fact non-calcareous.

Mica is omnipresent in these fabrics to an extent that it is likely a naturally-occurring component of the clays. Its grain size corresponds to the fineness of the fabric rather than the size of

temper, lending further strength to this observation. Mica also appears on the surface of vessels, at times as a component in a paint or slip, and other times as a transparent application without color. It seems as though the mica is suspended in a colorless liquid when applied to the vessel. This phenomenon is most apparent when the mica pools in grooves and points of inflection of the vessels. In these places there is a concentration of mica without another present color. At other times the micaceous surfaces seem to be the result of buffing or polishing while the vessel surface was wet or perhaps leather hard. It has been suggested that rubbing with a cloth might cause the larger mica particles to lie on the surface and create a sheen, and my observations hold with this. This technique is clearly distinguishable from a wet application of mica that pools in crevices: this treatment does not occur in the crevices or grooves, but is most brilliant on the shoulders or rounded portions of vessel bodies.

In the recording of sherd color, I followed the practice of the French archaeologists who do not use Munsell Color Charts. I followed this convention for several reasons: the color variety in the ceramics is so great that the recording of minutiae masks the overall sameness of groups; the quantity of sherds makes it a burdensome task to code them all according to the Munsell charts; and most importantly, I wanted to use as much as possible a set of descriptors that would seem appropriate to the French researchers who might consult and utilize this research. I tried to keep my variations on color to a minimum of terms representing the color families that I observed. For example, there were tan, beige, rosy beige and orange, but never ecru, pearl, salmon or light red. I hope that this follows the spirit of the French system of identifying color families, and that it allows maximum possible replicability without Munsell codes. I believe it works well enough for the type of workshop production that these ceramics come from. It is likely that the potter and his staff also had a general idea of color family in mind, and did their best to produce the results with the selected clays, additions to them, surface finish, and firing atmosphere. I found that the descriptive terms were satisfactory during the project as long I was consistent in my use of color terms.

Céramique commune claire and sombre

More problematic to incorporate was the concept of an all-encompassing division between *céramique commune claire* (light common ware) and *céramique commune sombre* (dark common ware). The essential division drawn between these two classes of common wares is that of the presence or absence of oxygen in the ceramic firing atmosphere. This has been a paradigmatic division in French archaeology since Picon's 1973 presentation of the firing modes as applied to

Gallo-Roman productions (Picon 1973). Ever since, it has been an essential element in the identification and description of Gallo-Roman ceramics in Gaul.

The predominance of this aspect of ceramic description seems to derive from the cultural associations of firing atmospheres. It is widely accepted that the oxidizing atmosphere used for orange *cruches* and beige *mortaria* was not used by the Celts, and therefore their use was in direct imitation of Italic productions using oxidizing atmospheres (Tuffreau-Libre 1992:32). Therefore, reducing atmospheres resulting in *sombre* vessels are directly linked with traditional Celtic traditions, and the number of vessels in this range is said to diminish in the early Empire, and then return in strength from the fourth century onwards, in a resumption of indigenous ways (Tuffreau-Libre 1992:132).

The application of the duality is that all ceramics are either one or the other. *Claire* or *sombre*, light or dark. Orange jugs and beige *mortaria* are light. Grey jars and plates are dark. This is so fundamental a distinction that the first sorting of ceramics of any assemblage after the *fine* and *commune* distinction is between *claire* and *sombre*, and sometimes these two features comprise a complete identification. With a large segment of the common pottery, the only further distinction is a note of the absence or addition of a surface treatment. *Céramique commune grise engobée* (slipped) is a standard identification of fabric. It may include table wares, storage jars, pitchers, and cooking vessels. The differences between these wares are visible and recognized, but would not necessarily be included in a standard inventory. Notably, there is not an established vocabulary for the fabrics of these different wares. This may only be created when there is a regional typology that is both published and accepted by researchers.

There are times when vessels appear heterogeneous in color, yet in the operating descriptive system, they belong either to one or the other category. In the order of dividing *céramique commune* between *claire* and *sombre*, no vessel comes from a mixture of oxidizing and reducing firing atmospheres, and therefore no vessel is described as having a combination of colors. At times vessels are clouded by incomplete oxygen absence or presence in the firing atmosphere, or by brightly colored flame clouding or darkening from use over a fire. At times these vessels may present a variety of colors ranging from orange to brown to grey to black, and the question arises as to how to classify them. Since the intention of the description is of the firing atmosphere rather than color, the essence of the description includes a cultural assignation supported by the style of vessel and texture of the fabric if color alone is not indicative. In this study I have attempted to follow this method as closely as possible. I do use color descriptions (see above) because I find them essential, but I attempt to place each sherd under the description of either *claire* or *sombre*. There are cases in which

this poses some difficulty. In this study these are primarily in contexts of misfired vessels or vessels that have been used for cooking, and thus exhibit some discoloration. In these instances, I try to gauge the aspect that the vessel was intended to embody, either *claire* or *sombre*.

The outcome of this process is a string of data for each sherd that encompasses a complete description in a uniform manner for all the sherds in the assemblage. The resulting descriptions form the details of the following four chapters that present the assemblages from the production contexts of *Ilots A and C*, and *dépotoir 8043*, and the use contexts from *états zero through three* and *abandon*. These chapters are the presentation of the recognizable trends in the ceramic data in the three production contexts and through the five use contexts.

CHAPTER III: THE *CÉRAMIQUE COMMUNE* PRODUCED AT THE *LYCÉE MILITAIRE*

Any description of a ceramic collection or presentation of a ceramic typology necessarily breaks down the assemblage into its main components based on observable criteria. More often than not, these criteria are the elements of form and fabric that are essential to understanding the use of the ceramics in their original contexts and the production of these vessels by a potter utilizing available materials and techniques. Form and fabric are distinct but not wholly independent categories. We can state largely that they are cross-cutting categories: either the fabrics occur in a variety of forms, or the forms occur in a variety of fabrics. In the former case, the range of vessel forms is described for each of the fabrics that is present. Therefore Fabric 1 appears in forms A, B, and C, and forms Fabric 2 appears in forms B, C, and D, and so on. On the other hand, Form A could occur in the range of fabrics 1, 2, and 3, etc. Essentially, a study may give priority in listing either to the forms or to the fabrics. The reasons for choosing one or the other of them might be to emphasize either production (fabric and surface treatment) or functional use (form, and also some elements of fabric), or to maximize or minimize the description of one of the variables. In a broad sense, the first element listed is generalized (lumped) and presents less variability than the second that is elaborated upon in more detail (split), conceivably to an infinite number of categories.

In this study, broad categories of vessel form are of central importance in tracing the habits of food preparation, storage, serving, and transportation. Fabric is also associated with specific vessel uses, but in the case of *céramique commune* in these contexts, the same or similar fabrics are used for several classes. This makes fabric in this assemblage a less specific indicator of particular vessel types. In part to correspond with the functional analysis of the use contexts, I organize this presentation of the kiln-associated material according to broad groupings of vessel form, with details of fabric also included to be used for future identifications. The vessel forms that are used in the descriptions of these vessels are also the ones that make up the components of the functional analysis included in this study.

FUNCTIONAL CLASSES DEFINED

The definition of functional classes of ceramic vessels within the assemblage is arranged around categories that would have been relevant in their use contexts. The construction of these analytical categories attempts to trace various food-related activities that are observable in the vessels of the particular classes. These classes do not cover with an even hand the complete range of vessels in the systemic context, since significant portions of the ceramic vessels from two major categories (*amphorae* and *c ramique fine*) are excluded, as are all the vessels of other material categories such as wood, leather, basketry, glass, and metal. I also excluded from the study those ceramic objects that are not containers of food. There were lamps, a ceramic mask, and several unidentified objects that I did not include here, although these items and similar ones have been included in other studies of *c ramique commune* (Alfonso, in press). While the classes constructed here are defensible within the category of *c ramique commune*, they cannot begin to represent the true range of culinary behavior that occurred in these contexts.

Most of the classes contain forms that are already accepted in French archaeology. In this study I have not proposed a definition of forms such as bowl, goblet, and lid, by mathematical expressions of vessel proportions or other criteria, although I recognize the usefulness of those definitions when they are employed (eg: Millett 1979:37; Tuffreau-Libre 1980). The classes that I use in this study correspond to forms that are intuitively familiar to us because of exact correlations with or similarities to modern vessels. All of these forms are recognized already in French archaeology, and do not generally need re-introduction within that context. I do introduce the forms here and explain them in their functional groupings when they occur in categories together with other forms. The categories that are used in the following analysis consist of:

Bowls: vessels used in food preparation. These are open forms that are neither of a size or surface treatment that indicates table use; differentiated by height from the lower plates; a few of the bowls are basin-like, but the majority are conical, many with inverted rims; these tend to have internal grit like that in *mortaria*, and would have been used for grinding foodstuffs. The bowls are predominantly fired in a reducing atmosphere and therefore are mostly grey. This class may include several French-language categories that are *ecuelle* (bowl, basin), and *jatte* (bowl, platter, porringer,

basin), but not *coupe* (stemmed dish or bowl) that would fall within the category of tablewares (below).

Footed Cooking vessels: footed cooking vessels that are intended to be used over the heat source such as embers or a stove. These include both cooking plates and *marmites*. The former in general have short straight sides, and the latter have curving sides and may be nearly as tall and closed as jars. The term *marmite* can also be used to indicate a general cooking pot with rounded sides, but in this study the term refers specifically to the footed form. The two footed forms in this category are representative of a Roman cooking style and share a similarity in rim forms, and thus create one coherent class.

Goblets: small drinking vessels with a basic shape like miniature ovoid jars; this category is only marginally represented here because all supra-regional patterns are included in the category of *céramique fine*.

Jars: tall closed forms that were used in a variety of food activities. These are the predominant cooking vessel in the pre-Roman tradition and are also used for storage and transportation. They are still used for these functions in the Roman period, but in cooking are supplemented by plates and footed vessels. Most of these jars are ovoid in shape, sometimes more slender or more globular. The jars occur with a variety of surface treatments, such as mica slips, pigmented slips, and grooving, and a great variety of rim forms. Any misidentification that occurs in this category is probably in the inclusion of portions of pitchers, which in the absence of handles, seem equivalent in form and fabric.

Lids: in a variety of sizes; probably under-identified in this sample, since either a handle or a rim and at least a portion of the body are necessary for identification. There may be some misidentification, since in fragmentary form, lids and bowls are readily confused (cf: Musée des Beaux-Arts et d'Archéologie 1992:219). In addition, the function of covering other vessels is probably under-represented here, since bowls and plates probably doubled as lids.

Liquid storage and serving vessels: these are tall closed vessels that make up the largest category because the fabric of the *cruches*, the largest sub-set, are nearly unmistakable, and therefore almost perfectly identified. The two primary components are *cruches* that are a distinctive orange, and pitchers (see jars, above), which are used for heating or cooking liquids as well as serving.

Cruches usually appear in a defined range of fabrics. They invariably have *claire* or oxidized fabrics, either white to beige or in the neighborhood of orange. They are occasionally painted or slipped. The paints are either overall coloring, or pigment in horizontal bands on the body of the vessel. The slips can be micaceous or not. *Cruche* forms are also fairly standard. They have a narrow neck with a defined rim, and a globular body. They are furnished with usually one handle, but occasionally two. In the *Lycée Militaire* assemblages, the *cruches* that have associated bases tend to have foot rings that give the impression of a finished vessel, one that may have been intended for use at the table. The word *cruche* recalls the English word *cruet*, and there appears to be some similarity in the uses of the vessels with these names. In the American usage of “*cruet*,” both are narrow-necked vessels for pouring liquid at the table. However, the term *cruche* as it is used here, refers to a vessel that is much larger than those usually considered *cruets* in American terms.

Mortaria: open basins for mixing or grinding food. They are easily identified in the study due to their distinctive fabric and shape and are a marker of Roman practices of food preparation. They are usually furnished with a pouring spout, and almost always have an internal grit, most often of quartz, to facilitate grinding.

Plates: flat open vessels used for cooking and table service. This study includes Pompeian Red Slip plates. Although Pompeian Red Slip follow a supra-regional pattern, there have not been many studies of these vessels to date.

Storage jars: big, thick-walled vessels, often of a coarse brown fabric. They sometimes have an incised decoration of undulating lines around the shoulder, or bands of mica application. They are often hand built, and the form is of a Celtic tradition. It is likely that smaller ovoid jars were also used for storage, so this category does not cover all storage activities. In French archaeology these are often called “*dolia*” although in strict

usage on Roman sites this terms should refer to much larger vessels that are nearly impossible to move and that are often buried underground. Only one of the typically Roman *dolia* has been found in the assemblage (Production A).

Table wares: small vessels such as bowls or cups of a size or surface treatment to indicate individual consumption or serving such as of sauces (this probably creates some overlap with the preparation of these sauces). The category excludes plates and goblets, although there is a functional relation between these classes. This category, like goblets, is small because many vessels of these behaviors follow supra-regional patterns and are included in *céramique fine*.

Unidentified: vessels that could not be placed in one of the above categories, usually because the individual sherd did not present enough information in form or fabric. There are also some forms that were unique enough not to warrant their own categories (such as a *faisselle*), and some forms for which we do not know a function.

DESCRIPTION OF FABRICS

Guy Alfonso's (forthcoming) study of the same workshops presents the wares by broad groupings of fabrics, with examples of the vessel forms in each. His work is particularly useful in the description of the details of form within the general headings of fabric. I elected to provide more detail than is usually done in common ware ceramic descriptions in the region, and therefore I separate Alfonso's fabric categories into more detailed fabric descriptions. The *of céramique commune* used by Alfonso (corresponding with other traditional descriptions) are: *claire* orange fabric, *claire* rosy beige without slip, *claire* rosy beige with micaceous slip, *claire* rosy beige with orange-brown slip, and grey ware. Within these primary categories Alfonso describes the variety of vessel forms, elaborating in this second category rather than in the first.

This study does not set out to repeat the already useful work of Alfonso on the same ceramics. Therefore, the presentations of the ceramic productions repeat as little as possible of the drawings presented in his publication. In some instances repetition is necessary for clarity. In these cases it is hoped that the re-appearance of certain forms with differing descriptive emphases is complementary rather than merely repetitive.

As discussed in Chapter 2, the fabrics in the assemblage are frequently micaceous. In the following descriptions, it is understood that all fabrics are micaceous unless otherwise

noted, and it will not be explicitly stated for each fabric description. Mica is probably a natural presence in the local clay sources, and there is no indication from particle size or presence and absence observations that mica is added as temper. When mica does occur as an apparently intentional element in these vessels, it appears as a mica wash or slip on the surface of the vessels, also discussed in Chapter 2. This is described below as a "mica application."

The standard inclusions, some of which may be intentionally-included particles, or temper, for the *Lycée Militaire* ceramics is a mixture of sand and iron oxide. The thin-section analysis conducted by Geokit indicated that the sand in the Autun fabrics was granite, quartz, feldspar, and mica (Geokit 1995:9). In varying proportions these are consistently present in the fabrics from production contexts. Both the sand and iron oxide are interpreted by Geokit as intentional inclusions, or temper. Setting aside the question of whether or not the iron oxide in particular is an intentional or naturally-occurring component in the clay body, it appears that the quantity of it present determines some of the colors achieved in the oxidized fabrics, most notably in the beige to orange family. The iron component contributes the orange component of these colors and at times produces rosy clouds on the surface of the vessels, likely deposited on the vessels during firing. In all the following ceramic descriptions sand and iron components should be assumed present, except when noted otherwise.

Occasionally there are other inclusions added to the clay body as temper. These tend to be grog, especially in the case of *mortaria*, and occasionally a fragment of metal such as copper or bronze, presumably waste or unintentional contamination from the nearby metal workshops. These are noted individually when they occur. There are very rarely other elements present as added inclusions, such as an organic substance, probably chaff of some variety, and these are also noted where they occur.

The dumps of *Ilots A* and *C* and *dépotoir* 8043 are composed of materials that were almost certainly produced at the site, and others that likely were not. In each of these contexts, there were some kiln wasters, or production mistakes. The most common production mistake is overfiring. Many vessels appear wholly or in part with a hard grey fabric, at times nearly vitrified. It is particularly evident that this is a production mistake when the grey appears in combination with other fabric colors, especially beige or orange. Other production mistakes that occur are vessels that are off-round, that is their mouths or larger portions of the bodies are misshapen, either through handling or extreme overfiring. In other cases, the vessel was handled when the clay was still wet, and we see signs of that activity in the finished vessel, with fingerprints and other effects like the smearing of details such as grooving.

Harder to discern are the vessels that are kiln wasters simply by having been broken during firing or kiln unloading. It is likely that a certain number of the vessels from these contexts that do not appear to be kiln wasters fall into this category. It is impossible to tell from many of the sherds whether they broke from other vessel portions bearing clear evidence of misfiring, whether their breakage alone was their flaw, or whether they did not pertain to the productions of these contexts at all. Production mistakes are noted below when they do appear. For the reasons noted here, the most frequently cited of these is overfiring.

The shared characteristics of the obvious kiln wasters point to the attributes of the vessels produced at the *Lycée Militaire*. These include some of the surface treatments described below, but most notably they include a distinctive fabric texture. The fabric of many of the kiln wasters in the productions of *Ilots A* and *C*, and some of the vessels in *dépotoir* 8043 is of a particular texture. These fabrics are loose rather than hard compacted, and do not feel grainy. They appear somewhat curd-like in the fresh break. In the break they appear somewhat laminated with a rounded or clumping feature in the fracture. These characteristics are particularly evident in the oxidized fabrics, such as the beige and rosy beige plates and jars. This family of fabrics predominates among kiln wasters, therefore it is suggested that this is a primary fabric produced at these workshops. There is a range of fabrics found in the dump contexts, and it is likely that many of them were produced at the *Lycée Militaire*. The light and non-grainy feel seem to be recognizable characteristics of the wasters. These traits are probably indicative of *Lycée Militaire* production.

Another fabric type contrasts with the ones just described. This is a hard, granular fabric with a mortar feel. There is a sharp distinction between these two types of fabrics, one with the nearly fluffy, curd-like appearance and the other with a grainy, mortar-like aspect, and they are easily differentiated once the two fabrics are compared side by side. The mortar fabrics sometimes present a very high sand component, and are not found with signs that they are kiln wasters. It is concluded here that the hard granular fabrics that occasionally appear are extraneous to the kilns, and were not produced at the site.

Many of the vessel forms identified from the *Lycée Militaire* production contexts are unique forms. It has been difficult to interpret the significance of this observation, since the relationship of these to other, larger kiln dumps is not known. It is likely that the frequent unique vessels are the result of sampling that occurred when these discarded vessels were removed from a larger dump area to be used for fill.

The vessels described below in the production contexts are discussed in groups according to functional category. Within these categories, general types are presented, with as many of the variants as possible also illustrated or noted. It is difficult to predict from the limited sample which of the traits will be the most characteristic of the vessels as they are distributed and used, so even fairly minor variations in form are discussed. I hope that this will enable the identification of *Lycée Militaire* ceramics in other contexts. The result is a presentation of the assemblage on nearly a vessel by vessel scale. For common forms such as plates and some of the jars, there are many examples of these forms, both in production contexts and use contexts. Where possible these are noted, and *état* of the use context is provided.

THE CERAMIC PRODUCTS OF ILOT A

There were 430 sherds in the *céramique commune* assemblage from the productions of Ilot A. These sherds pertained to a minimum of 216 vessels. A summary of the forms present appears below. Detailed descriptions of the forms and fabrics is found in Appendix A. For a summary of the sherds in the categories of *céramique commune sombre* and *céramique commune claire*, the reader is referred to the original publication of the ceramic inventories (Alfonso, forthcoming).

The forms

PLATES: The basic plate form from these contexts has a flat bottom and uncomplicated profile. It has slightly everted sides, with or without thickening of the vessel wall on the interior or exterior. The most common variation among the plates from Ilot A are the details of the rim form, although there are also several examples with unique details on the vessel sides, such as a faceted exterior. A majority of the plates from Ilot A are in *claire* fabrics. They are usually in the beige to orange range, and may present mica or pigmented applications, usually on the exterior and interior of the vessel.

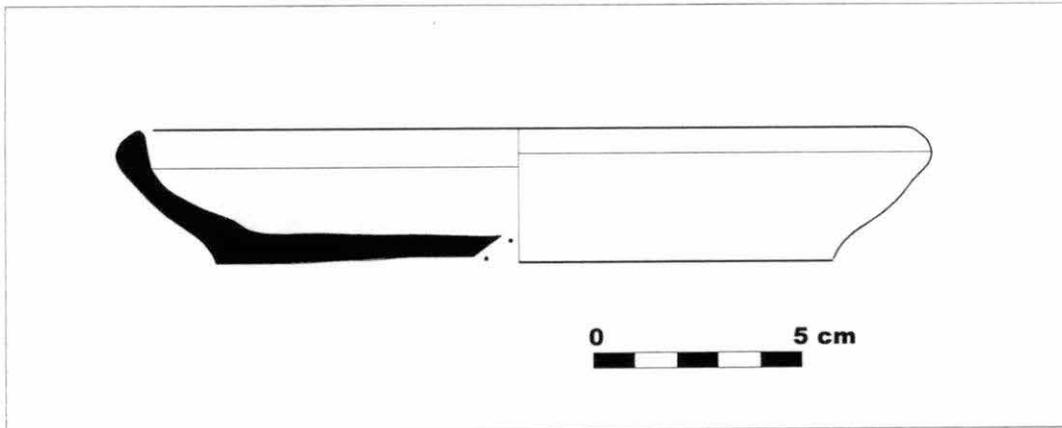


Figure 3.1: Plate

BOWLS: The bowls recovered from the production contexts in *Ilot A* occur predominately in *céramique commune claire*, and cover the range of bowl forms. They were probably used in food preparation, cooking, serving, and perhaps individual consumption.

There is a large, open bowl whose decoration and size suggest its use as table service, perhaps for events with numerous people. Two other large-diameter bowls are slightly less decorated, but may also belong to the range of table service. These forms, as well as many of the other bowls, have a mica application on the surface.

There are several forms of small bowls that were perhaps used for table service or in food preparation. There is considerable variety among this collection, including pedestalled bowls and conical grinding bowls. The most consistent element in these forms is their similar oxidized fabrics, mostly occurring in a rosy beige color.

FOOTED COOKING VESSEL: *Ilot A* produced one notable footed cooking vessel. This is a deep footed vessel, or *marmite*, with a simple “S” curved profile. It is in a rosy beige fabric.

JARS: *Ilot A* produced a large range of jar forms. They include Besançon type, with the grooved upper surface of the rim and their heterogeneous colors. They also include a group of jars with fairly simple rims that are rolled, rounded, or almond shaped. More distinctive are the jars with rims with an internal groove (or gutter, *en gouttière*), and the jars with an oblique facet on the interior of the neck. The latter creates a restricted opening with the neck everting

from that point to the top of the rim (fig. 2). These vessels also appear in the production contexts from *Ilot C*. An additional rim form that occurs on this group of jars has a groove on the external edge of the rim. This detail occurs primarily on rim forms that are square-ish in profile.

There is some variety in the body forms of the *Ilot A* jars. They appear as ovoid, pear or teardrop shaped, and in at least one case, globular. While some of the forms appear in both *claire* and *sombre* fabrics, the majority of these jars are *claire*.

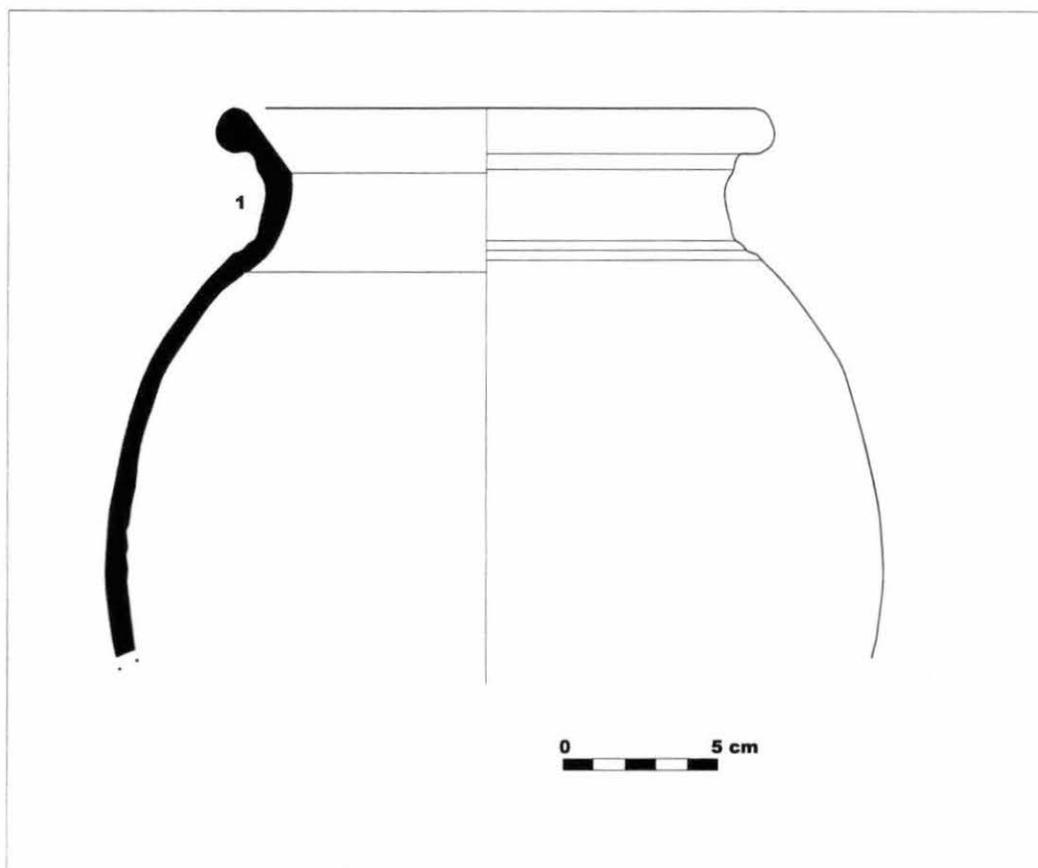


Figure 3.2: Jar with oblique facet on interior of neck

OVAL-MOUTHED VESSEL: Several vessels fall between the categories of bowl and jar. They have a tall but open form, with relatively straight sides and a horizontal rim. In addition to this hybrid body form, these vessels have oval-shaped orifices. It seems safe to assume that the vessels are produced with this particular configuration of characteristics in order to meet the needs of a specific function. It is possible that the function of the vessels could have been

associated with one of the industrial or workshop activities located in the vicinity of the ceramic workshop.

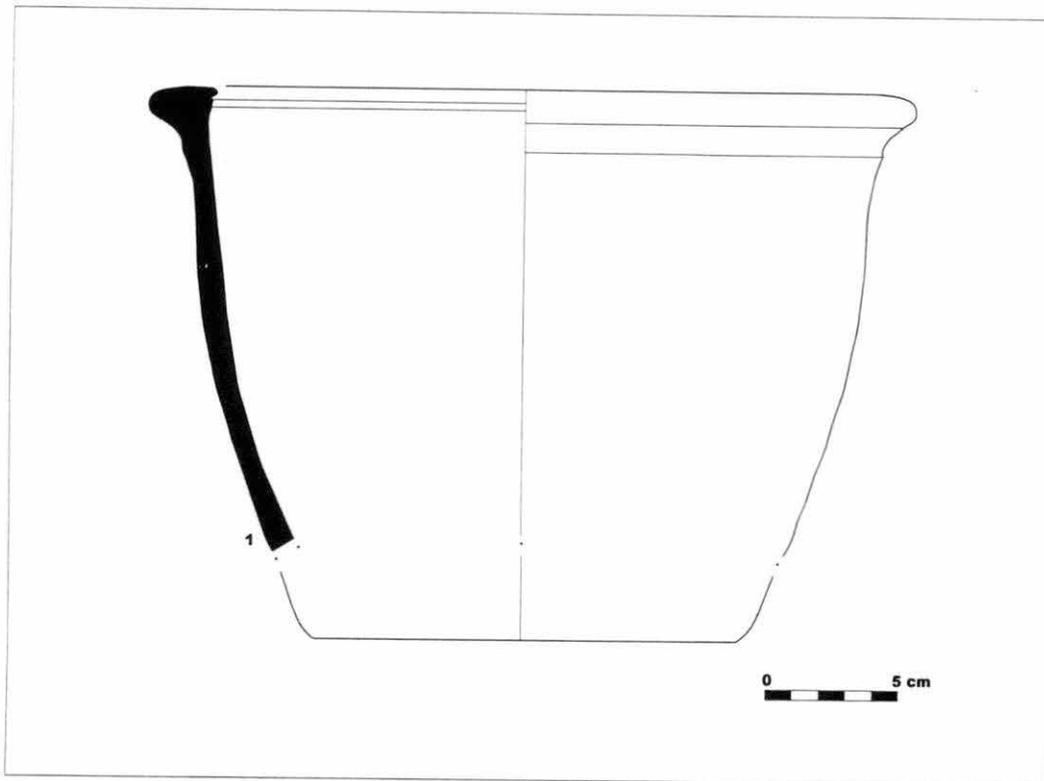


Figure 3.3: Oval-Mouthed Vessel

CRUCHES: There are three broad categories of *cruches* from the productions of *Ilot A*. The first of these are: *cruches* with pinched rims to form a lobed rim that could be called a trefoil spout, or *embouchure trilobée*. The second is a very common variety of *cruches* in a fine orange fabric and a simple rim called by Alfonso *chapiteau simplifié*. The third category is a group of *cruches* in a beige or rosy beige fabric with a simple rim and a heavy slip in a rusty red color. In addition to these categories, there are miniature vessels that may be small bottles or *unguentaria*, and there are vessels in *cruche*-like fabrics with wide mouths; these may be *cruches* or liquid containers of another sort. Both of these additional categories are included here under the heading of *cruches*.

LIDS: There are a number of lids from the kiln dumps of *Ilot A*. These show a great deal of variety, including in size. They have a sizeable range of rim diameters and a variety of rim forms and thickness of vessel wall.

THE CERAMIC PRODUCTS OF *ILOT C*

The contexts of the ceramic workshop in *Ilot C* produced 967 sherds of *c ramique commune* that belonged to a minimum of 390 vessels. The forms present in those contexts are summarized here, with detailed descriptions of form, fabric and surface treatment presented in Appendix B.

The forms

PLATES: The plates from *Ilot C* are similar to those from *Ilot A*. They have straight or smoothly curving sides and flat bottoms. They tend to be in oxidized fabrics, some with paint or slip. They are found in use contexts from * tats* one and three, and *abandon*.

BOWLS: The bowls from *Ilot C* include a series of vertical (band) rim bowls and inverted rim conical bowls, some furnished with a large sand (mostly quartz) grit on the interior to aid in grinding (fig. 4).

FOOTED COOKING VESSELS: There is a variety of forms within the category of footed cooking vessels from *Ilot C*. They include large and small examples of shallow footed vessels and taller forms. Both shallow and tall forms occur in open (straight-sided) and restricted varieties, including one carenated form (fig. 5) is a moderately shallow example of a large, restricted form). A particularly common rim form on these footed vessels is a forked rim, either with a nearly heart-shaped profile or with a pendant square on the exterior of the lip. It is clear that at least some of these rims are designed to receive a lid.

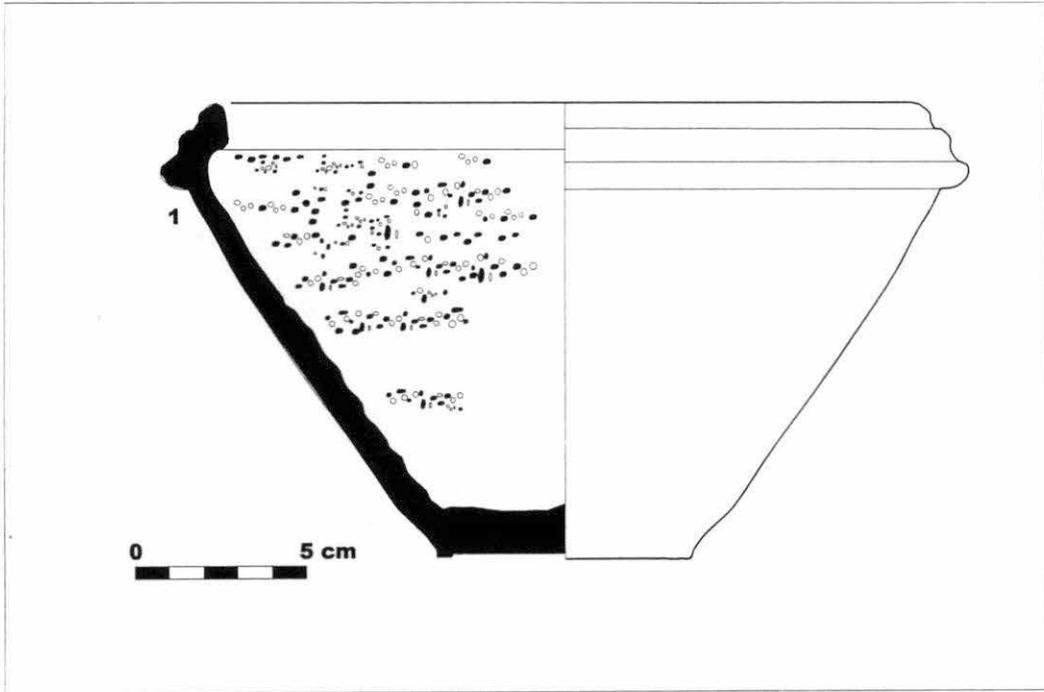


Figure 3.4: Grinding bowl, production contexts, *Ilot C*

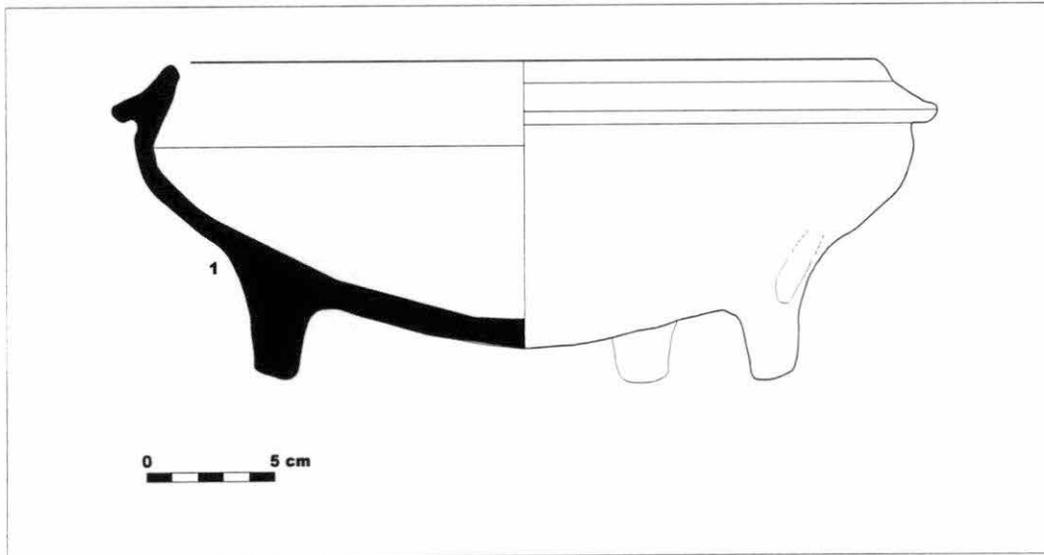


Figure 3.5: Large footed cooking plate with restricted opening, from production contexts, *Ilot C*

JARS and GOBLETS: The variety of jars from *Ilot C* production contexts is similar to that from *Ilot A* contexts. There are ovoid vessels with internal oblique angle mouths. These occur in high-fired (hard) fabrics, both in oxidized and reduced versions. They do not usually present any form of surface treatment. The series of jars with rims *en bourrelet*, or rolled, almond shaped, horizontal, or squared rims has more variety, both in fabric and surface treatment. There are surface applications on this range of vessels as well as smoothing of the wet surface during production.

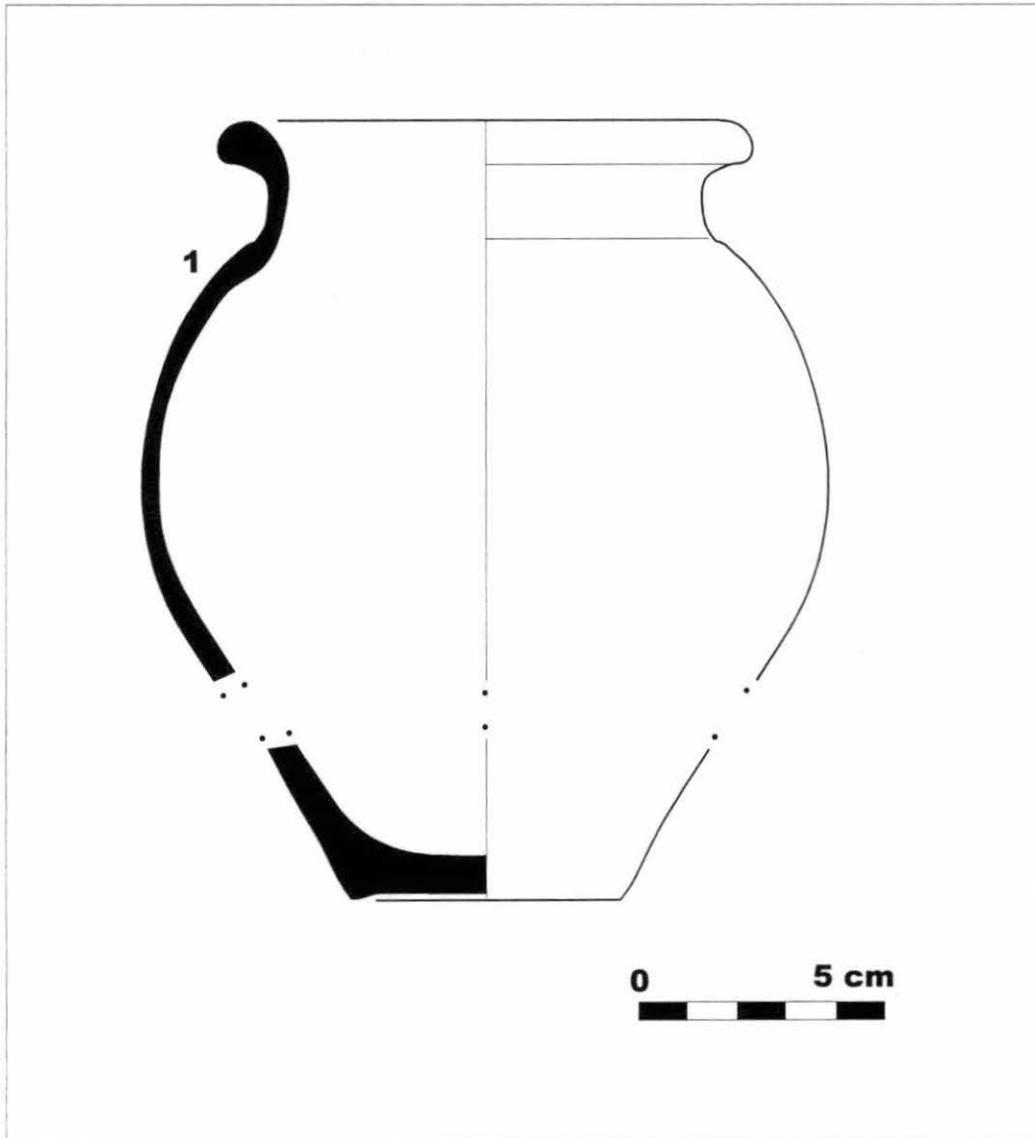


Figure 3.6: Goblet, production contexts, *Ilot C*

The vessels include several forms of small jars or goblets with similar characteristics to the collection of jars as a whole. The most frequently-occurring of these is the rosy-fabric goblet with reduced surfaces. Its rim form is rolled, and it has a somewhat trough-like neck (fig. 3.5). Others are unique examples of smaller jars (Appendix B: figs. 6.6 and 7.1).

PITCHERS: Several pitchers appear in the production contexts of *Ilot C*. These show a variety of rim forms, (Appendix B: figs. 8.3-6). The groove visible on the superior surface of these rims may be to receive a lid, in keeping with the observation that pitchers may have been used for heating or cooking liquids. This is supported by pitchers in this assemblage displaying both sooting evidence on the exterior vessel surfaces and cooking residue on the interiors.

CRUCHES: The most common form of cruche from these contexts is the red slipped cruche with a cup-like rim. These cruches have light colored, finely textured fabrics, and the slip is thick and brick red in color. Further forms of cruches from *Ilot C* include those in grey fabrics with trefoil spouts.

LIDS: The lids in the collection are varied in size, and many show a groove or tunnel on the inferior portion of the rim, likely a useful feature in keeping the lids in place on top of a cooking vessel.

THE CERAMIC CONTENTS OF DÉPOTOIR 8043

The dump context suspected to be a kiln deposit (US 8043) is located outside the block of buildings between the southern corner of *Ilot C* and the city walls. US 8043 was examined in the course of this study to evaluate the possibility that it is a kiln dump, associated or not with either of the known ceramic workshops. The presence of kiln wasters indicates that at least some of the elements contained in the deposit do indeed come from production contexts, although their origins remain uncertain. There were 468 sherds in the collection of *céramique commune*, and these correspond to a minimum of 108 vessels. The details of form and fabric of these sherds appear in Appendix C, following.

The smaller number of sherds and vessels in this dump compared with the previous production contexts produced a higher incidence of unique vessels, with fewer trends of repeated forms. Some of the specialized forms were likely not produced on site, as there is no

evidence for kiln wasters in these particular forms and fabrics. These include both the Roman style *dolia* and *mortaria* from US 8043.

The forms

JARS: There are also grooved-neck jars that in other contexts have been associated with early first century A.D. contexts, particularly from Saône River deposits (Tuffreau-Libre 1992:138). It is likely that these vessels were not produced on the site, and when they occur in production contexts, they are extraneous to the kilns.

The remaining jars include Besançon type jars, also associated with early contexts, as well as jars or jars and pitchers that do resemble the products of *Ilots A* and *C*. There is also a two-handled *cruche* and several forms of footed cooking plates. In fragmentary form there were also overfired grey and orange *cruche* fabrics, as well as more examples of broken feet (some tube feet) from cooking plates.

THE ORGANIZATION OF PRODUCTION AT THE *LYCÉE MILITAIRE*

Because of frequency of breakage and costs of transport of utilitarian vessels, it is likely that all the regular needs of *céramique commune* were met by local production. There is evidence in *céramique commune* assemblages that some vessels, rendered special by decoration or quality, or preferred to local forms for other reasons, were transported from greater distances. Likely, both these distribution patterns were in effect at the *Lycée Militaire*. The workshops described above and Autun's other ceramic producing workshop at the site *Rue des Pierres* probably met at least a significant portion of the regular demand for utilitarian vessels locally. With several ceramic workshops functioning in the city, there might be specialization among them with regard to the range of vessels produced. In particular, the *Lycée Militaire* workshops may have produced complementary ranges of vessels.

As might be expected from any commercial kiln dump, none of the three kiln dump assemblages evenly represents all the functional categories defined above. The bulk of the *céramique commune* production from *Ilot A* seems to have been in simple plates, various jars and lids, and *cruches*. *Ilot C* produced primarily bowls, red-slipped *cruches*, various jars, simple plates, and a variety of lids. The dump 8043 also had *cruches* and various lids, jars, and footed cooking plates. Similar plates and a largely overlapping range of jars occur in *Ilots A* and *C*. The *cruches* from *A* and *C* are different, and the lids are not easily enough grouped to neatly compare.

In this context of specialized commercial production, it would be expected to see an emphasis on some forms and not others. Other pottery workshops would have the consumer demands for vessels in the remaining functional categories. The question remains whether the *Ilots* A and C assemblages represent an independent workshop, or whether these kilns were associated by ownership, personnel, or agreements over the division of product range. Further, the *dépotoir* 8043 contents do not add significantly to the determination of whether or not these workshops were organized independently. Although some of its fabrics, particularly among the *cruche* and cooking plates are similar to the oxidized fabrics from the two known workshops, US 8043 cannot be definitively connected with either. In spite of the uniqueness in many of the 8043 vessels, there is a similarity in fabrics found in the three locales. There also remains a degree of overlap in the vessel categories and forms found in the three context groups. On the basis of the slight degree of overlap, it could tentatively be suggested that the two workshops may have been associated, perhaps as specialist work areas in a jointly run establishment, or perhaps as collaborating but independent workshops. Further, it could be suggested that US 8043 functioned as a dump for one or both of the workshops, or that as a secondary deposit it was drawn from a common source.

DATING

Interpretation from excavation has concluded that the kilns began functioning in *état* two, or roughly during the latter half of the second century A.D. For the most part, the current research into the forms and fabrics bears out the stratigraphic interpretation that the kilns were most active during the site's *états* two and three. The greatest quantity of ceramics identifiable as produced at the *Lycée Militaire* do come from *état* three and *abandon* contexts. However, there are also incidences of some *Lycée Militaire* forms identified from *état* one contexts. These forms are from *Ilot C* and include the small red-slipped *cruche*, a plain plate form, and a conical grinding bowl with inverted rim. Further research into these specific contexts and forms will determine whether the dating of the kilns should be reconsidered. These few examples alone do not warrant the proposition that the dating of the earliest functioning of the kilns might be erroneous. Rather, it is likely that some other factors account for the presence of these vessels in apparently earlier contexts.

IV. FUNCTIONAL CLASSES FROM USE CONTEXTS:

COMMON POTTERY AS CULTURAL ARTIFACT

As discussed in Chapter One, various habits of food preparation, storage, serving and transportation, and therefore the vessels used in these activities, are associated with either Mediterranean or Celtic traditions. Certain obvious markers of Roman cultural influence occurred before the conquest. These include *amphorae* and also fine table wares such as Campanian, or black gloss, both of which appeared early on Celtic sites throughout Gaul. Other indicators of Roman influence such as the *mortarium* appeared early in *Gallia Narbonensis* but took hold only very slowly throughout the rest of the provinces (Okun 1989:120; Tuffreau-Libre 1992:76). Different patterns of diffusion imply that there were various currents of Romanization that took place at different rates, and perhaps for separate reasons or through distinct parts of Celtic culture. The evidence presented here indicates that there were still changes, which might be called Romanization, that were occurring well into the late third century AD.

THE *PAX ROMANA*

The time between the Augustan reforms and the mid third century AD was the period in which Gallo-Roman culture matured. Early during this time of Roman rule there were incidents of indigenous resistance to Roman presence in Gaul, including the revolt centered upon Autun in AD 21, and a larger rebellion in AD 68-70. Following these, the remainder of the three centuries was a relatively stable period during which the Western Roman Empire flourished. At that time, Gaul like other Roman territories, experienced a development of Romanized forms of urban life, government and culture that had appeared with the reign of Augustus. In the later part of the third century, rebellion in Gaul disrupted the cohesion that had characterized the preceding centuries (Sinnegan and Boak 1977:387-393; Rebourg 1993:70).

This period of stability has not compelled the same types of studies as have the turbulent beginnings and ends of the Empire. Although we have an image of Roman patterns of economy and society in the provinces in general, we know little about the ways that local societies adapted to Roman rule. Certainly there was both acceptance and rejection of cultural change by a primarily

indigenous population. The seeming quiet of the politics seems to have masked the detailed patterns of cultural change that occurred at the time. Questions of resistance or acceptance of Roman culture in daily life are largely forgotten in the presence of a visibly Gallo-Roman society. The answers to these questions lie buried beneath the larger picture of a Romanization that according to traditional thought occurred little by little, as the elites spread Roman habits, by example, to other classes of society (Coulon 1985:22). Alternatively, the change in various aspects of indigenous culture was not solely dependent on an elite example, but occurred with independent timing in other segments of society.

The "maturation" of Romanized societies

It is suggested that the "golden age" of the second century AD was the period in which the process of Romanization was completed (Coulon 1985:22). A certain degree of Romanization had already occurred by the time of the conquest. This Romanization is seen beginning with the trade of Mediterranean prestige goods and their adoption into social ritual such as wine consumption (Dietler 1990). Further elements of Romanization occurred in government and power structures in the generations following the Roman conquest, and in the shifting roles of the local elite. The institutional changes implemented by Augustus, including urban configurations and new systems of taxation, had certain pervasive influences on the structures of daily lives. The roles of the Celtic elite were implicated in these changes, some of which may have been the formalization of emerging social and political trends within indigenous societies (Woolf 1995:12). The roles of the Celtic common classes are much less understood. Other than the unmistakable public events such as the enforced relocation of populations like that from *Bibracte*, the nature and timing of changes within these classes has been examined much less than the changes among the elite class.

The degrees and timing of Romanization in various facets of Gallo-Roman society is a particularly rich subject worthy of exploration. During the outwardly stable period of the first three centuries AD, individual people and communities assumed ways of life that in some cases were very Roman. Patterns of urban life, economy, and government were markedly changed from the pre-Roman Celtic patterns. These alterations transformed the ways that people in certain classes of society lived and experienced their lives. However, there were portions of the Gallo-Roman experience that may have retained their Celtic flavor, and as often occurs in the close interaction of two disparate cultures, there were new developments out of the combination of Celtic and Roman that created elements that were not present in either of the parent cultures. The closer examination of the Roman period in the West leads us to scrutinize the small-scale habits of communities under

Roman rule and the ways they transformed their daily lives during this so-called maturation of Gallo-Roman culture.

"Amalgam" cultures

The makeup of Gallo-Roman culture was more than a combination of elements from Celtic and Roman traditions; it also included new elements that arose from the co-existence of these ways of life. It is this new character that made each of the Romanized cultures different from the others. For these reasons Gallo-Roman culture differed from Romano-British or Romano-Belgic cultures. The individual differences in regional cultures made different impacts on the Romanized societies and provided multiple case studies for each interaction of Mediterranean and indigenous societies. The specific changes that occurred in southern Burgundy should be considered changes in that region, different in character from elsewhere in the provinces, and different also from nearby areas of Gaul.

Romanization in foodways at the Lycée Militaire

The site at *Lycée Militaire* was occupied during the politically stable Roman period in Gaul and provides an assemblage with the potential for addressing these questions. Representing these three centuries of Gallo-Roman culture, the assemblage illustrates the appearance of new foodways combining characteristics of the two cultures and records the identifiable persistence of the two individual cultural traditions alongside the new one.

The changes that occurred in the foodways of Gallo-Roman *Augustodunum* are recorded in the material record of these habits, in the vessels of food storage, transportation, cooking and serving. Looked at as an assembled set of evidence for quotidian behavior, these utilitarian artifacts reveal the culinary habits of a Romanized Celtic society that opted both for the adoption of Roman foods and methods of food preparation, and for retaining elements of indigenous culture, occasionally combining the two in innovative amalgamations. These culinary habits are examined for the periods of occupation of the site *Lycée Militaire* through the changing proportions in a series of functional classes of ceramics, defined in Chapter Three.

VESSEL COUNTS

The data used in this study were recorded both in number of sherds and minimum numbers of vessels represented. This allowed maximum flexibility in the analysis, with the ability to use whichever tabulations were most appropriate in the context of the particular study. The analyses

presented here are in numbers of vessels rather than in numbers of sherds. Logically, since the focus of the study is the kitchen assemblage, we are interested in the actual numbers of vessels. The differential fragmentation of the various types of vessels would detract from that goal rather than add clarity. In terms of the present study, the use of vessel count rather than sherd count eliminates some of the over-emphasis on vessels whose body sherds as well as rim, base, and handle sherds are diagnostic. For example, the orange *cruche* fabric is nearly always identifiable since the color, texture, and thickness of the fabric is reserved almost exclusively for these vessels. In comparison, the common grey fabrics may be used for cooking plates, jars, pitchers, and bowls, so that a body sherd of any of these may not be attributable to a functional class. The reciprocal side of this is that the use of vessel counts rather than sherd counts decreases the proportion of the unidentified category, since the majority of unidentified sherds are body sherds that do not contribute to the vessel count. The unidentified category does contain some rim sherds, though, and represents a number of individual vessels. This is the case when similar rim forms occur on more than one type of vessel (*marmite* and jar, for example) and there is not enough of the vessel present to differentiate, or with one of the cases of unique or unidentified function.

The counts of vessels (expressed as "MNI" or minimum number of individual vessels) is compiled primarily using rim sherds, occasionally using a handle or spout. Since a drawn record is made of every rim sherd of significant size (either as a drawing of that sherd or as a correlation with an already drawn form), this method compensates for the error that may occur when portions of the rim of the same vessel are stored (and therefore studied) separately.

In this portion of the study, only the vessels of defined classes were included. Of the total 11,684 sherds (1,378 vessels) that were examined from use contexts, there were 10,864 sherds (1,277 vessels) that pertained to *états* zero through three and *abandon*, and that fit into the eleven categories of vessel classes, including the category of undefined. The sherds that were eliminated belonged to the non-vessel class (such as the lamps and mask), belonged to (or were suspected of belonging to) excluded classes such as *céramique fine* and *amphorae*, or that belonged to stratigraphic units that had some uncertainty in dating.

CHANGING FOODWAYS

The entire assemblage of vessels reveals a certain stability from *état* zero through the period of abandonment. None of the major vessel classes wholly appears or disappears during that time, although some of the minor vessel classes are not present in *état* zero due to the small numbers in that assemblage. Significantly, there are trends of increase and decrease within some classes and

apparent relations of proportion between different pairs of classes that may reveal some changes in foodways during occupation of the site. The proportions of all the vessel classes are presented for the five chronological periods (*états* zero through three and *abandon*) identified on the site (Fig. 1, battleship diagram). The counts of these individual vessels and the values transformed into percentages of total vessels in the period are presented in Table 1 (a and b).

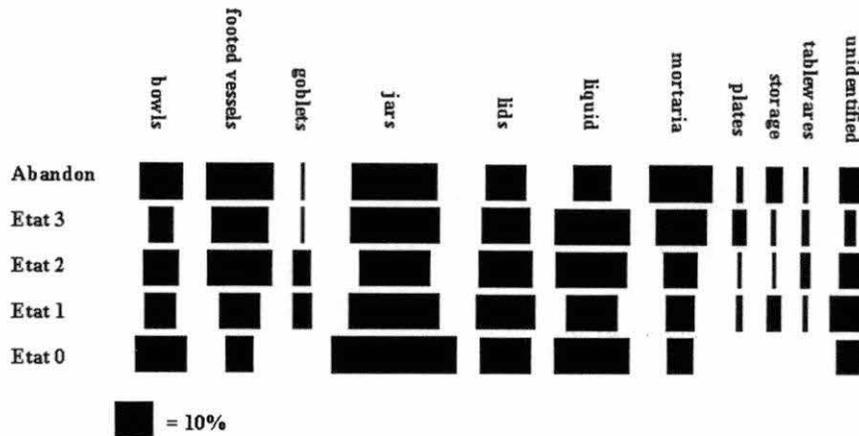


Figure 4.1: Battleship diagram of vessel class percentages, by état

Table 4.1a: Vessel Class Counts by Etat

Vessel Class	État 0	État 1	État 2	État 3	Abandon	Total
bowls	2	12	29	38	23	104
footed vessels	1	16	55	85	36	193
goblets	0	7	15	4	1	27
jars	5	36	60	139	46	286
lids	2	23	46	75	21	167
liquid recipients	3	20	61	114	20	218
mortaria	1	11	27	77	34	150
plates	0	2	3	21	2	28
storage jars	0	5	2	6	8	21
tablewares	0	1	7	10	2	20
unidentified	1	16	18	17	11	63

Table 4.1b: Vessel Class Percentages by Etat

Vessel Class	État 0	État 1	État 2	État 3	Abandon	Total
bowls	13.3	8.1	9.0	6.5	11.3	8.2
footed vessels	6.7	10.7	17.0	14.5	17.6	15.1
goblets	0.0	4.7	4.6	0.7	0.5	2.1
jars	33.3	24.2	18.6	23.7	22.5	22.6
lids	13.3	15.4	14.2	12.8	10.3	13.0
liquid recipients	20.0	13.4	18.9	19.5	9.8	17.0
mortaria	6.7	7.4	8.4	13.1	16.7	11.7
plates	0.0	1.3	0.9	3.6	1.0	2.2
storage jars	0.0	3.4	0.6	1.0	3.9	1.6
tablewares	0.0	0.7	2.2	1.7	1.0	1.6
unidentified	6.7	10.7	5.6	2.9	5.4	4.9

The first observation of these figures indicates that there is a large difference in the quantities of vessels present within the various categories. Several vessel classes (goblets, plates, storage jars, table wares, and unidentified) are relatively small, while some of the others (in particular jars, and to a lesser degree liquid recipients) contribute a relatively large proportion of the overall assemblage. The figures indicate that jars are the largest class in all but *état* two. Jars display an overall decrease from 33.3 percent in *état* zero to 22.5 percent in *abandon*. The liquid recipients also contribute greatly to the assemblage. With the exception of a slight decrease in *état* one and a largely reduced number in *abandon*, they display a relatively consistent presence at the beginning and end of occupation, comprising 20.0 percent of the vessels in *état* zero and 19.5 percent in *état* three, and are the largest class in *état* two at 18.9 percent.

After the liquid recipients, the two other classes of vessels most closely associated with Roman foodways exhibit overall increases from *état* zero through *abandon*; footed cooking vessels increase from 6.7 percent in *état* zero to 17.6 percent in *abandon*, and *mortaria* increase from 6.7 percent in *état* zero to 16.7 percent in *abandon*. Lids are fairly constant, varying slightly during the phases of occupation from 13.3 percent in *état* zero to 15.4 percent in *état* one, to 14.2 percent in *état* two, and 12.8 percent in *état* three. They decrease slightly in abandonment deposits, at 10.3 percent. Bowls are most abundant in *état* zero at 13.3 percent, and are seen fluctuating but overall decreasing through *état* three, and reappear again strongly in the period of abandonment, with 11.3 percent.

Among the four classes that exhibit relatively minor contributions to the overall numbers, goblets are absent from *état* zero and peak in *états* one and two at 4.7 and 4.6 percent respectively. In *état* three and in *abandon* they return to less than one percent. Plates are also entirely absent in *état* zero, and reach a high of 3.6 percent in *état* three. The indigenous style storage jars are likewise missing from the *état* zero assemblage, and are only significantly present in *état* one at 3.4 percent and *abandon* at 3.9 percent. The mixed class of tablewares is also absent from *état* zero, but reaches a high in *état* two with 2.2 percent.

The relatively stable nature of the assemblage can be attributed to an already-established Roman influence in patterns of food preparation, storage and consumption by the time the former inhabitants of Bibracte were settled at the *Lycée Militaire*. Roman forms, long introduced into Gaul through a developing long-distance trade, are visible from the earliest period of occupation at *Augustodunum*. *Mortaria* were present in small numbers in *état* zero, and liquid recipients, most commonly associated with wine consumption, were a significant proportion of the small assemblage from that period on.

The forms that were not present at all in *état* zero represent both Roman and Celtic traditions. The goblets, plates and tablewares of Roman usage as well as the storage jars of indigenous style are classes that are present in such small numbers that it is to be expected that they are absent from the fifteen vessels that make up the *état* zero assemblage. The presence of all types of goblets and tablewares is best studied using the *céramique fine* collection. Some reality is probably reflected in the increase of plates during these periods, but the real numbers are masked by the exclusion of *Terra Nigra* from this study. As constructed in this study, these classes remain small throughout the site's occupation and cannot be seen to represent significant patterns of change in behavior.

The introduction of Roman forms and their associated uses had already occurred before the population was established at the *Lycée Militaire*. The earliest period provides a collection with distinctly Roman elements, yet there was perceptible change in the makeup of the assemblage during the subsequent periods of occupation. The change in the proportions of Roman and Celtic elements in the common wares indicates a continuing process of adopting Roman cooking habits and the development of a Gallo-Roman character in foodways.

FUNCTIONAL PAIRS

We see an evolution of Gallo-Roman foodways when we consider pairs of functionally related vessel classes. For the analyses of these related sets, the data are presented from *états* zero through three. The period of abandonment of the site is excluded from this portion of the study since it presents contexts that are inherently different from the others. It represents the final phase of the site, but is not a phase of occupation, rather it is a phase during which the building became disused. As such, it will include the refuse that accumulated on the site both before and after regular activities were occurring in the rooms. Since this represents a significantly different set of contexts from the actual phases of occupation, it will not be included with the occupation phases in this part of the functional analysis.

Roman versus Celtic vessel forms: bowls used for grinding

The Mediterranean style *mortarium* is commonly observed on Roman sites, adopted fairly early for the grinding and mixing of foodstuffs. These ceramic basins are distinctive in both form and fabric,¹ and are frequently furnished with a quartz grit on the interior surface to facilitate grinding, and a spout for pouring. On the larger examples the spout is merely stylistic, but perhaps had the added benefit of serving as a handle for grasping either during use or when moving the vessel from spot to spot. They were used in particular for hulling and grinding grains, puréeing boiled foods, grinding meat and pounding fish for the equivalents of croquettes and quenelles, making cakes, fritters and pancakes, composing sauces, producing cheese, and mixing spices (Tuffreau-Libre 1992:76). *Mortaria* can be very large; examples of up to 46 centimeters occur at the *Lycée Militaire*.² This a vessel type that is unattested in the Celtic ceramic assemblage (Tuffreau-Libre 1992:76).

The *mortaria* of Burgundy have been studied in detail by Anne Pasquet (Pasquet 1996). There was a production of *mortaria* of uncertain date within Autun at the site *Rue des Pierres*. The earliest *mortaria* produced in Burgundy come from Chalon-sur-Saône around AD 40-60 (Pasquet 1996:99). This early production as well as the numerous workshops that made *mortaria* in Burgundy attest to their importance in Gallo-Roman foodways throughout the Roman period.

Mortaria are abundant at the *Lycée Militaire*, but the site also presents an example of a vessel form from the Celtic tradition that seems to provide an alternative to the Roman *mortarium* for the same function of grinding and mixing. This is a form of conical bowl common in the later Iron

¹ There is a marked similarity in the fabrics of *mortaria* except when they occur in fabrics from the *céramique fine* class, including *mortaria* in Campanian, *Terra Sigillata*, and *Métallescente*.

² Elsewhere in Burgundy, *mortaria* are noted with rim diameters up to 68 centimeters (Pasquet 1996:109).

Age (Joly and Barral 1992:103, nos. 9 and 10; Musée des Beaux-Arts et d'Archéologie 1992:221, nos. 68-75). At the *Lycée Militaire* there are conical bowls with inverted rims that appear with an internal grit, indicating the bowl's use for grinding. This addition of grit is a clear indicator that the bowl was being adapted for the specific use of grinding, creating a functional equivalent of the *mortarium*. In addition to this change, a common transfer of technology occurred from the hand building of this traditional form to wheel turning of the same form as this technique spread at the beginning of the Roman period. The bowls are almost uniformly grey (reducing atmosphere), and at least some are produced on the site. The original gritless form perseveres alongside the innovation, and together they indicate a cultural preference for preserving an indigenous form as well as altering it to serve in a new context. Although the continuation of Celtic-style conical grey bowls is attested on other Roman period sites in Gaul (eg: Perrugot 1996:71, nos. 18 and 19; Joly 1996a:126, nos. 4 and 5), there are no mentions elsewhere of these bowls being furnished with internal grit.

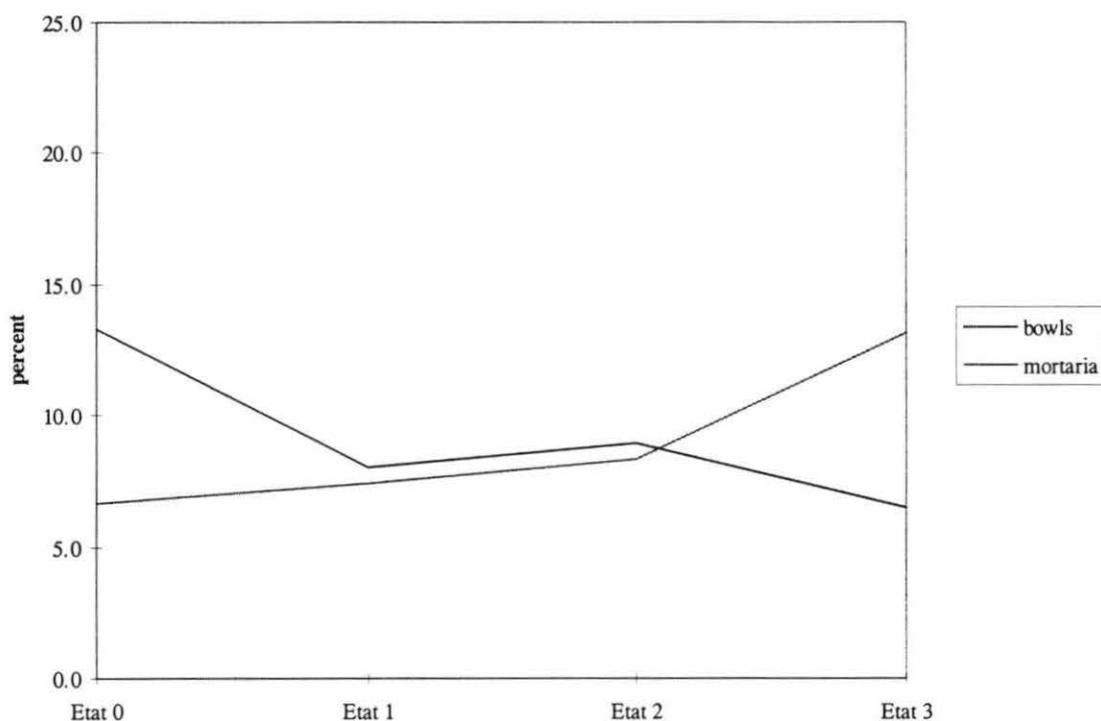


Figure 4.2: (Graph) Conical bowls and *mortaria*, percentages of vessels in occupation phases

Throughout the occupation phases of the *Lycée Militaire*, Roman *mortaria* contribute a steady presence alongside the conical grinding bowls. In *état* three for the first time, the *mortaria* are present in greater numbers than the conical bowls. Together these two categories contribute to between 15.5 and 20.0 percent of the vessels in the assemblage per period. In *état* zero they make up 20.0 percent, in *état* one 15.5 percent, in *état* two 17.4 percent, and in *état* three 19.6 percent. The consistency of these combined numbers indicates that the use of grinding vessels in food preparation was already established in the early occupation of the site, and that there was not a marked increase in the activities associated with these vessels. The percentages of the individual classes reveals the gradual shift of preference from the indigenous to the Roman-style vessels for this use. Roman *mortaria* co-existed with the indigenous version of the form starting with the earliest data from the site and only gradually eclipsed the Celtic conical bowl form in vessel percentage per *état*. Interestingly, the relative percentages of these two in *état* zero indicate that the Mediterranean foodways associated with grinding and mixing in *mortaria* were adopted more completely in the early phases than were the *mortaria* themselves. The Celtic style grinding bowl may be a form unique to this site, and was used alongside the *mortarium* during all of the site's occupation phases. This view of form and function indicates a combination of adoption of Roman foodways and the adaptation of pre-conquest Celtic tools to accommodate the new methods of food preparation. The pattern in this case is the creation of a Gallo-Roman innovation and its slow, if partial, replacement by the traditional Roman form.

The addition of the food preparation techniques associated with the *mortarium* and with the hybrid form of conical bowl adapted for grinding represents an expansion of the foodways practiced in Gaul. The prevalence of these forms in the collections from the *Lycée Militaire* indicates that this development was more central than marginal, and that the change in behavior preceded the adoption of the associated Roman tools.

Roman versus Celtic vessel forms: jars and footed cooking vessels

Footed vessels, used over hot embers or flames, were used in cooking styles that may have in part replaced the traditional jar placed either near a hearth, in a bed of ash or reduced embers, or set above hot embers on a stand or ring. The proportion of footed cooking vessels increases from *états* zero through two and decreases slightly in *état* three.³ These footed vessels start at a low of 6.7 percent in *état* zero and achieve a high of 17 percent in *état* two. The movement in the proportion of

³ The percentage of footed cookwares is also high in *abandon* (17.6 percent), resembling that of *état* two.

jars mirrors in reverse that of the footed cooking wares. Jars decrease from a high of 33.3 percent in *état zero* to a low of 18.6 percent in *état two*, with a slight increase to 23.7 percent in *état three*. The combined percentages of the two classes vary only from a low of 34.9 percent in *état one* to a high of 40.0 percent in *état zero*.⁴

Although jars also performed a variety of other functions, they were the primary cooking vessels in pre-Roman Celtic ceramic assemblages. They were used for food storage and probably transport, but it appears that only they served the purpose of cooking grains and boiled meats, both important food staples in the Celtic diet. Their decrease in the contexts at *Lycée Militaire* is likely attributable to the incorporation of other methods of cooking, including those utilizing footed cooking vessels. In the Roman period, the taller, footed *marmites* were probably used for “wet” dishes such as stews and porridges, and the low, footed cooking plates may have been used for heating or cooking small quantities of foods and for cooking “dry” foods such as grain cakes or other dishes, perhaps overlapping with the uses of plates such as Pompeii Red Slip plates used for cooking.

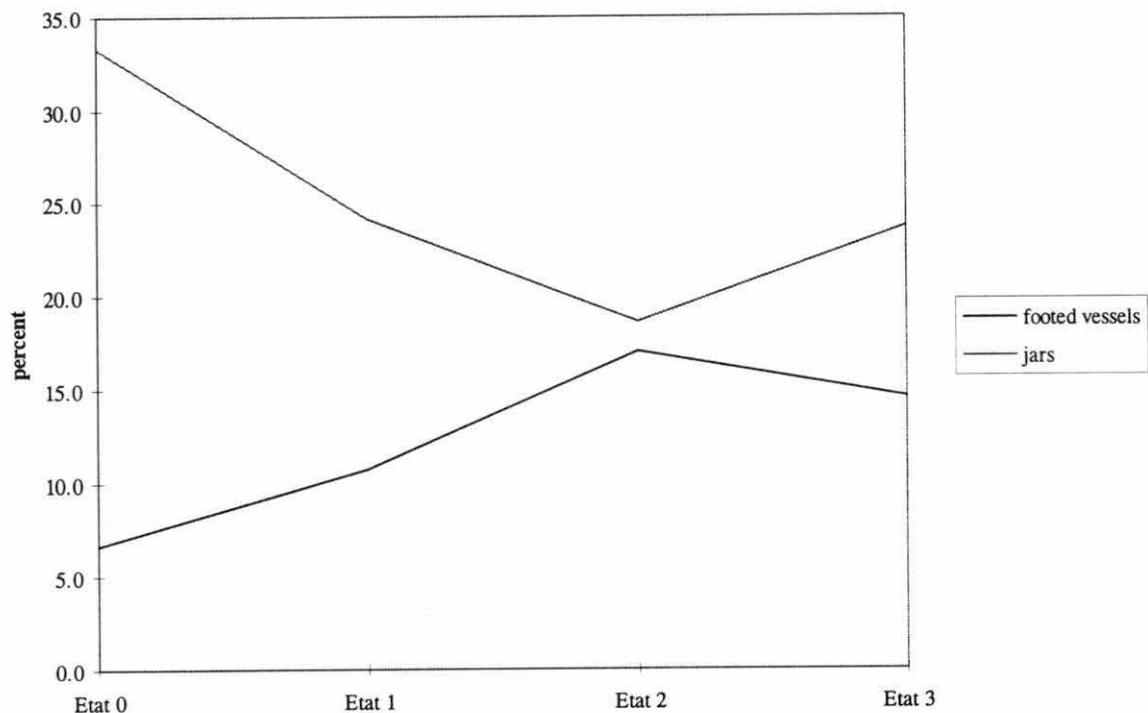


Figure 4.3: (Graph) Footed cooking vessels and jars, percentages in occupation phases

⁴ The two classes contribute to a combined percentage of 40.1 percent in *abandon*.

An increasing incorporation of these Roman cooking methods and the associated vessels may well account for the decreasing percentage of jars in *états* zero through two. In these periods it appears as though footed cooking vessels replace a portion of the jars used for cooking. The slight reversal of this trend in *état* three sees both a decrease in the percentage of footed cooking wares and an increase in the percentage of jars. This lends strength to the observation of a relationship between the two forms and that the increase of Roman style cooking methods may cause a decrease in indigenous ones.

Jars fulfilled a variety of roles in the Romanized kitchen, including that of cooking pot. While the jar decreased as principal cooking vessel during the first two centuries AD, it certainly remained as one of the available cooking vessels in the Gallo-Roman repertoire. The use of the jar for cooking was a basic element in both Celtic and Roman cultures, and the still high numbers of jars as well as sooting on many of the examples from the *Lycée Militaire* indicate their continued use for cooking alongside the footed vessels. The relative proportions of jars and footed cooking vessels shows a decreased emphasis on jars for cooking, with the addition of an alternative method of faster cooking in the footed vessels.

The two cases of change in related pairs of vessel classes shows two methods of incorporating change in foodways during the first three centuries AD. The adaptation of a Celtic bowl to suit a new cooking activity introduced from the Mediterranean shows the development of the Gallo-Roman pattern out of the distinct pre-existing elements. The result is neither an amalgamation of the two nor a movement from one to the other. Instead, a new cultural expression arises from the contact of Roman and Celtic. The grinding bowl is a new form that is only gradually and partially replaced by the functionally equivalent Roman *mortarium*.

The partial replacement of cooking jars by footed cooking vessels presents a more direct adoption of Roman ways of cooking. The footed cooking vessel represents a new method of cooking that does not have an equivalent in the Celtic ceramic assemblage. Unlike the circumstances surrounding the adoption of the *mortarium*, the adoption of this new food activity included the adoption of the associated vessel forms. We see a direct correlation between the decrease of jars and the increase of footed cooking vessels, and in the final period of occupation, a slight reversal of this trend. It appears as though some of the jars previously used for cooking are being replaced in the Gallo-Roman repertoire by footed cooking vessels (both plates and *marmites*), which represent an expansion and increase in the flexibility of the assemblage.

Explanations of the patterns

The two very different patterns of change in these instances are not ones that are easily explained or predicted. Why did the local people choose to create a new form out of a familiar vessel rather than directly adopting the Mediterranean tools for grinding? Perhaps the local production of grinding bowls was simpler and easier than transporting the heavy *mortaria* from distant production centers before they were produced locally, although this argument is tempered by the very early production of *mortaria* at Chalon-sur-Saône, at a distance of less than fifty kilometers from Autun. Perhaps the specialized *mortaria* were considerably more expensive than their indigenous-style counterparts. With their distinctive form and limited range of colors, *mortaria* were slow to catch on in the Celtic kitchen; the continuation of the indigenous bowl form and its adaptation for a new use may have been an aesthetic choice, influenced or not by ideological issues. Perhaps the oxidized *mortaria* were at first not appealing to the Celtic taste in kitchen tools, and there was simply a preference for the more familiar form of the grey conical bowl. It is hard to overlook, however, the possibility that this preference was an ideological statement of resistance against Roman patterns of daily behavior, expressed in the choice against a household item that seems to represent the Mediterranean so strongly in both appearance and function.

Very similar questions can be posed for the direct adoption of the footed cooking vessel. Was this form simply the easiest and most useful version of possible vessels available for this purpose? Are we overlooking a Celtic contribution to the form as it appears at the *Lycée Militaire*? The rim variations on both the cooking plates and *marmites* include some forms that are similar to pre-Roman jars found in Gaul. However, these forms are remarkably individual, and as different from one another as they are similar to Roman rim forms.

These data do not produce answers to why these responses to culture contact occurred as they did, but they present versions of how Gallo-Roman society incorporated Roman elements, and how it responded to foreign influence by developing a style of its own, different from Celtic, and still different from Roman. These changes in foodways represent a host of changes that occurred in the realm of private life, within the experience of the ordinary resident of *Augustodunum*. It is particularly notable that the changes took place during the centuries, not decades, following the conquest of Gaul. The political changes were largely completed within a generation or two following the Augustan reforms. While the political changes accompanying annexation had an impact on the lives of many citizens, they likely created the greatest changes in the experience of the elite, the classes of society directly involved in the governance of Celtic and then Gallo-Roman society. Changes in foodways occurred in the non-elite classes, and developed slowly throughout the Roman

period in southern Burgundy. By the end of this period, the foodways experienced by an individual in *Augustodunum* were probably as different from those in Rome as from those at Bibracte.

VESSEL CLASSES BY CONTEXT TYPES

In order to take a closer look at the sources of variation (and stasis) in the ceramic assemblage, it is useful to return to the archaeological contexts that produced the ceramic data. The proportions of the eleven ceramic classes are examined by context type across the three *états* of occupation (excluding *état* zero on the basis of its small numbers and *abandon* because of its differing nature), and by *état* for differences within the contexts of each period. Context type is the most suitable unit of analysis at this point, selected rather than individual context (stratigraphic unit) because the variety in individual stratigraphic units includes contexts with very few sherds and ones with extremely large numbers of sherds where the comparison of percentages of vessel classes may be skewed.

As indicated in the discussion of the assemblage as a whole, the three *états* are remarkably similar in their vessel class percentages. It appears that among the ten vessel classes (and the unidentified component) in these three time periods, there is a general fingerprint in the Gallo-Roman kitchen (speaking specifically of this site) for the percentages of the total repertoire made up by each of the identified categories. This no doubt corresponds with the number of vessels in use at any one time, rates of breakage, and frequency of the various use activities. The similarity of the profiles of the three occupation *états* indicates that there was an overarching consistency in these factors throughout the occupation of the site. Or in essence, the footprint of the Gallo-Roman kitchen remains largely the same. In general, the categories with large numbers in any of the *états* such as bowls, cooking plates, lids, jars, liquid storage vessels, and *mortaria* always had greater numbers than the smaller categories such as plates and storage jars. It must not be assumed, however, from these profiles, that in the three *états* the context of the vessel classes is the same. In a hypothetical instance, the occurrence of one vessel class might move from occupation contexts in an early phase to dump contexts in later phases. The contribution of the different contexts types of the vessel categories in the three *états* is discussed below.

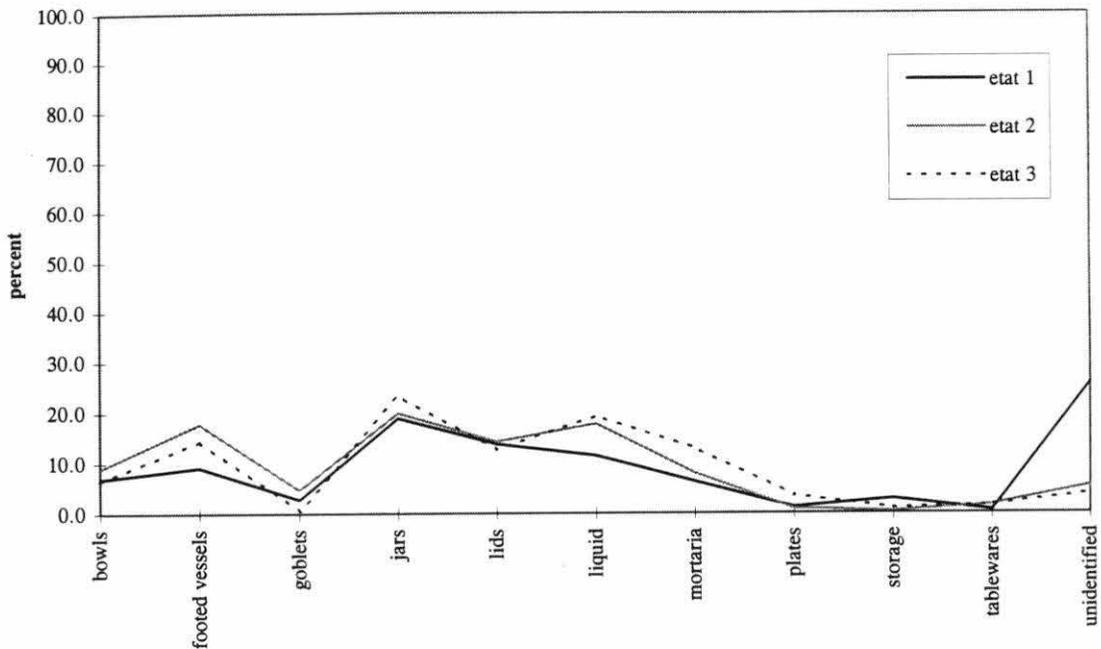


Figure 4.4: Percentages of vessel classes, états one through three

Comparison of context types

To determine whether the vessels were disproportionately represented by any of the context types, the patterns of vessel quantities within contexts types was examined. For each of the occupation phases états one through three, seven types of contexts were identified from excavation records and studied for patterns in the quantities of the eleven vessel classes. These types of depositional context are: architecture⁵, destruction/abandon, dump, feature fill, fill, industrial feature, and occupation. These are drawn directly from excavation records of the individual stratigraphic units.

These are not parallel, but rather are nested categories. The categories are not grouped at equal levels of detail, since they describe contexts among which some are more specialized than others. For example, a feature fill is a more specific designation than general fill, which in turn may overlap in some instances with dump. However, since the categories were applied consistently in the excavation records, they provide an accurate means of comparing the three periods of occupation.

⁵ These contexts include walls and floors, for example, which occasionally include ceramic sherds and other artifacts in their matrices.

One possible result of the comparison would be a similarity among like contexts through the different *états*. In other words, that one type of context such as feature fill will have a characteristic that remains consistent throughout the three *états*. If there is a discernable pattern of change such as the primary source of one vessel class moving from one context type to another, then this would indicate the origin of changes in the assemblage discussed above.

Most of the contexts represent the deposition of archaeological remains in non-occupation settings. Only the occupation contexts and the industrial features represent artifacts deposited in their use contexts. The other five context types represent either the disposal of refuse away from the contexts in which they were used (dumps, some fills, and destruction/abandon) or the subsequent re-deposition of materials taken from dumps and used in building or leveling activities (architecture, and some fills including feature fills). The re-use of deposited material, such as from dumps, is common in urban contexts, and is a regular characteristic of Roman sites, where rubble construction is ubiquitous and fill layers as leveling prior to the next building phase are the norm. This regular churning of cultural material leads to contexts whose contents are mixed chronologically, and to the separation of systemically associated artifacts between stratigraphic contexts. It may also partially explain the high incidence of residual artifacts noted in the study of the *céramique fine*, as early artifacts appear in contexts that were re-deposited after the end of their regular life, re-entering the archaeological record at a considerably later time than their original deposition.

Percentages of vessel classes within contexts for each état

The percentages of vessel classes for context types within each *état* are presented in Tables 2-4. These are tabulated using the counts of individual vessels, and then transformed into percentages of the categories within each *état*. The categories represent the ten functional categories of vessels plus the unidentified category, and seven context types. The total profile for each *état* is also presented.

Table 4.2: Percentages of Vessel Classes by Context Type, Etat 1

Class	Archit.	Destr.	Dump	Feature	Fill	Industr.	Occup	TOTAL
bowls	0	0	18.2	6.3	3.6	7.4	9.5	6.9
foot. vess.	0	0	9.1	3.1	5.5	18.5	14.3	9.2
lids	0	0	0	9.4	16.4	14.8	19.0	13.8
goblets	0	0	18.2	0	5.5	0	0	2.9
jars	0	0	18.2	28.1	23.6	18.5	9.5	19.0
liquid	66.7	0	18.2	15.6	3.6	22.2	2.4	11.5
mortaria	0	0	9.1	0	7.3	7.4	9.5	6.3
plates	33.3	0	0	0	0	0	0	1.1
storages	0	100.0	9.1	6.3	0	0	2.4	2.9
tableware	0	0	0	3.1	0	0	0	0.6
unident.	0	0	0	28.1	34.5	11.1	33.3	25.9

Table 4.3: Percentages of Vessel Classes by Context Type, Etat 2

Class	Archit.	Destr.	Dump	Feature	Fill	Industr.	Occup	TOTAL
bowls	0	12.8	5.7	11.1	8.3	0	5.6	8.9
foot. vess.	0	22.4	12.9	33.3	18.8	0	13.0	17.8
lids	0	14.4	8.6	11.1	18.8	12.5	18.5	14.3
goblets	0	4.8	2.9	22.2	2.1	25.0	3.7	4.8
jars	0	20.8	21.4	0	18.8	50.0	16.7	20.1
liquid	0	6.4	37.1	22.2	14.6	12.5	22.2	17.8
mortaria	0	7.2	10.0	0	8.3	0	9.3	8.0
plates	0	1.6	0	0	2.1	0	0	1.0
storage	0	0	0	0	0	0	1.9	0.3
tableware	0	4	0	0	0	0	0	1.6
unident.	0	5.6	1.4	0	8.3	0	9.3	5.4

Table 4.4: Percentages of Vessel Classes by Context Type, Etat 3

Class	Archit.	Destr.	Dump	Feature	Fill	Industr.	Occup	TOTAL
bowls	0	4.4	7.0	0	13.3	20.0	5.9	6.5
foot. vess.	0	14.6	17.5	9.4	12.0	0	13.7	14.4
lids	16.7	12.1	12.0	9.4	19.3	0	9.8	12.7
goblets	0	1.0	1.0	0	0	0	0	0.7
jars	16.7	27.2	22.5	21.9	18.1	40.0	21.6	23.4
liquid	41.7	21.4	16.0	21.9	16.9	40.0	19.6	19.4
mortaria	25.0	14.6	12.5	15.6	9.6	0	9.8	12.9
plates	0	1.0	5.0	15.6	3.6	0	2.0	3.6
storage	0	1.5	0.5	0	1.2	0	2.0	1.0
tableware	0	0.5	3.0	3.1	1.2	0	0	1.5
unident.	0	1.9	3.0	3.1	4.8	0	15.7	3.9

Dissimilarity between context types, within états

The variation between the percentages of vessel type within each context type (per *état*) was compared using a city-block metric⁶, the results of which are presented below in tables 5-7. The city-block metric is a dissimilarity measure in which the distance between two items is the sum of the absolute differences in value for each variable. The higher numbers on the dissimilarity matrices represent context types that are less similar to each other. The greatest possible dissimilarity is 200, while two exactly similar contexts would have a coefficient of zero, representing no difference between them. The histograms present in a visual format the spread of dissimilarity coefficients between the context types within the individual *états*.

⁶ The Robinson coefficient, specifically derived for and often used in archaeological studies is one type of city-

Table 4.5: Dissimilarity Matrix Between Context Types in Etat 1

	Architect- ure	Destruction	Dump	Feature fill	Fill	Industrial feature	Occupation
Architecture	-						
Destruction	200.0	-					
Dump	163.7	181.9	-				
Feature fill	168.8	187.4	101.1	-			
Fill	192.8	200.0	112.7	57.2	-		
Indust. feature	155.5	199.9	79.4	71.9	71.7	-	
Occupation	195.1	195.1	116.0	77.5	43.9	66.0	-

(Average = 135.1)

Table 4.6: Dissimilarity Matrix Between Context Types in Etat 2

	Architec- ture	Destruction	Dump	Feature fill	Fill	Industrial feature	Occupation
Architecture	-						
Destruction	100.0	-					
Dump	100.0	68.2	-				
Feature fill	99.9	88.3	95.3	-			
Fill	100.1	33.7	55.3	90.2	-		
Industr. feature	100.0	111.0	109.2	108.3	108.3	-	
Occupation	100.2	55.5	41.0	88.9	26.1	109.4	-

(Average = 85.2)

Table 4.7: Dissimilarity Matrix Between Context Types in Etat 3

	Architec- ture	Destruction	Dump	Feature fill	Fill	Industrial feature	Occupation
Architecture	-						
Destruction	70.7	-					
Dump	85.7	26.4	-				
Feature fill	72.9	40.0	39.6	-			
Fill	80.3	44.8	34.0	57.4	-		
Industr. feature	86.7	94.2	109.0	112.4	103.4	-	
Occupation	88.4	33.7	35.5	50.3	39.5	105.9	-

(Average = 67.2)

Dissimilarity across états

The dissimilarity between the same context types across *états* was also calculated. Those results are presented in Tables 8 (a-g).

Table 4.8a: Dissimilarity Between Architecture Contexts Across Etats

	Architecture, Etat 2	Architecture, Etat 3
Architecture, Etat 1	100.0	116.7

(Average = 108.4)

Table 4.8b: Dissimilarity Between Destruction/Abandon Contexts Across Etats

	Destruction, Etat 2	Destruction, Etat 3
Destruction, Etat 1	200.0	197.2

(Average = 198.6)

Table 4.8c: Dissimilarity Between Dump Contexts Across Etats

	Dump, Etat 2	Dump, Etat 3
Dump, Etat 1	73.7	78.3

(Average = 76.0)

Table 4.8d: Dissimilarity Between Feature Fill Contexts Across Etats

	Feature Fill, Etat 2	Feature Fill, Etat 3
Feature Fill, Etat 1	131.1	87.6

(Average = 109.4)

Table 4.8e: Dissimilarity Between Fill Contexts Across Etats

	Fill, Etat 2	Fill, Etat 3
Fill, Etat 1	68.9	81.4

(Average = 75.2)

Table 4.8f: Dissimilarity Between Industrial Feature Contexts Across Etats

	Industrial Feature, Etat 2	Industrial Feature, Etat 3
Industrial Feature, Etat 1	112.9	103.7

(Average = 108.3)

Table 4.8g: Dissimilarity Between Occupation Contexts Across Etats

	Occupation, Etat 2	Occupation, Etat 3
Occupation, Etat 1	61.1	63.0

(Average = 62.1)

This exercise reveals that for context types across the three *états*, in some of the cases there is more consistency between types of context of different time periods than between the various types of the same time period. In some of the context types, there is a footprint of vessel class percentages that is persistent throughout the three periods of occupation at the site. For the context types with the clearest patterns (occupation, fill, dump with the exception of *état* one, and destruction/abandon with the exception of *état* one), the profiles resemble the profiles of the three *états* as a whole (all contexts combined). It may be possible to postulate that this is a general relationship of the percentage of vessel classes in the systemic context. For example, highest quantities of liquid storage and serving vessels, and jars, fewer lids, footed cooking vessels, bowls, and *mortaria*, and fewest storage jars, plates, goblets, and other table wares. Three context types show considerably less patterning (industrial feature, architecture, and feature fill), and it would be possible to state that their compositions are either due to specific use activities or taphonomic effects involved with re-deposition.

As a whole, though, it is not possible to say that there is a single pattern that appeared: while some of the context types display clear similarity across the three *états*, the average of the dissimilarity coefficients of the seven contexts across *états* 105.4, and the average of the differences between *état* totals is 95.8, indicating that there is slightly more dissimilarity between same-type contexts of different *états* than there is between the *états* themselves.

CONTRIBUTIONS OF CONTEXT TYPES WITHIN ETATS

The percentages of the vessel types for each of the contexts were compared with the overall percentages in their respective *états*. This is a measure of the dissimilarity of each of the context types from the overall profile of its *état*. This reveals the relative contribution of the context types to the make-up of the *état* profile. As presented in the city-block metric, the lower numbers represent the similar context types, and the higher numbers are those that present the most diversity within the *état*. The similar coefficients represent context types that resemble the overall footprint of vessel types identified in the assemblage.

Etat one

Table 4.9: Dissimilarity Coefficients, Context Types and Combined Contexts, Etat 1

	Total of all contexts, Etat 1
Architecture, Etat1	174.9
Destruction/Abandon, Etat 1	194.3
Dump, Etat 1	84.6
Feature Fill, Etat 1	42.7
Fill, Etat 1	38.9
Industrial Feature, Etat 1	45.4
Occupation, Etat 1	47.2

Greatest contributions of dissimilarity marked in bold.

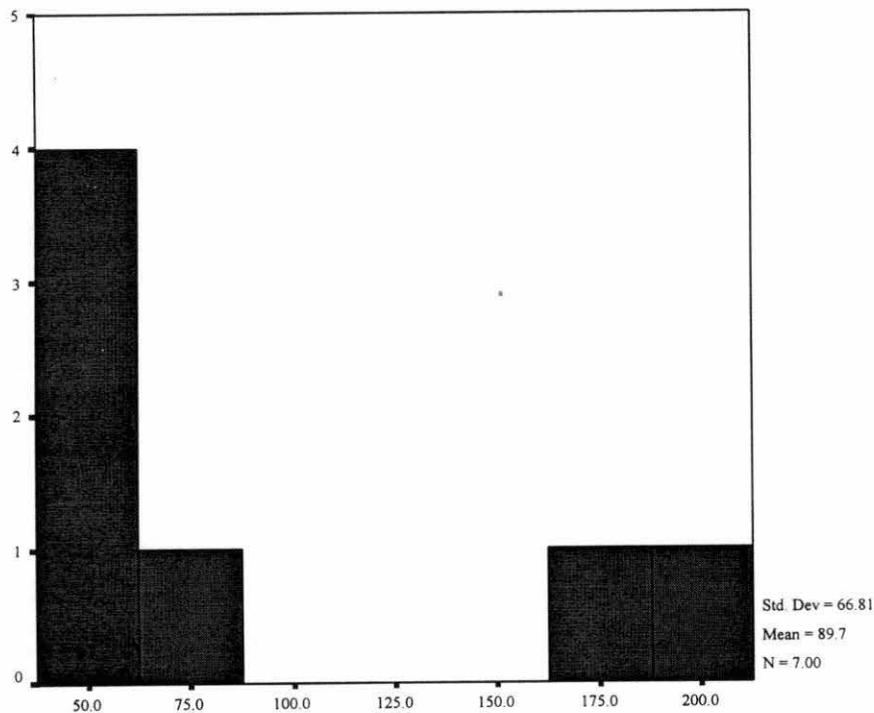


Figure 4.5: Histogram of dissimilarity coefficients between total of Etat 1 contexts and Etat 1 context types

The strongly bimodal distribution of the dissimilarity coefficients indicates that the majority of the context types follow the overall profile of percentages in *état* one, and the context types that do not follow the pattern are more than slightly different. Two contexts, architecture and destruction/abandon, contribute most of the dissimilarity in *état* one.

Etat two

Table 4.10: Dissimilarity Coefficients, Context Types and Combined Contexts, Etat 2

	Total of all contexts, Etat 2
Architecture, Etat 2	100.0
Destruction/Abandon, Etat 2	25.0
Dump, Etat 2	45.2
Feature Fill, Etat 2	79.1
Fill, Etat 2	19.5
Industrial Feature, Etat 2	100.2
Occupation, Etat 2	30.6

Greatest contributors of dissimilarity marked in bold.

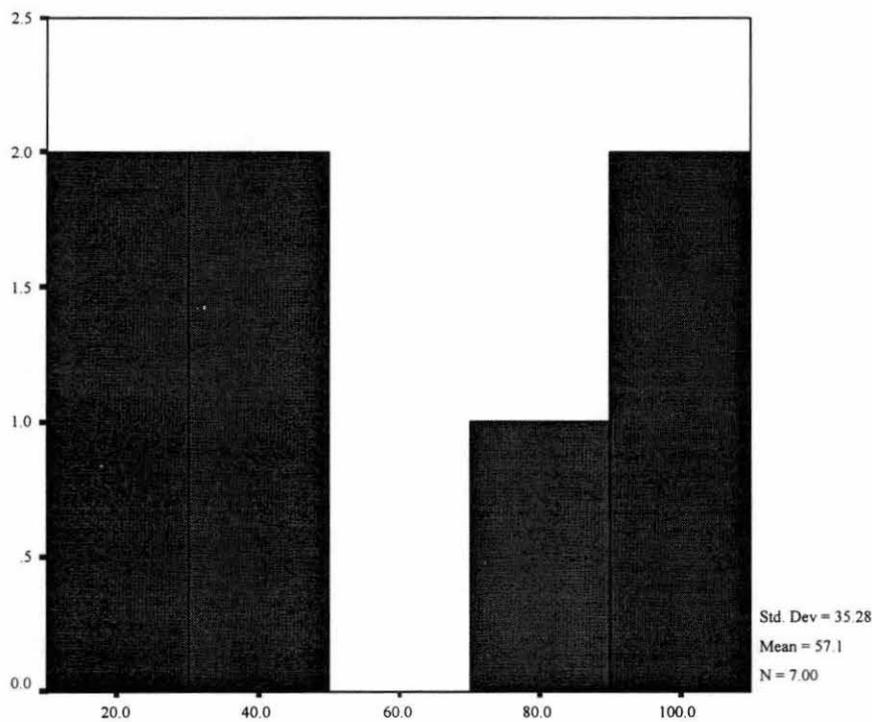


Figure 4.6: Histogram of dissimilarity coefficients between total of Etat 2 contexts and Etat 2 context types

État two, like *état* one, presents a strongly bimodal distribution of dissimilarity coefficients. In this case, four context types are extremely similar, while three are less so. In comparison with *état* one, the individual context types (Industrial feature, Architecture, and Feature fill) contributing dissimilarity are more like the whole of *état* two than are the dissimilar context types different from the whole of *état* one.

Etat three

Table 4.11: Dissimilarity Coefficients, Context Types and Combined Contexts, Etat 3

	Total of all contexts, Etat 3
Architecture, Etat 3	76.7
Destruction/Abandon, Etat 3	16.8
Dump, Etat 3	13.6
Feature Fill, Etat 3	37.6
Fill, Etat 3	29.0
Industrial Feature, Etat 3	101.4
Occupation, Etat 3	25.9

Greatest contributors of dissimilarity marked in bold.

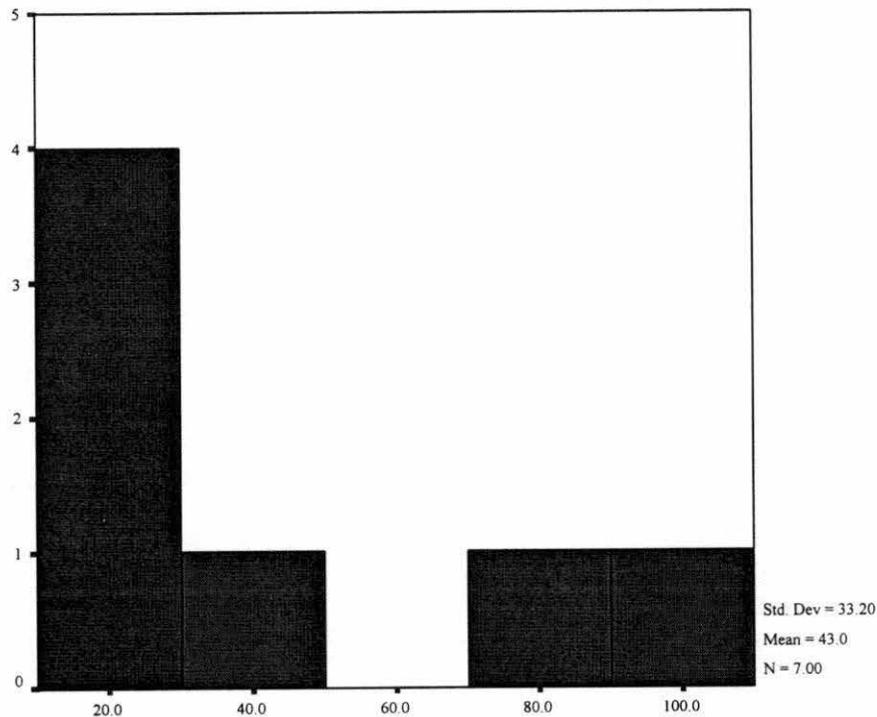


Figure 4.7: Histogram of dissimilarity coefficients between total of Etat 3 contexts and Etat 3 context types

État three, like *états* one and two, presents a bimodal distribution of dissimilarity coefficients. And like *état* two, the relative contribution of the more dissimilar context types is less than it is in *état* one.

Explanation of dissimilarity: sample size

The numbers of vessels in the context types presents the most direct explanation for this bimodality seen in the histograms of the dissimilarity matrices. All of the coefficients marked in bold (Tables 4.9-12) for their significant contributions of dissimilarity to the overall *état* profile have a total number of vessels less than or equal to 13. Three context types have vessel counts of less than 13 but do not have profiles which are significantly dissimilar to the overall profiles from their respective *états*. This is also illustrated in Figure 4.7, a histogram of the vessel counts in the context

Table 4.12: Vessel Counts in Context Types

	Archit.	Destr.	Dump	Feat.	Fill	Industr.	Occup.	Total
Etat 1	6	(1)	(11)	32	55	27	42	174
Etat 2	(0)	125	70	9	48	8	54	314
Etat 3	12	206	200	32	83	5	51	589

Greatest contributors of dissimilarity marked in bold.

Numbers less than 13 not contributing greatly to dissimilarity denoted in parentheses.

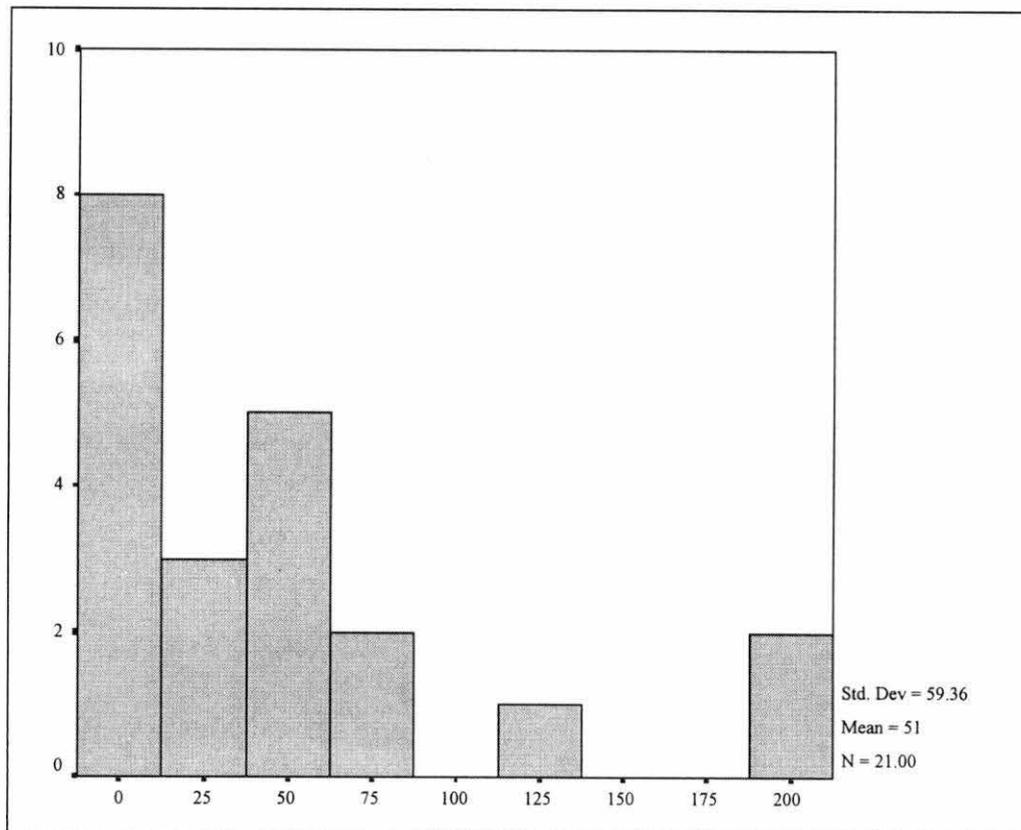


Figure 4.8: Histogram of vessel counts in the context types of the three états

types of the three *états*. Although a low number of vessels does not automatically create a profile dissimilar to that of the *état*, the reverse may be stated: for this assemblage, once a minimum sample size is achieved, there is a predictable profile, or ratio between vessel classes. This corresponds to the overall profile of the *état*, and can be considered an indicator of the food-related behaviors of each horizon in which the ten functional categories are utilized in proportion to one another; the slight evolution in these proportions might be attributed to cultural factors rather than taphonomic ones.

Conclusions

The results of this study indicate that there is a pattern in the proportions of vessel classes for the entire assemblage, and these proportions shift slightly through time (cases in point: bowls and *mortaria*, jars and footed cooking vessels). In identifying sample size as the primary contributing agent to the dissimilarity of some context types, we may safely conclude that the decrease in Celtic style vessels (bowls in place of *mortaria* and jars partially replaced by footed cooking plates) is a change in vessel use in systemic context rather than the movement of these categories from systemic to archaeological contexts. The slight shift in proportion is a cultural change, rather than an artifact of deposition.

To further examine the nature of these contexts, it would be necessary to include all classes of material, particularly all ceramic classes as well as bone and metal. Under such scrutiny, the contexts might be able to answer questions about dumping practices including catchment size (cf. Boone 1987), re-deposition of material in building events, and the specific activities associated with the individual stratigraphic units.

CHAPTER V: CONCLUSIONS

CERAMIC DESCRIPTION

Ceramic description is never simply description. The presentation of a large ceramic assemblage is essentially imbued with the theoretical standpoint that led to the study. The current ceramic study is influenced by several streams of archaeological thinking. The archaeological traditions that converge here are Romanization studies, the study of ceramic vessel form and function (e.g. Braun 1983; Millett 1987), and site formation and interpretation, especially as these apply to urban contexts (e.g. Boone 1987; Millett 1979; Schiffer 1995). These sub-fields combine in a contribution to Gallo-Roman studies whose first objective is to further the understanding of a collection of common wares through the exposition of a significant number of vessel forms with their associated fabric descriptions. But this study also attempts to interpret in a cultural context the changes in an assemblage during a period of known political climate, and it points to a series of questions for future research into the study of archaeological contexts and re-deposition, residuality, and the understanding of excavated stratigraphic units.

The descriptive component of this dissertation provides a catalogue of forms and fabrics that may be usable by other archaeologists in the construction of a comparative and synthetic ceramic study in southern Burgundy. The level of detail provided is hopefully useful to the researcher who attempts to identify similar vessels, or the same forms in different contexts. The numerous vessel form illustrations and the methodical presentation of a set of observations about fabric and surface treatment are intended to facilitate future identification and to provide the basis for comparison. With enough studies of this nature made available to the researchers addressing the categories of poorly understood ceramics from Southern Burgundy, eventually it will be possible to construct a comprehensive typo-chronology for the Gallo-Roman period. A synthesis of ceramic interpretations from various sites and the publication of that work is currently a crucial missing element in archaeological research in the area.

The site of the *Lycée Militaire* is ideal for beginning a study of this nature in that it provides both use contexts and ceramic production contexts. Much attention has recently been accorded the ceramic producing sites in Burgundy (see in particular *S.F.E.C.A.G.* 1996), but the chronological

interpretation of these wares and the production activities are best understood through their study in tandem with the occurrence of the wares on consumer sites. The *Lycée Militaire* offers both types of contexts. While the productions of two *Lycée Militaire* workshops have been summarized elsewhere (Alfonso, forthcoming), here they are examined with the intent to interpret them in their use contexts as well. Where possible, dates provided by use contexts have been assigned to the productions of the ceramic workshops. The utilitarian ceramics from the use contexts have been presented according to occupation horizon, or *état*.

CERAMIC STUDY AS CULTURAL INTERPRETATION

The *Lycée Militaire* is a site that was settled during the Augustan reforms that transformed the generation-old province of Gaul by establishing new settlements and new systems of provincial government. The city of *Augustodunum* that was founded through these reforms was Roman at its establishment. Differing from its parent settlement of Bibracte, *Augustodunum* was set out with an orthogonal street system and with a presumably Roman form of governance, but with an ethnically Celtic population. Excavation evidence from the *Lycée Militaire* and other sites in Autun indicates that within the city there were separate areas of elite residential dwellings, public architecture, and an industrial quarter that provides the data for this study. Without evidence to the contrary, it can be suggested that the industrial quarter excavated on the grounds of the *Lycée Militaire* probably housed ordinary citizens of an artisan class on the second storeys of the excavated workshop buildings. Apart from members of the elite class who were integrated into a Roman system of government as the local leaders, these residents participated in trades that were similar to those practiced at Bibracte (Chardron-Picault and Ducreux 1993), and probably did not have a particular, overarching interest in the increasing Roman-ness of local society. The residents of the industrial quarter were ordinary people, likely of indigenous ancestry, who were living in a Romanized physical and political environment. This study investigates the common ware ceramic assemblages used and produced by these individuals, and considers these wares a part of the cultural adaptation to the changes brought about by Roman rule.

Stasis and change in ceramic patterns

The ceramic assemblage from the *Lycée Militaire* was already Roman in nature by the first period of occupation of the industrial quarter. The utilitarian wares from *état* zero are few in number but include *mortaria*, footed cooking vessels, and liquid (presumably wine) storage and serving vessels, all of which are markers of Roman foodways. The assemblages from *états* one through three

and *abandon* all retain a mixture of Celtic and Roman elements with no additions or losses of categories not accounted for by the small numbers of *état zero*. This stability indicates that a Roman character was already established in the common ware assemblage and prevailed through the Gallo-Roman period. Roman culinary practices were already introduced during the first phase of occupation, or *état zero*. *Mortaria* indicate the grinding of aliments in preparation, a Roman cooking practice attested by Apicius, footed cooking wares suggest the broadening of cooking methods from the Celtic jar to include faster cooking methods such as frying or dry heat methods over an open fire, and the liquid containers or *cruches* indicate that wine was a part of the diet throughout the site's occupation.

The proportions of Celtic and Roman vessels change slightly throughout the periods of occupation of the site. The gradual replacement of the Celtic form of bowl (some example of which had been adapted for grinding for use in Roman culinary practices) with the Roman *mortarium* and the increasing presence of the footed cooking wares and related decrease of the generalized jar form are indicators of a slow movement away from traditionally Celtic foodways and toward Roman habits. It is not at all surprising that this shift occurred, but its timing during the first three centuries AD indicates that the cultural changes associated with incorporation into the Roman state were much slower than might have been presumed, with a considerable lag behind the political changes of the first century BC and early first century AD. Cultural changes were certainly not instantaneous upon Gaul's annexation, nor would they have occurred automatically with the establishment of the Augustan settlement at present-day Autun. The political changes that were wrought with the movement of the Aeduan populace from Bibracte to Augustodunum were not necessarily superficial, but they were an enforced set of changes that were imposed at a given point in time. The implications of the slow movement from one set of habits toward another are indications of a deeper manner of change, one that alters the daily habits that are rooted in cultural tradition. These are the indicators of a cultural, rather than imposed, political, Romanization.

Urban and rural patterns of Romanization

An important component of this research is that it examines the Romanization of a non-elite segment of an urban society. It has often been concluded that the greatest changes during Romanization were occurred among the indigenous elite and in urban contexts. These have been contrasted to the non-elite and rural segments of society, where it has been modeled that change is less likely to occur. Elites employed the status markers of Mediterranean goods (pre- and post-conquest) and preferential positions in provincial Roman government (post-conquest), and it has

been remarked that change was more profound among the privileged classes than among the others. Cities, with the more regular influx of markers of supra-regional status, and at times seats of provincial government, are largely considered the loci of greater change than are the isolated and sometimes more independent rural settlements.

Public and private spheres

The *Lycée Militaire* provides the example of an urban non-elite segment of society. The food preparation and cooking patterns apparent in the *céramique commune* assemblage are indicative of a relatively Romanized society. While a truer comparison could be made if similar studies were made on other sites in the region, it seems as though Romanized culture was more than a veneer in this context. Some food-related items may be adopted for status; drinking paraphernalia in particular can be seen as adding to an indigenous person's (often a leader's) association with Mediterranean prestige. The possession of a set of drinking cups, or being able to provide wine for one's associates, can both be seen as increasing an individual's prestige. Part of the prestige-increasing element is that these are, or can be, translated into public events. They identify the individual as having connections with the Mediterranean, carrying a heightening of social status.

Common wares, on the other hand, belong to a more private part of an individual's (or household's) possessions. As such, Roman elements among the common wares indicate a level of Romanization in behavior which is intended to be functional, rather than intended for display. While the choice of foods and their preparation sometimes become outward displays of cultural identity, their daily patterns, which would be identified in a corpus of utilitarian ceramics, belong to the private sphere.

Cultures change in the private behaviors more slowly than they do in public ones. The change in cooking and food preparation methods shows a degree of thoroughness in the incorporation of Augustodunum's residents into the Roman world. This non-elite, urban population, over the course of several centuries, altered its patterns of private daily life. This was not an enforced change, but one which evolved, without eliminating some of its indigenous characteristics, into a society with a distinctly different flavor than pre-contact Celtic society.

DIRECTIONS FOR FURTHER RESEARCH

The analysis of context types in Chapter IV raises a series of questions about site formation and interpretation. These issues are not limited to ceramic studies, but the prevalence and durability of ceramics makes them an excellent artifact category for their exploration. Beyond the study of

ceramics in production and use contexts, there are a host of questions about the post-depositional events that impact the ceramic assemblage and its interpretation. The issues at hand are patterns of dumping and re-deposition, the latter caused by the intensive use of space and re-building in this urban context. In the *Bâtiment Est* of the *Lycée Militaire*, the majority of stratigraphic units containing common wares were classed as context types that are interpreted as secondary deposits. The events that caused the re-deposition of ceramics, presumably taken from primary dumps, are as influential in the formation of this assemblage as are the original activities in which the ceramics were utilized.

The study of individual stratigraphic units and types of depositional units must be done in conjunction with the site excavators, and ideally it should include all context types rather than being limited to those containing utilitarian ceramics. Since the current research was designed to study specifically the production and use of ceramics in *Augustodunum*, that work is beyond the scope of this study. However, the preliminary examination of the contexts that contained *céramique commune* indicated that there were patterns to be observed even in this limited assay, and further research of this kind is warranted on this or similar sites.

THE PLACE OF COMMON WARES IN STUDIES OF ROMANIZATION

There is no appropriate excuse for a lack of detailed description of the ceramic assemblages, but it has been noted that the *céramique commune* of Gallo-Roman Burgundy is notably nondescript. In some cases it bears a striking resemblance to utilitarian ceramics of other periods in the region, allowing a degree of confusion between Gallo-Roman common wares and the utilitarian ceramics of earlier and subsequent periods (cf. Green et al. 1987:66). This category of ceramics presents particularly unrewarding assemblages for ceramic description, and has therefore gone under-published in the archaeological literature. The *céramique commune* in general has remained unidentifiable or at least largely unidentified in spite of its prevalence in excavation contexts. In particular for the grey wares, or *céramique commune grise*, have had almost no detailed description to date.

I attribute the lack of typo-chronology primarily to the lack of available description that limits inter-site comparison of ceramics. However, this difficulty is not separable from the actual uniformity within the ceramic class through time. There is considerable homogeneity witnessed in the assemblages that is due to an unchanging character of utilitarian ceramics. These vessels are not subject to the changes of style that challenge elite ceramics, and their basic functional character often retains unaltered features of form, fabric and finish that appear again and again in the assemblages of

successive centuries. The difficulty in establishing typologies and chronologies of utilitarian ceramics during the Roman period is not limited to Burgundy, and it has been noted that within Roman contexts “in general, coarse-wares cannot be dated with precision...[and] it is rash to assume that their lifespan will be restricted or that the typology will develop in a consistent or logical way” (Peacock 1982:162). This unchanging nature of utilitarian ceramics combined with other difficulties in regional archaeology (see Chapter I) has presented particular difficulty in the establishment of clear common-ware chronologies in Burgundy as elsewhere.

It is usually suspected, as in this research project, that even the utilitarian ceramics that appear chronologically indistinct do contain characteristics that are dependent on their chronology, and that these are discoverable given the appropriate level of detailed analysis. However, it must be concluded that ceramic vessels that are highly utilitarian in nature do not always have characteristics that evolve. Unlike the chronologically sensitive stylistic traits that adorn prestige ceramics, many common wares may have fabrics and surface treatments as well as forms that remain constant during a period of several centuries. Since utilitarian vessels are often not decorated in significant ways, they do not follow the seriation models developed for fine ware categories. Change in utilitarian vessels is governed by function rather than aesthetics (Peacock 1982:162). Mechanical considerations often outweigh expressions of style in the context of utilitarian ceramics, and as a result there may be little evolution of styles of functional vessels. Since in many cases stylistic or aesthetic changes do not apply to the utilitarian vessels in question, there are assemblages for which there is no pattern of change in form and fabric.

Further continuity of vessel fabrics and surface treatments was caused by a stasis in pottery technology. The late Iron Age adoption of the potter’s wheel occurred rapidly, and firing atmospheres attributed to Mediterranean or indigenous traditions, were also co-existing by the earliest evidence at the site of the *Lycée Militaire*. In the Gallo-Roman context of this dissertation, ceramic technology did not change greatly, and the utilitarian fabrics are remarkably similar throughout the first three centuries AD. The variations of color resulting from conditions of firing atmosphere vary even within the same productions from the *Lycée Militaire* and do not appear to be chronological indicators, and the incidences of slipping or mica coatings are similarly variable within the same temporal ranges. The most notable distinction between fabrics present at the site has been attributed to geographic rather than chronological factors. The *Lycée Militaire* fabrics are essentially fine-grained (regardless of temper size) and appear curd-like in the fresh break, and the mortar fabrics that are much sandier are presumed to be produced at some location other than the *Lycée Militaire*.

Vessel form may yet yield patterns that are chronologically recognizable, although these patterns will emerge only with more comparative studies of stratified assemblages. These may eventually provide some chronological indicators that allow wider interpretations of dating from common wares. Similar studies of stratified assemblages may build on the start made in this dissertation, and comparison of assemblages from dated contexts will eventually suggest date ranges for more vessel types than is currently known. At the moment, this research is limited to describing the dated collections as a preliminary chronological contribution.

The seemingly non-contributing nature of common wares is based on the assumption that pottery is primarily used for dating. The strongholds in ceramic studies have been ceramic seriation, the definition of cultural eras based on vessel decoration styles, and stylistic trends in table wares. It is because of these emphases that the (apparently, or as yet) non-chronologically sensitive utilitarian vessels appear relatively useless as foci of study. For Gallo-Roman contexts in Burgundy as elsewhere, significant assemblages have remained essentially "mute" since they do not contribute to chronological analysis. What has been lacking in these realms is the recognition that ceramics, including and particularly utilitarian ceramics, have contributions to make other than as chronological tools.

Ceramics, long confined within the limits of stylistic analysis and chronological interpretation are like other artifacts, records of human behavior in the past. The interpretation of "pots as tools" (Braun 1983) is much more than the title of an article, it is a truism in current archaeological research. Ceramics are patterned by various human activities, and ceramic research has explored the possible questions that may be posed to particular assemblages. When style is not an element and vessels therefore may not be used for dating, the primary contribution of an assemblage may be information regarding the contexts in which the vessel was made and used. As illustrated in Chapter IV, a collection of ceramics that are poorly understood in terms of chronology and typology may yield data about the practices of food preparation and serving. In this case, vessel form as an indicator of vessel function was identified, and in the analysis of proportions of functional vessel classes, change in food habits was observed.

Whereas chronological questions may be asked of fine wares (prestige ceramics) whose changes are variables of time, the appropriate questions for utilitarian assemblages include research into the patterns of activities that surround their uses and sometimes their production and distribution. Single-site and regional assemblages can answer different questions about human behavior in the past. In regional studies, vessel distribution is apprehensible; and the social organization that underlies the production and consumption of ceramics is further understandable

from that data. Single-site assemblages may provide different information, including the change in specific behaviors through time, as traced in the study of the *Lycée Militaire*. The common feature of both kinds of ceramic studies is that they may assume that archaeological ceramics are artifacts produced and used in social contexts as well as tools used for particular activities. Common ware assemblages may therefore yield understanding of the actions surrounding both production and use.

The use of ceramic data for topics other than chronology best utilizes the characteristics of common wares. This artifact category is rich in possibilities of the interpretation of human behavior, some related to pottery technology itself and others related to foodways, the disposal of refuse, and the patterns of site use and re-use. It is hoped that one of the contributions of this dissertation is the pointing out of possible ways of attaining useful cultural information from a ceramic assemblage that is not useful in usual terms due to the lack of regional typo-chronology.

APPENDIX A: THE CÉRAMIQUE COMMUNE PRODUCTS OF ILOT A

PLATES

The basic plate form from these contexts has a flat bottom and simple side which flares slightly toward the rim. All of the first group of plates (below) belong to this general category. The differences presented in the following vessels are the details of the rim form. The rim has several variants. Some are thicker at the exterior (fig. A.1.1). Others have more of an inward curve (fig. A.1.3) or an inner beak (fig. A.1.4) or a beaded rim (fig. A.1.6). These are all minor variations on the same straight-sided plate with a flat bottom.

- Plate: *claire*, coarse fabric, temper 2-5 mm, micaceous application, rosy beige fabric, thickened rim (fig. A.1.1). This form also occurs in “zoned” fabrics, beige and rosy beige.
- Plate: *claire*, medium textured fabric, temper 2-5 mm, micaceous application, grey-tan fabric, inward-curving rim (fig. A.1.3). This form also appears in an overfired grey.
- Plate: *claire*, medium textured fabric, temper less than 2 mm, shiny and hard red slip (similar to Pompeii red slip), beige fabric, inward-curving rim (fig. A.1.2). A similar form appears in a rosy beige fabric with no slip.
- Plate: *claire*, medium textured fabric, temper less than 2 mm, micaceous application, orange-grey (overfired) fabric, rim forming an internal beak (fig. A.1.4). There are similar forms of the same texture in pale orange with no slip, and in rosy beige and grey (overfired) with a micaceous slip.
- Plate: *claire*, medium textured fabric, temper less than 2 mm, micaceous application, rosy beige fabric, pointed internal rim (fig. A.1.5).

- Plate: *sombre*, medium textured fabric, temper less than 2 mm, light grey fabric with bumpy surfaces, beaded rim (fig. A.1.6). The form also occurs in *claire*, medium textured fabric, temper less than 2 mm, rosy beige.

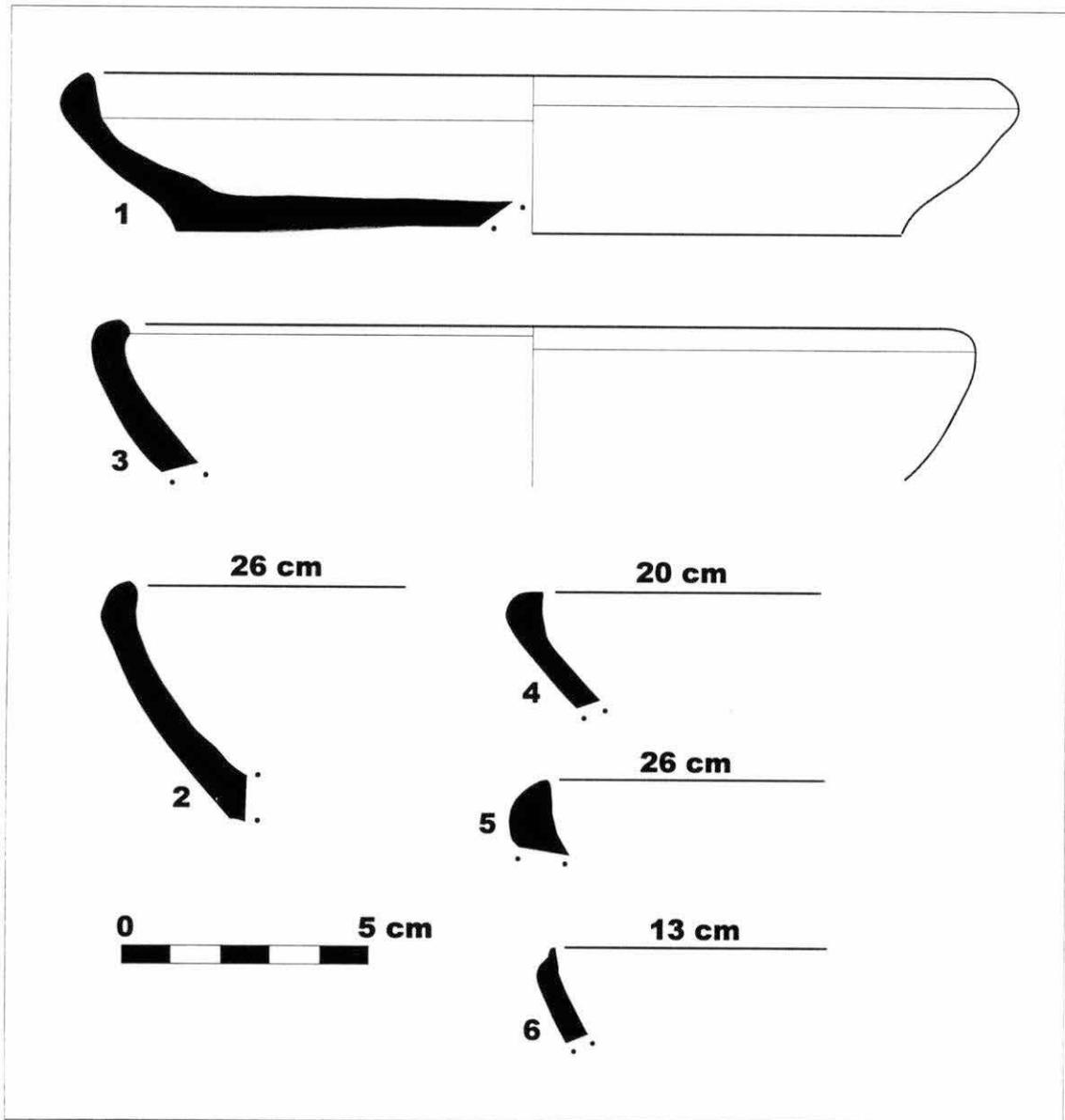


Figure A.1: Plates from Ilot A

Another series of plates provides more variation than the first series. Here the external thickening of the rim can be increased (fig. A.2.1), or the side of the body can be more faceted than

ridged exterior (fig. A.2.5). However, they all retain the basic elements of flat bottom and simple profile.

- Plate: *claire*, medium textured fabric, temper less than 2 mm, micaceous application, rosy beige fabric, externally thickened rim (fig. A.2.1). The form also appears commonly in a beige fabric, and in two examples which are *sombre*, have medium textured fabric, temper less than 2 mm, micaceous application on the interior, and grey fabric. This form is found in *état* two use contexts.

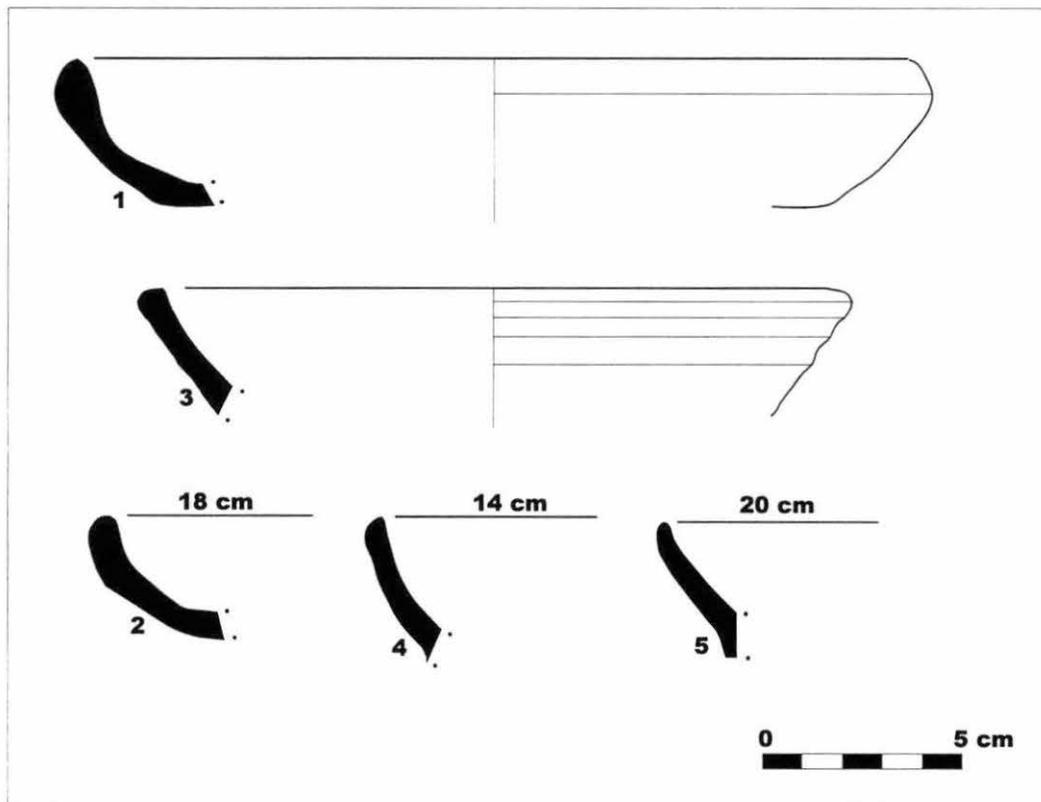


Figure A.2: Plates from *Ilot A*

- Plate: *sombre*, medium textured fabric, temper less than 2 mm, light grey fabric, and dark grey reduced surfaces, straight rim, faceted exterior (fig. A.2.2). This fabric is very similar to *Terra Nigra* and perhaps should be considered as such.

- Plate: *claire*, medium textured fabric, temper less than 2 mm, pale orange fabric, ridged exterior (fig. A.2.3).
- Plate: *claire*, medium textured fabric, temper less than 2 mm, beige fabric (fig. A.2.4).
- Plate: *claire*, medium textured fabric, temper less than 2 mm, beige and rosy-beige zoned fabric (fig. A.2.5).

Another series of plates demonstrates a variation in the rim form, still with the familiar flat-bottom and relatively straight sides. These vessels have thickened rims on the interior of the vessel. The vessel wall produces a ridge in the interior of the rim. In some, the rim is also flattened so that the result is a beak protruding to the exterior of the vessel (fig. A.3.2).

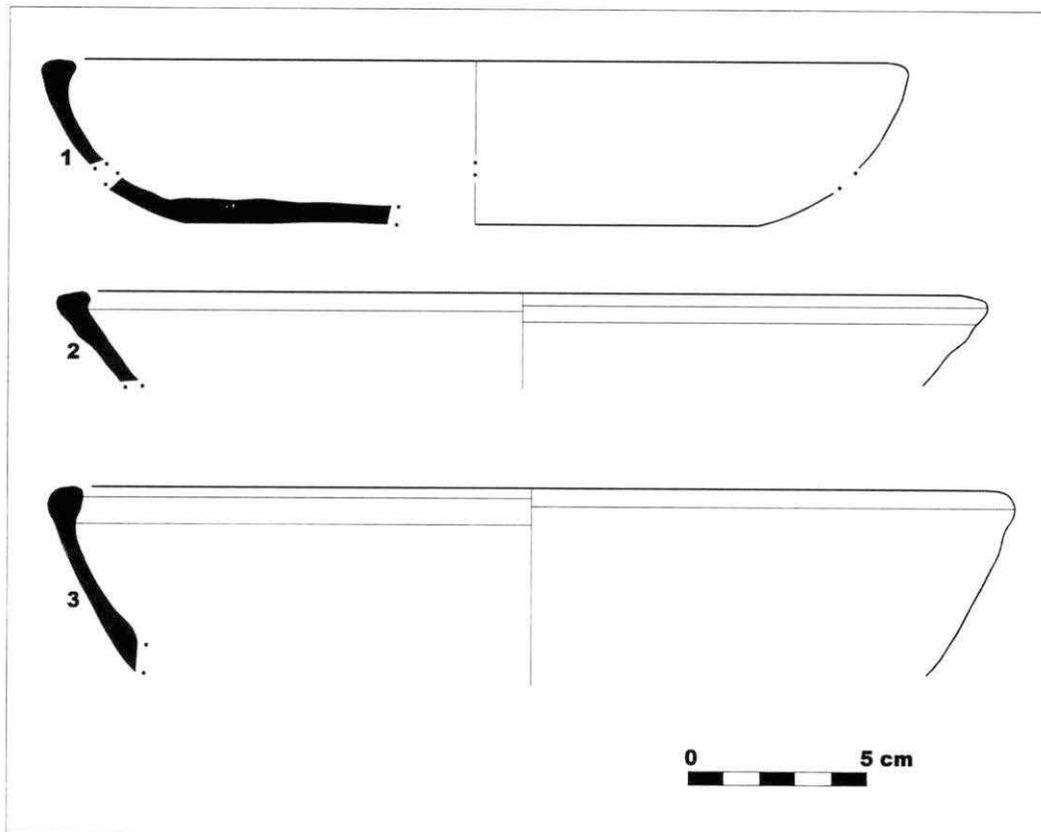


Figure A.3: Plates from *Ilot A*

- Plate: *claire*, medium textured fabric, temper less than 2 mm, mica application and orange paint, rosy beige to orange fabric, thickened rim (fig. A.3.1).
- Plate: *claire*, medium textured fabric, temper less than 2 mm, micaceous application, pale orange fabric, thickened rim (figure 3.2).
- Plate: *claire*, medium texture fabric, temper less than 2 mm, micaceous application, rosy beige fabric, thickened rim (fig. A.3.3).

In addition to the pictured plates, there is a series of additional plates not illustrated which exhibit thickened rims (similar to figure A.3.3) and appear in a variety of rim diameters. Two are 22 centimeters, one 25 centimeters, and two 35-36 centimeters. They are all *claire*, medium textured fabrics, with temper less than 2 millimeters in size. All except the vessel with a diameter of 25 centimeters have a micaceous application, orange-brown paint, and a rosy beige fabric, some zoned with beige. The 25 centimeter vessel is pale orange and has only fugitive traces of what might be a pigment.

BOWLS

The bowl forms from the production contexts in *Ilot A* include several unique forms. The first of these is a large, two-handled basin. It has grooves on the exterior of an inverted rim and a mica application on the rosy beige and overfired grey fabric. It was handled when the clay was still wet, and therefore presents a messy appearance, and is categorized as a kiln waster.

- Basin with handles: *claire*, coarse fabric, temper less than 2 mm, mica application, rosy beige and overfired grey fabric, rim diameter 30 cm (not illustrated, see Alfonso, forthcoming, fig. 9.4).
- Hemispherical basin: *claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige fabric (not illustrated, see Alfonso, forthcoming, fig. 9.5).
- Bowl with flared rim: *claire*, medium textured fabric, temper less than 2 mm, mica application, beige fabric (not illustrated, see Alfonso, forthcoming, figure 9.6).

- Elaborated rim basin: *claire*, coarse fabric, temper 2-5 mm, rosy tan fabric, bumpy surfaces (fig. A.5.1).
- Bowl ? : *claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige fabric (figure 5.2).

The next are small bowls which were perhaps used for table service or in food preparation.

- Small hemispherical bowl: *claire*, coarse fabric, temper less than two mm, mica application, beige fabric, bumpy surfaces (not illustrated, see Alfonso, forthcoming, figure 6.1).
- Inverted rim bowl: *claire*, medium textured fabric, temper less than two mm, rosy beige fabric (fig. A.4.1).

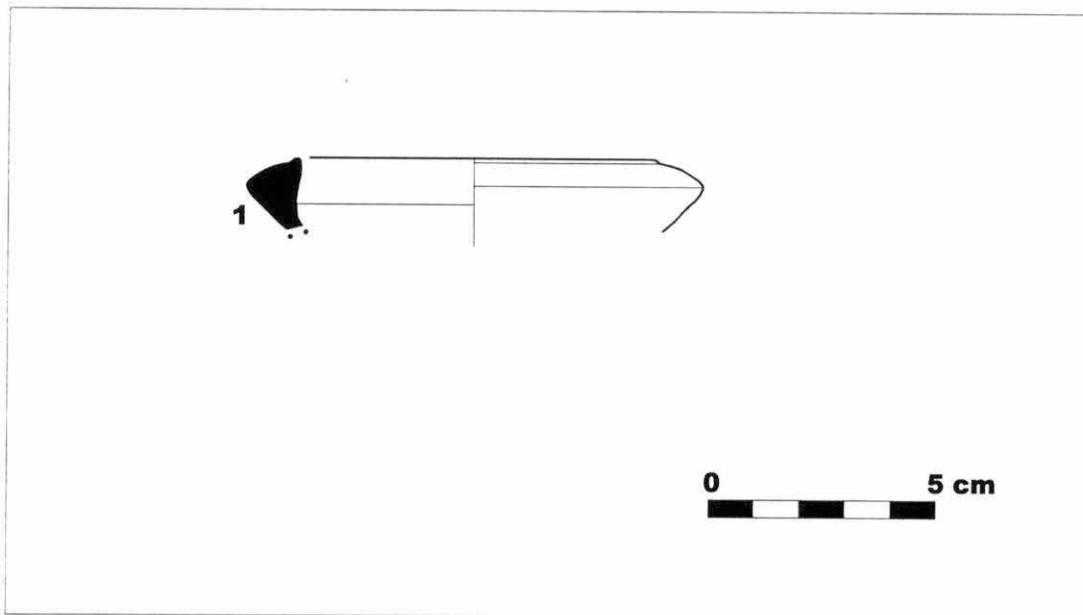


Figure A.4: Inverted rim bowl from *Ilot A*

- Bowl or cup: *claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige fabric (figure 5.3).

The following form is a pedastelled cup or bowl probably used for table service.

- Pedastelled tableware: *claire*, medium textured fabric, temper less than 2 mm, zoned orange, pale orange, and grey fabric (figure 5.4). This may be an imitation *terra sigillata* form.

The rim and base following may both be conical bowls. Both appear in uncharacteristically oxidized fabrics. The rim sherd shows a typical inverted rim style common on conical bowls, and the base presents the internal grit which is sometimes found on these grinding bowls.

- Inverted rim: *claire*, medium textured fabric, temper less than 2 mm, rosy beige (fig. A.5.5).
- Conical grinding bowl: *claire*, coarse fabric, temper less than 2 mm, mica application, rosy beige fabric with internal grit (fig. A.5.6).

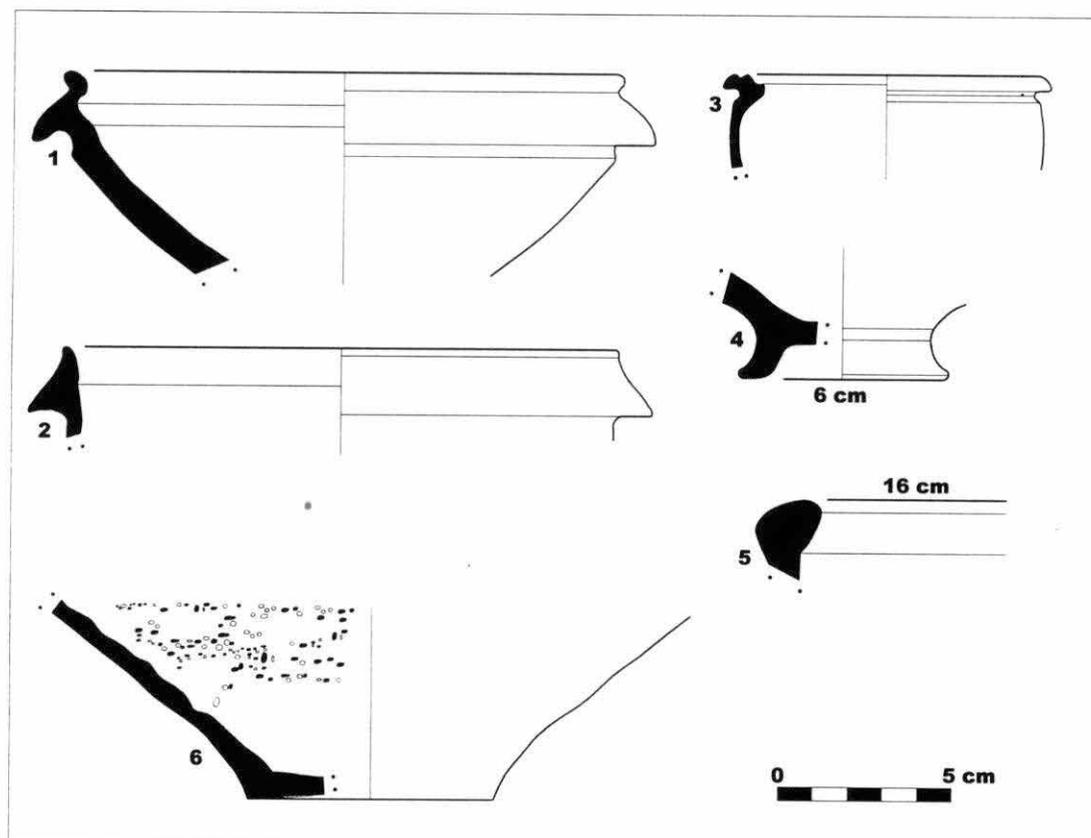


Figure A.5: Bowls from *Ilot A*

FOOTED COOKING VESSEL

- Footed *marmite*: *claire*, coarse fabric, temper less than 2 mm, rosy beige and dark grey fabric, bumpy walls (fig. A.6.1).

JARS

The first two examples are of the Besançon type, with the grooved upper surface of the rim and their heterogeneous colored fabrics. It is assumed that they have the ovoid body shapes of most Besançon type jars. The first of these (fig. A.6.2) has a more complicated rim form than most other jars from the *Lycée Militaire*. This observation alone is not sufficient to judge the vessel as foreign to the kiln, but it is notably dissimilar to others from the site. The dating of the kiln operations would also indicate that these vessels were not produced at the site, since the ceramic production there post-dates the conventional dates for Besançon style rims.

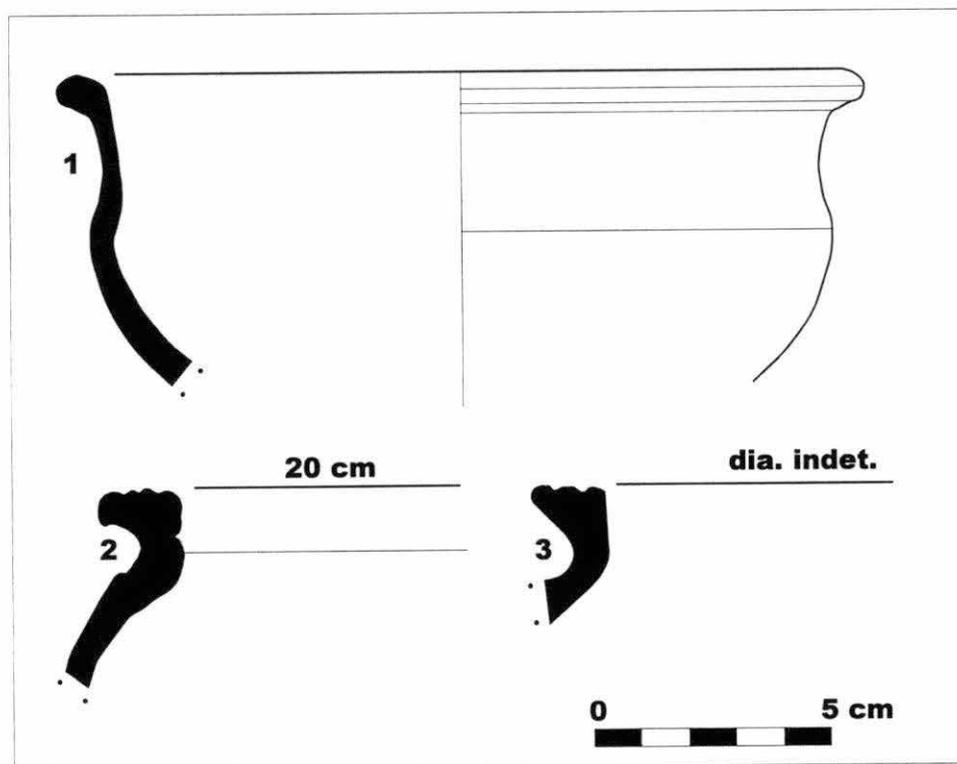


Figure A.6: *Ilot A*, *marmite* and jars

- Elaborate Besançon type jar: *claire*, coarse fabric, temper less than 2 mm, zoned grey, beige, and brown fabric, bumpy surfaces (fig. A.6.2).
- Besançon type jar: *sombre*, coarse fabric, temper less than 2 mm, grey and beige fabric (fig. A.6.3).

The production contexts of *Ilot A* revealed several examples from a series of jars which have an oblique facet on the internal rim of the vessel mouth. The majority of these vessels appear in the *Ilot C* production assemblage, yet several of them appear in the *Ilot A* production contexts as well. One form from the following group closely resembles a vessel from the productions of *Ilot C*.

- Oblique angle mouth: *claire*, coarse fabric, temper 2-5 mm, beige and grey fabric (fig. A.7.1).
- Oblique angle mouth: *claire*, medium textured fabric, temper less than 2 mm, rosy beige and grey fabric, high fired (fig. A.7.2).
- Oblique angle mouth: *claire*, medium textured fabric, temper less than 2 mm, beige and grey fabric, smoothed surfaces (not illustrated, closely resembles Alfonso, forthcoming, fig. 23.2).
- Small oblique angle mouth: *claire*, medium textured fabric, mica application, orange fabric (fig. A.7.3).

The following are jars whose internal rim forms a small shelf or internal ledge (rim *en gouttière*). This feature may serve to support a lid, or it may be a stylistic feature.

- Rim *en gouttière*: *claire*, medium textured fabric, temper less than 2 mm, mica application, grey (overfired) fabric (fig. A.7.4).
- Rim *en gouttière*: *claire*, medium textured fabric, temper less than 2 mm, beige fabric (fig. A.7.5).
- Rim *en gouttière*: *claire*, medium textured fabric, temper less than 2 mm, dark beige fabric, smooth surfaces (fig. A.7.6).

- Rim *en gouttière*: *claire*, medium textured fabric, temper less than 2 mm, rosy beige and grey fabric (not illustrated, see Alfonso, forthcoming, fig. 6.6). There is a similar form in the following fabric: *claire*, medium textured fabric, mica application, rosy beige fabric.

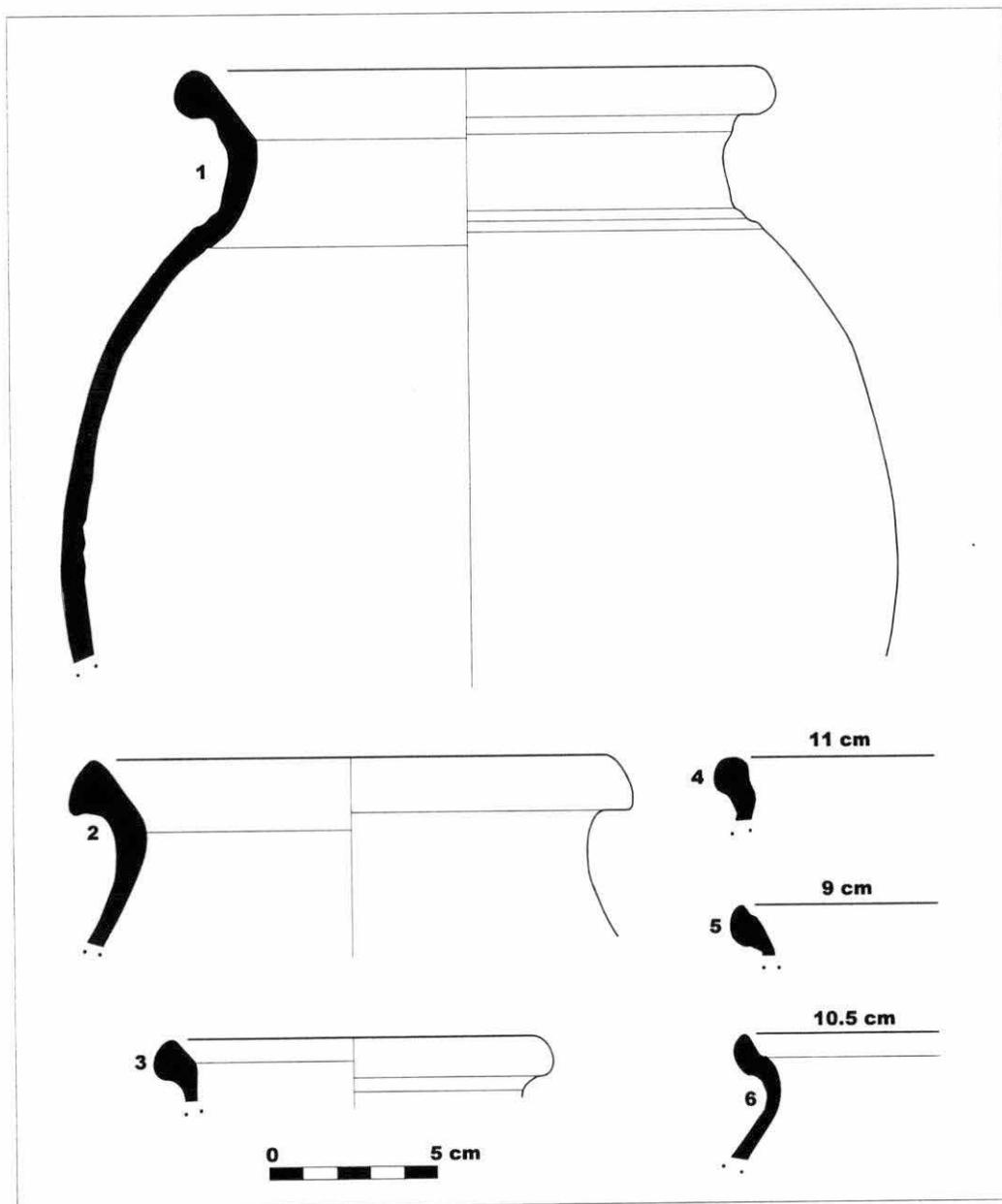


Figure A.7: *Ilot A*, jars

The following two vessels are similar in some aspects to the jars of oblique angle mouths. In particular, the first (fig. A.8.2) has a rim form which is much like those of the oblique angle mouth jars, but it is more sharply everted, forming a jar with a horizontal rim. It is assumed that these are jars, however the rim is similar to those that appear on *marmites*.

- Horizontal rim jar: *claire*, medium textured fabric, temper less than 2 mm, rosy beige and pale orange fabric (fig. A.8.2). This vessel was damaged slightly by handling while wet, and the grooves under the rim are misaligned because of it.
- Horizontal rim jar: *claire claire*, medium textured fabric, temper less than 2 mm, mica application, pale orange fabric (fig. A.8.4).

The following vessel is a variation on the jars of oblique angle mouths. Its internal neck is too rounded to form the true oblique angle, but it shares the rim form of some of these vessels.

- Rolled oblique angle mouth: *claire*, medium textured fabric, temper 2-5 mm, rosy beige fabric, unsmoothed surfaces, grooving on shoulder (not illustrated; for comparison, see Alfonso, forthcoming, fig. 11.3-4).

The following vessel has a distinctive vertical neck above the demarcation between vessel body and neck. This characteristic appears elsewhere in production contexts on the site (see Appendix C, figs. C.5.2-3, *Dépotoir* 8043).

- Trough neck jar (with slightly rolled rim): *claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige fabric (fig. A.8.3). This form appears in use contexts from *états* two and three, and *abandon*.

The following is a pitcher rather than a jar, but is related to the jars with an oblique internal angle.

- Pitcher: *sombre*, coarse fabric, temper less than 2 mm, grey (fig. A.9.1).

There are many jars with rims which are simply rolled over slightly toward the exterior, forming a plain, everted rim. The variations on these forms are seemingly limitless, with the range

from a very thin everted rim to a thick one which is rounded into an almond-shape. The rolled-rim jars have been described by Alfonso (forthcoming) as *en bourrelet*, and that term will be used here.

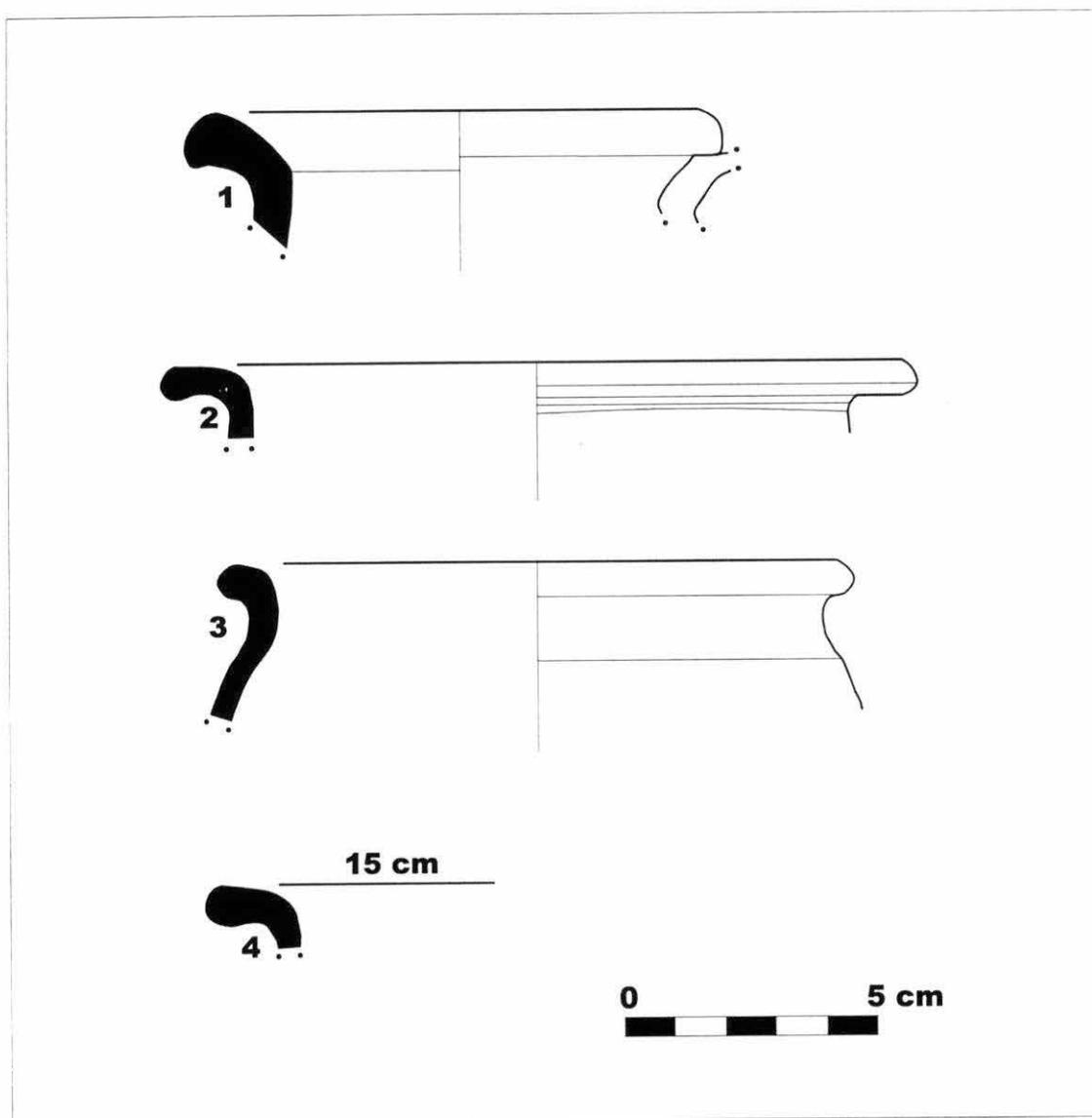


Figure A.8: *Ilot A*, pitcher and jars

These rim forms appear on vessels in a range of oxidized fabrics as well as in a reduced grey fabric. The details of grooving on the vessel shoulder, visible in the larger sherds or reconstructed vessels, seem to be interchangeable between the oxidized and reduced fabrics. The characteristic of smoothing the surface of the still-wet vessel appears on some vessels in this group of rim forms, and is a particularly notable trait among the jars and *cruches* from the productions of *Ilots A* and *C*. The

.shape of these vessels where it is visible through the shoulder appears to be more teardrop shaped than truly ovoid. The widest portion of these vessels is lower than on a typical ovoid jar. These teardrop-shaped vessels have very little eversion at the shoulder, and flare out only gradually as the side descends toward the belly. Many examples of vessels in this shape have grooving at the would-be shoulder, a detail which may serve to define the neck-body transition in a different manner.

- Rim *en bourrelet: claire*, medium textured fabric, temper less than 2 mm, rosy beige-pale orange, and overfired grey (fig. A.8.2).
- Rim *en bourrelet: claire*, medium textured fabric, temper less than 2 mm, orange (fig. A.8.4).
- Rim *en bourrelet: sombre*, medium textured fabric, temper less than 2 mm, hard fabric, grey (fig. A.8.5).
- Rim *en bourrelet: claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige fabric (fig. A.8.6)
- Rim *en bourrelet: claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige fabric (fig. A.8.7)
- Rim *en bourrelet: sombre*, medium textured fabric, temper less than 2 mm, hard fabric, grey (fig. A.8.8).
- Rim *en bourrelet: claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige and orange (fig. A.8.9).
- Rim *en bourrelet: claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige and orange (fig. A.8.10).
- *En bourrelet*-flattened almond shaped rim: *claire*, medium textured fabric, temper less than 2 mm, mica application, zoned beige and rosy beige fabric (fig. A.8.1).

- *En bourrelet*-flattened almond shaped rim: *claire*, medium textured fabric, temper less than 2 mm, mica application, beige fabric; grooving on shoulder (fig. A.9.3).
- Beak-like *bourrelet* rim: *claire*, coarse fabric, temper 2-5 mm, rosy beige and overfired grey fabric; grooving on shoulder (not illustrated, see Alfonso, forthcoming, figure 11.3).
- Rim *en bourrelet*: *claire*, medium textured fabric, temper 2-5 mm, rosy beige high fired fabric (not illustrated; see Alfonso, forthcoming, fig. 6.9). Two examples of this vessel appear in use contexts in *état* three.
- Rim *en bourrelet*: *claire*, medium textured fabric, temper less than 2 mm, overfired grey fabric (intended to be beige?); grooving on shoulder (not illustrated, see Alfonso, forthcoming, fig. 6.5). Examples of this form also occur in the following fabrics: *claire*, medium textured fabric, temper less than 2 mm, mica application, beige fabric; *claire*, medium textured fabric, temper 2-5 mm, mica application, beige fabric, bumpy interior surface; and *claire*, medium textured fabric, temper less than 2 mm, beige fabric.

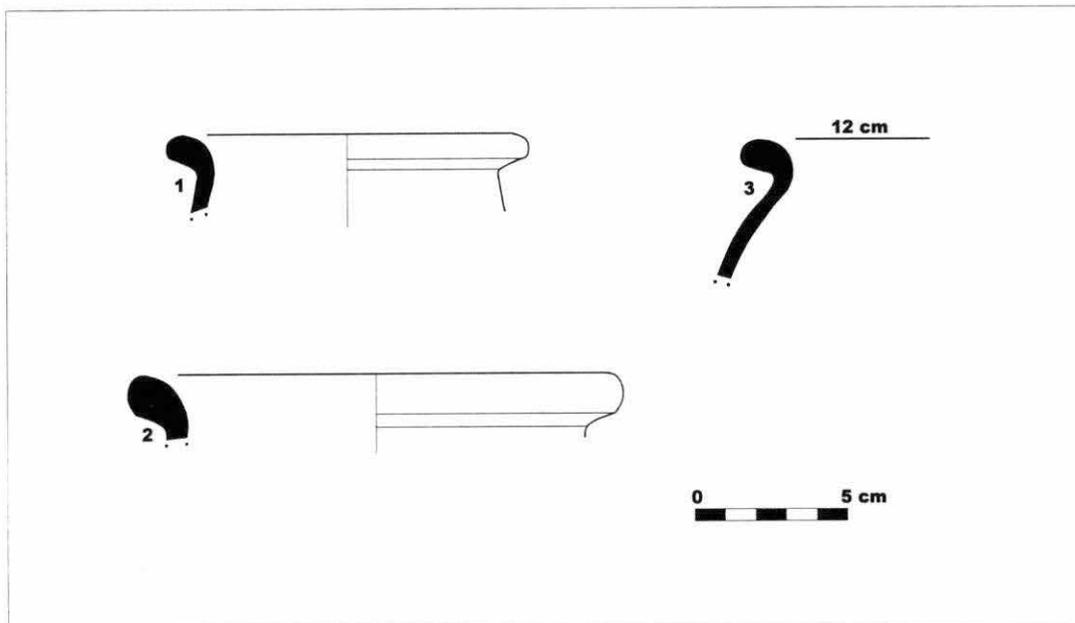


Figure A.9: *Ilot A*, jars

- Almond shaped rim: *claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige and orange fabric (not illustrated).
- Almond shaped rim: *sombre*, coarse fabric, temper 2-5 mm, mica application, grey fabric (not illustrated).
- Rim *en bourrelet*: *claire*, medium textured fabric, temper 2-5 mm, rosy beige fabric, mica application, rosy beige fabric (fig. A.11.2).
- Flattened *bourrelet* rim: *claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige fabric (fig. A.11.3). This form is found in use contexts from *état* three.

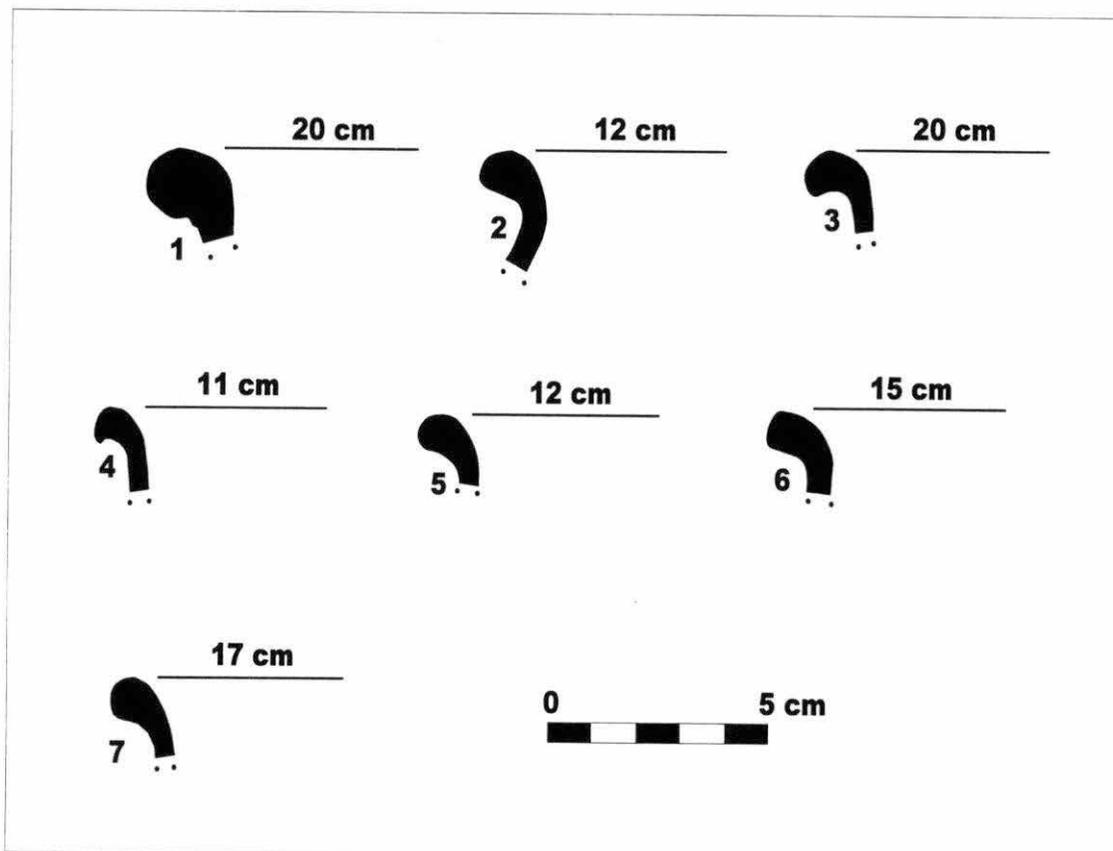


Figure A.10: *Ilot A*, jars

- Almond shaped rim: *claire*, medium textured fabric, temper less than 2 mm, mica application, hard orange fabric, smoothed surfaces (fig. A.11.1). This form is found in use contexts from *état* three.

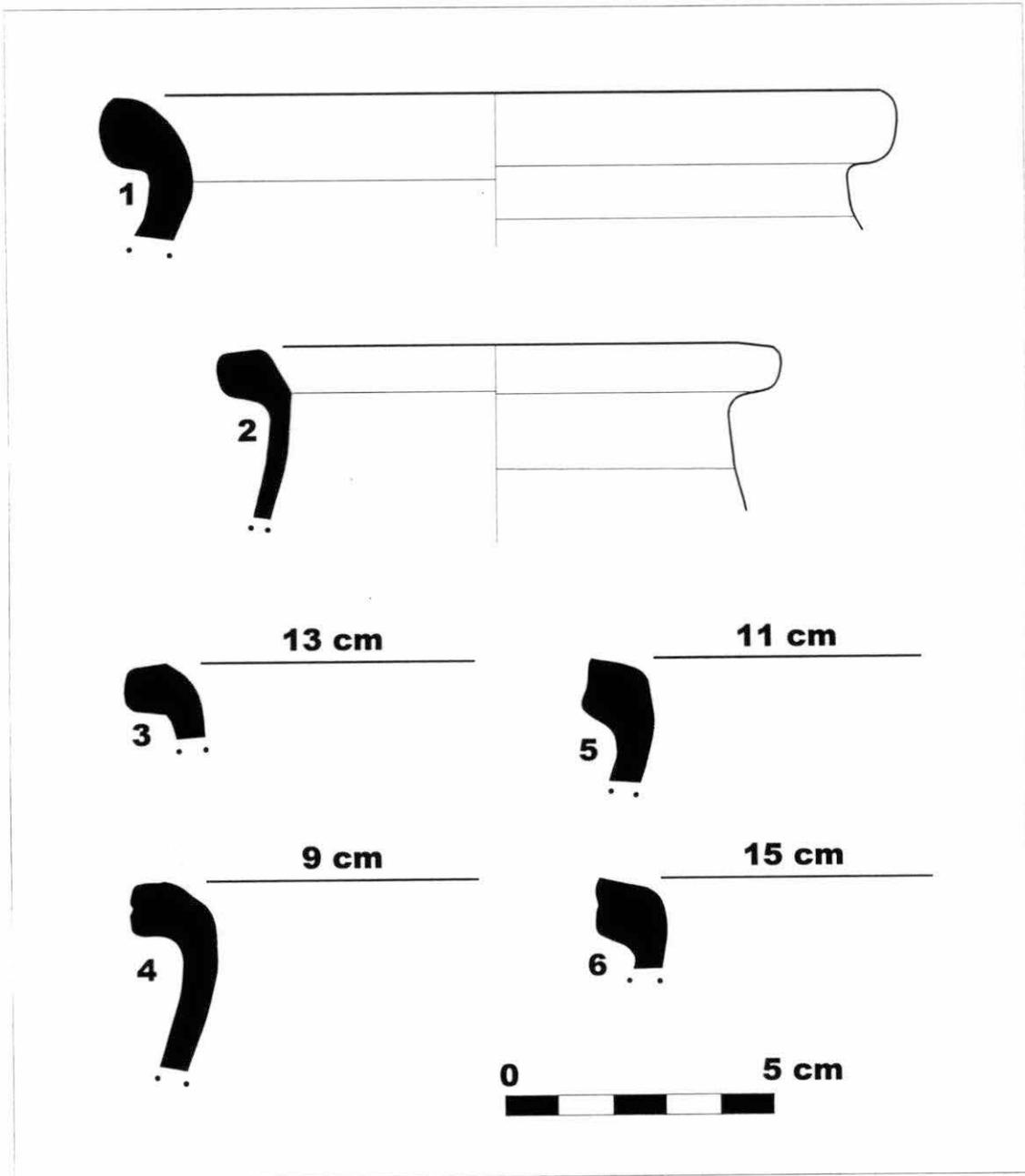


Figure A.11: *Ilot A*, jars

- Flattened *bourrelet* rim: *sombre*, medium textured fabric, temper 2-5 mm, grey high fired fabric; multiple grooves on vessel shoulder (not illustrated, see Alfonso, forthcoming, fig. 6.2).

The following vessels have a groove on the external portion of the rim. Presumably this is a purely decorative groove, and no functional significance is assigned to it.

- Grooved external rim jar: *claire*, medium textured fabric, temper less than 2 mm, rosy beige and pale orange fabric (fig. A.11.4).
- Grooved external rim jar: *claire*, medium textured fabric, temper less than 2 mm, rosy beige and pale orange fabric (fig. A.11.5).
- Grooved external rim jar: *sombre*, medium textured fabric, temper less than 2 mm, pale grey fabric (fig. A.11.6).

There is a vessel form which differs from both the usual ovoid profile and the teardrop profile described above. It is more globular than ovoid, but the largest expanse across its belly is pinched sharply outward rather than appearing rounded. This may be an example of a production mistake in which the clay was too wet to support the weight of the vessel after it was formed. It is also possible that this was clumsily formed by an inexperienced potter.

- Pinched globular jar: *claire*, coarse fabric, temper 2-5 mm, mica application, beige fabric (not illustrated, see Alfonso, forthcoming, fig. 8.7).

OVAL-MOUTHED VESSELS (and related rim forms)

There is a series of vessels with an unusual body shape and oval mouths. The vessel mouth was shaped while the clay was wet, presumably to create a vessel shape which served a particular purpose. The body shape of these vessels is rather like a tall bowl or basin, with relatively straight sides.

- Oval-mouthed vessel: *claire*, medium textured fabric, temper less than 2 mm, pale orange and grey fabric (not illustrated, see Alfonso, forthcoming, fig. 7.1).

- Oval-mouthed vessel: *claire*, coarse textured fabric, temper less than 2 mm, beige fabric (not illustrated, see Alfonso, forthcoming, fig. 7.2).
- Oval-mouthed vessel: *claire*, medium textured fabric, temper 2-5 mm, mica application, beige fabric (fig. A.12.1).

The following vessels share the body form of the oval-mouthed vessels, except their mouths are typically round rather than oval.

- Horizontal rim vessel: *claire*, medium textured fabric, temper 2-5 mm, mica application, rosy beige fabric (fig. A.12.2). Examples of this vessel appear twice in *état* three, and once in *abandon*.
- Horizontal rim vessel: *claire*, coarse textured fabric, temper 2-5 mm, mica application, rosy beige fabric (not illustrated, see Alfonso, forthcoming, fig. 10. 3). An example of this vessel form appears in use contexts from *abandon*.

CRUCHES

The three broad categories of *cruches* from the productions of *Ilot A* are *cruches* with a trefoil spout, or *embouchure trilobée*, the fine-textured orange fabric *cruches* with a rim in *chapiteau simplifié*, and the *cruches* in a rosy beige fabric with a simple rim and a heavy slip in a rusty red color. The other vessels included in the *cruches* here are the miniature *cruches* or *unguentaria*, and the wide-mouthed *cruches*.

The *cruche* with *embouchure trilobée* appears in a range of fabrics. Because these vessels represent at least in part the production mistakes of a ceramic workshop, it is not clear in some instances whether the intended finish of the vessel was *claire* or *sombre*. In these cases, the best evaluation was made, and where there remains some doubt, a question mark (?) is included. On some of these vessels there are both micaceous applications and colored pigments. Because it is clear on other vessels that the mica application occurs alone and is therefore an independent substance, these are listed separately in the descriptions below. It is not clear on these vessels, however, that the mica and the colored paints are applied separately. They might here be mixed before application.

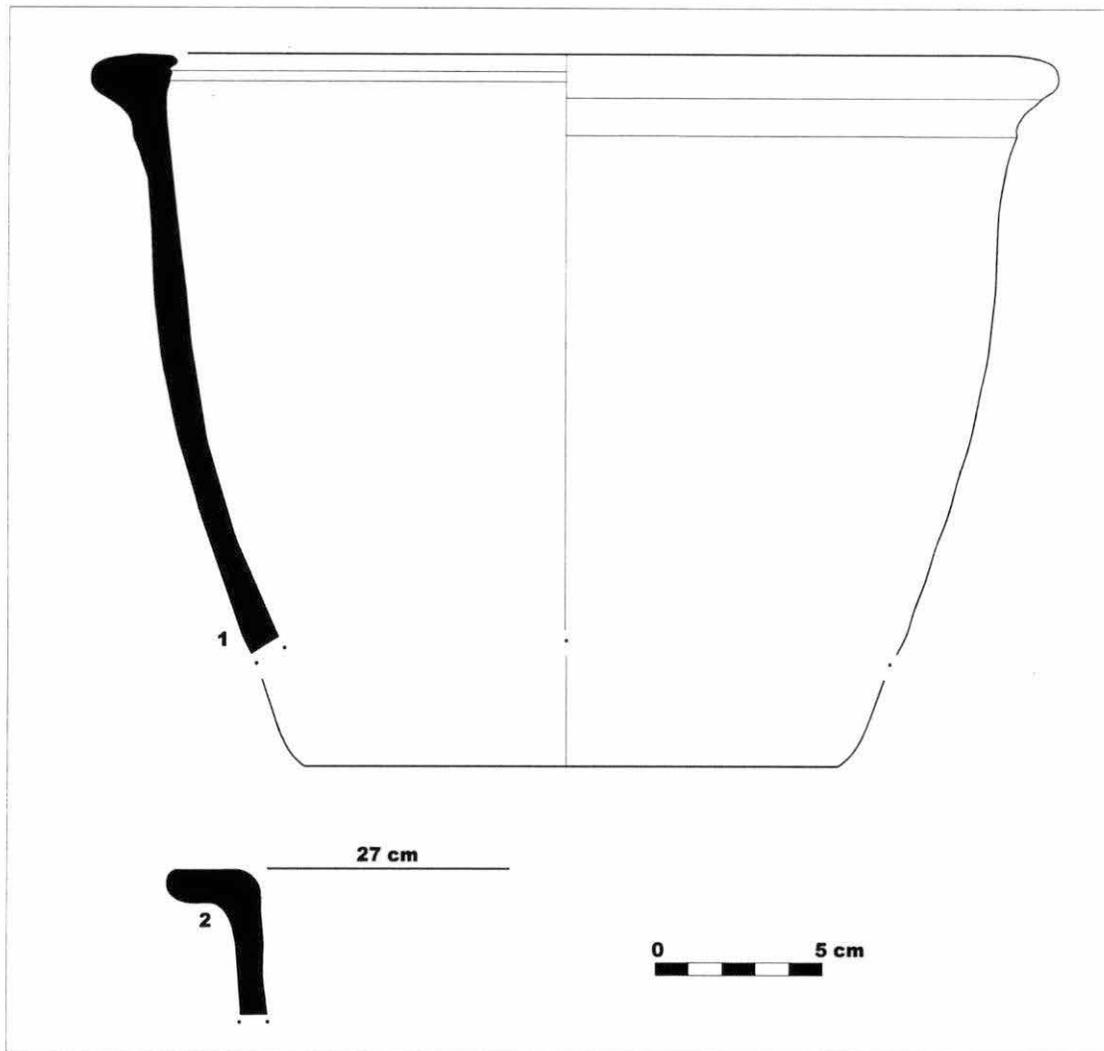


Figure A.12: *Ilot A*, oval-mouthed jars

None of the trefoil spout *cruches* is illustrated here. For two examples, see Alfonso, forthcoming, figs. 8.1 and 8.2.

- *Cruche* with *embouchure trilobée*: *claire*, medium textured fabric, temper less than 2 mm, mica application, beige fabric.

- *Cruche* with *embouchure trilobée: claire*, fine textured fabric, temper very fine or not visible with naked eye, mica application and red paint, beige fabric.
- *Cruche* with *embouchure trilobée: claire*, medium textured fabric, temper less than 2 mm, mica application, zoned beige and pale orange fabric.
- *Cruche* with *embouchure trilobée: claire (?)*, medium textured fabric, temper less than 2 mm, mica application, orange brown paint, rosy beige fabric.
- *Cruche* with *embouchure trilobée: claire*, medium textured fabric, temper less than 2 mm, mica application, beige fabric.
- *Cruche* with *embouchure trilobée: claire (?)*, fine textured fabric, temper very fine or not visible with naked eye, beige fabric.
- *Cruche* with *embouchure trilobée: sombre (?)*, medium textured fabric, temper less than 2 mm, mica application, reduced surfaces, and wiped vessel surface, grey fabric.

The orange *cruches* with rim form in *chapiteau simplifié* are strikingly similar to one another in comparison with the trefoil spout *cruches* which appear in a variety of fabric colors, and textures, and with numerous surface treatments. In spite of this homogeneity, there is some variety in the body form, indicated by the angle of the vessels as the shoulder. Some appear to have an elongated neck (fig. A.13.2), some a brief neck followed immediately by a rounding at the shoulders (fig. A.13.3), and others a moderate combination of the two (fig. A.13.1). The bases of the vessels are typically flat, but “finished.” That is, they have either incised grooves on the bottom (produced after the vessel was cut from the wheel), or incised lines around the exterior of the base, a millimeter or so from the bottom. The more complete “finishing” of the bases from this assemblage is one of the markers which can be used to differentiate *cruche* bases from those of ovoid jars. With the exception of a series of beige and rosy beige ovoid jars from the productions in *Ilot C* (see Appendix B), ovoid jars tend to have completely flat bases with no signs of finishing after removal from the turning wheel. The bodies of these *cruches* can appear wiped, as with a cloth before firing to produce a smooth finish. This is a trait that they share with many of the jars produced at the *Lycée Militaire*.

- *Cruche, chapiteau simplifié: claire*, medium textured fabric, temper less than 2 mm, orange fabric (fig. A.13.1).
- *Cruche, chapiteau simplifié: claire*, medium textured fabric, temper less than 2 mm, orange fabric (fig. A.13.2).
- *Cruche, chapiteau simplifié: claire*, medium textured fabric, temper less than 2 mm, orange fabric (fig. A.13.3).

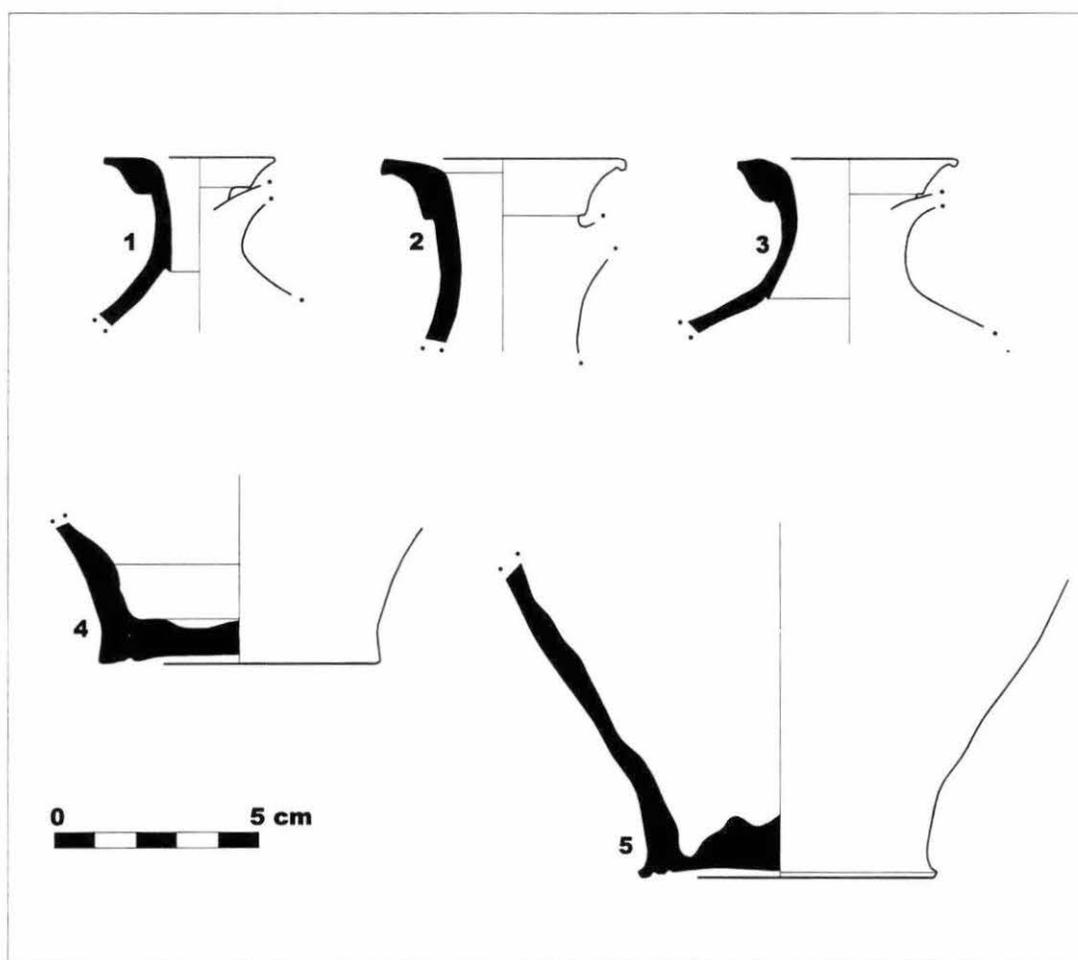


Figure A.13: Ilot A, cruches

- *Cruche, chapiteau simplifié: claire*, medium textured fabric, temper less than 2 mm, orange and fabric, wiped surfaces (fig. A.13.4).

- *Cruche, chapiteau simplifié: claire*, medium textured fabric, temper less than 2 mm, orange and overfired grey fabric, wiped surfaces (fig. A.13.5).

The slipped *cruche* has a rim form very similar to those in the orange fabric without slip. This vessel is not illustrated (see Alfonso, forthcoming, fig. 5.5).

- Slipped *cruche: claire*, medium textured fabric, temper less than 2 mm, rosy beige fabric, heavy rusty red slip.

The small bottles, *cruches*, or *unguentaria* are similar to one another in fabric. Their entire forms are not known, but they may be compared with the vessel from the productions in *Ilot C* (Appendix B, fig. B.9.1) which has two handles. Similar forms are found in use contexts from *état* two.

- *Unguentarium: claire*, fine textured fabric, temper less than 2 mm, beige fabric (fig. A.14.1).
- *Unguentarium: claire*, fine textured fabric, temper less than 2 mm, beige fabric (fig. A.14.2).
- *Unguentarium: claire*, fine textured fabric, temper less than 2 mm, beige fabric (fig. A.14.3).
- *Unguentarium: claire*, fine textured fabric, temper less than 2 mm, beige fabric (fig. A.14.4).
- *Unguentarium: claire*, fine textured fabric, temper less than 2 mm, beige fabric (fig. A.14.5).
- *Unguentarium: claire*, fine textured fabric, temper very fine or not visible to the naked eye, beige powdery fabric (fig. A.14.6).

The wide-mouthed *cruches* or jars have fabrics which are *cruche*-like feel and color. A form which is similar to these two was found in *état* zero contexts. Its fabric was most similar to the second vessel here (fig. A.15.2), presenting a red-orange slip on the interior, and a brown-grey exterior, probably the result of overfiring.

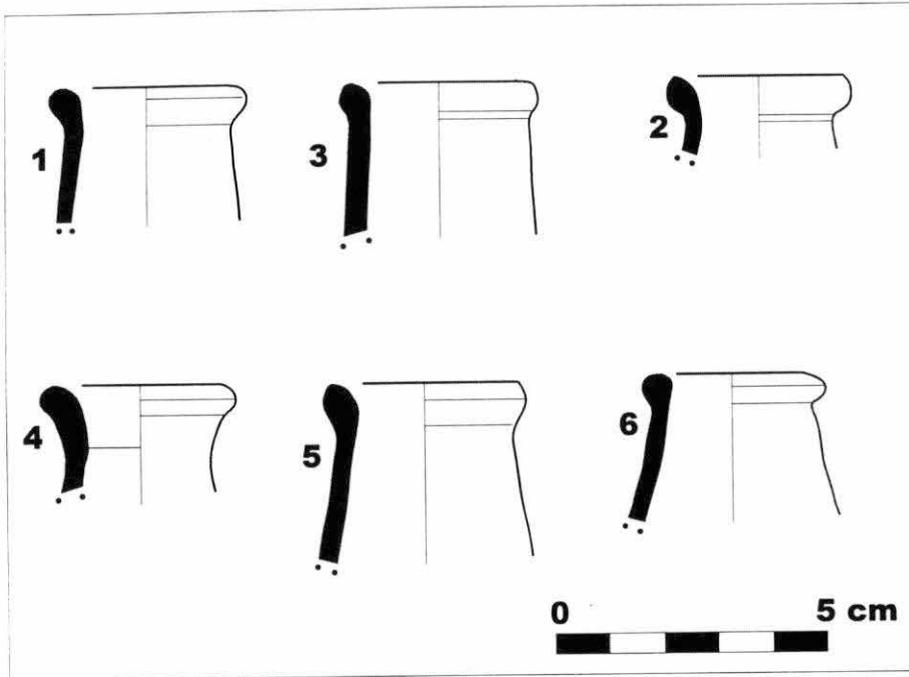


Figure A.14: *Ilot A*, miniature *cruches*, or *unguentaria*

- Wide-mouthed *cruche*: *claire*, fine textured fabric, temper very fine or invisible to the naked eye, orange fabric (fig. A.15.1).

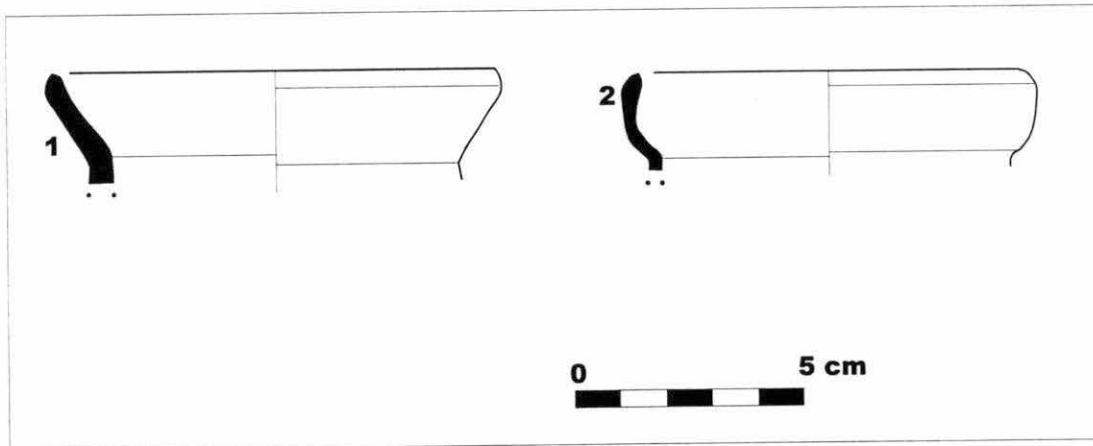


Figure A.15: *Ilot A*, wide-mouth *cruches*

- Wide-mouthed *cruche*: *claire*, fine textured fabric, temper very fine or invisible to the naked eye, orange fabric, slight traces of color on vessel surface, perhaps red-brown slip (fig. A.13.2).

LIDS

The lids that appear in the kiln dumps of *Ilot A* have characteristics which are similar to lids in other contexts. They show a variety of rim forms and thickness of vessel wall.

- Button-handle lid: *claire*, coarse fabric, temper 2-5 mm, rosy beige and pale orange (fig. A.16.1).
- Plain toe lid: *claire*, coarse fabric, temper less than 2 mm, mica application, orange paint, beige fabric (fig. A.16.2).
- Plain-toe lid: *claire*, medium textured fabric, temper less than 2 mm, zoned beige and pale orange fabric, red paint or slip (not illustrated).
- Large lid, externally grooved rim: *claire*, medium textured fabric, temper less than 2 mm, rosy beige and grey (overfired) fabric, smooth surfaces (fig. A.16.3); the rim form also appears in a pale orange unsmoothed fabric.
- Externally grooved rim lid: *sombre*, medium textured fabric, temper 2-5 mm, grey fabric with rosy beige (fig. A.16.4); a larger version of this form is found in the following fabric: *claire*, medium textured fabric, mica application, rosy beige fabric. A similar form is found in use contexts from *état one*.
- Fine-rimmed lid: *claire*, coarse fabric, temper 2-5 mm, zoned tan, grey, and pale orange fabric, bumpy surfaces (fig. A.16.5).
- Slightly channel-rimmed lid: *claire*, coarse fabric, temper 2-5 mm, zoned beige and pale orange fabric, red layer on surface which may be traces of slip, rough surfaces (fig. A.16.6).
- Channel-rimmed lid: *claire*, coarse fabric, temper 2-5 mm, orange and grey (overfired) fabric (fig. A.16.7).

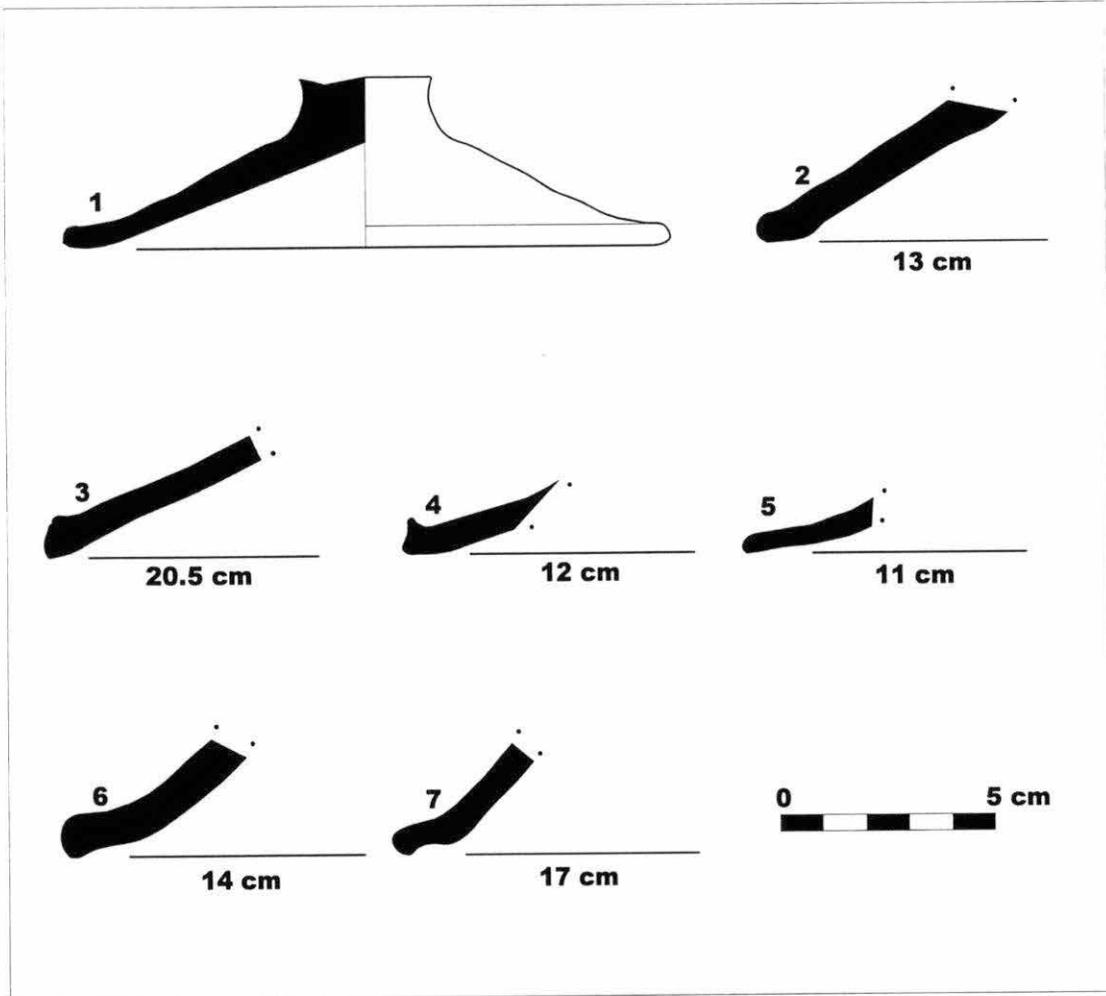


Figure A.16: *Ilot A*, lids

APPENDIX B: THE CÉRAMIQUE COMMUNE PRODUCTS OF ILOT C

PLATES

- Plate with internally thickened rim: *sombre* (?), medium textured fabric, temper very fine or invisible to the naked eye, smooth surfaces, low fired, brown fabric with dark grey surfaces (fig. B.1.2).
- Plain rim plate: *claire*, coarse fabric, temper 2-5 mm, mica application, wiped surfaces, low fired, rosy beige fabric (not illustrated, see Alfonso, forthcoming, fig. 21.1). Some examples of this form are not painted, and some have zoned beige and rosy beige fabrics,
- Plate with slightly pointed rim: *claire*, coarse fabric, temper 2-5 mm, mica application, wiped surfaces, low fired, beige fabric; base has concentric grooves on the bottom (figure 2.4). Examples of this vessel form are found in *état* one (multiple examples), *état* three (multiple examples), and *abandon*.

BOWLS

- Band rim bowl: *claire* (?), medium textured fabric, temper less than 2 mm, rough surfaces, red, brown, grey, and black fabric (fig. B.1.1).
- Inverted rim conical bowl: *claire*, medium textured fabric, temper less than 2 mm, rosy beige fabric high fired fabric (fig. B.1.3). This vessel form is found in use contexts from *abandon*.
- Inverted rim conical bowl: *claire*, medium textured fabric, temper less than 2 mm, rosy beige and orange fabric (fig. 1.4).

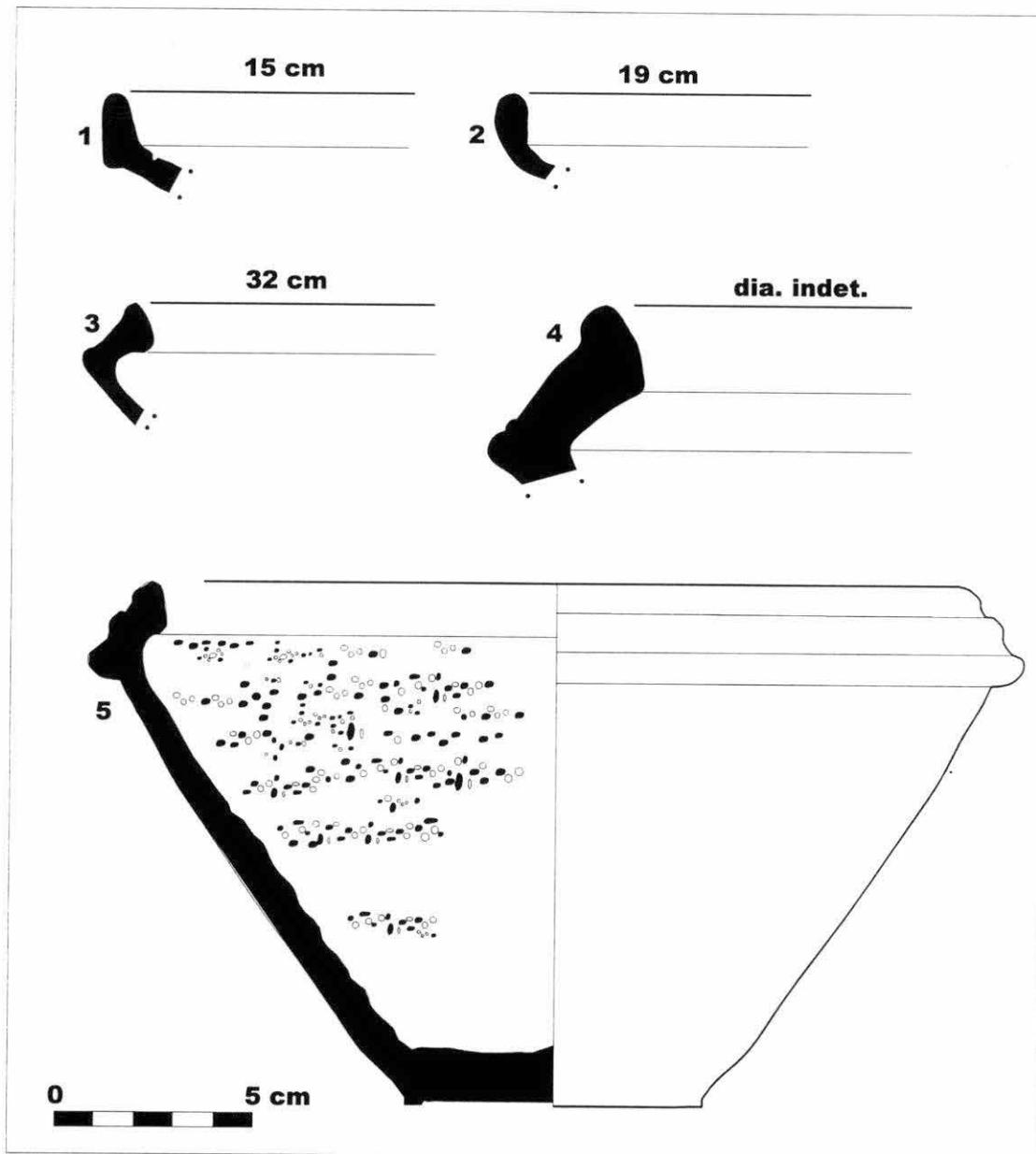


Figure B.1: Bowls, production contexts *Hot C*

- Inverted rim conical bowl: cliare, coarse textured fabric, temper 2-5 mm, rosy beige fabric, internal grit (fig. B.1.5). This form is also found with dark (reduced) surfaces, and one with black fabric, one with orange medium textured fabric, and one with rosy brown fabric. Examples of the form in *c ramique commune sombre* include grey medium textured fabric, temper less than 2 mm, with inclusions of white nodules in addition to the standard temper, and smooth exterior and

rough interior. They also appear in grey coarse fabric, temper 2-5 mm, with dark grey surfaces. The vessels appear in *état* two (multiple examples), *état* three (multiple examples) and *abandon* (multiple examples, including a smaller form), and similar vessels appear in *état* one.

- Carenated bowl: *claire*, coarse textured fabric, temper 2-5 mm, possible traces of paint or slip, rosy beige and over fired grey fabric (not illustrated, for comparison see Alfonso, forthcoming, fig. 26.2).

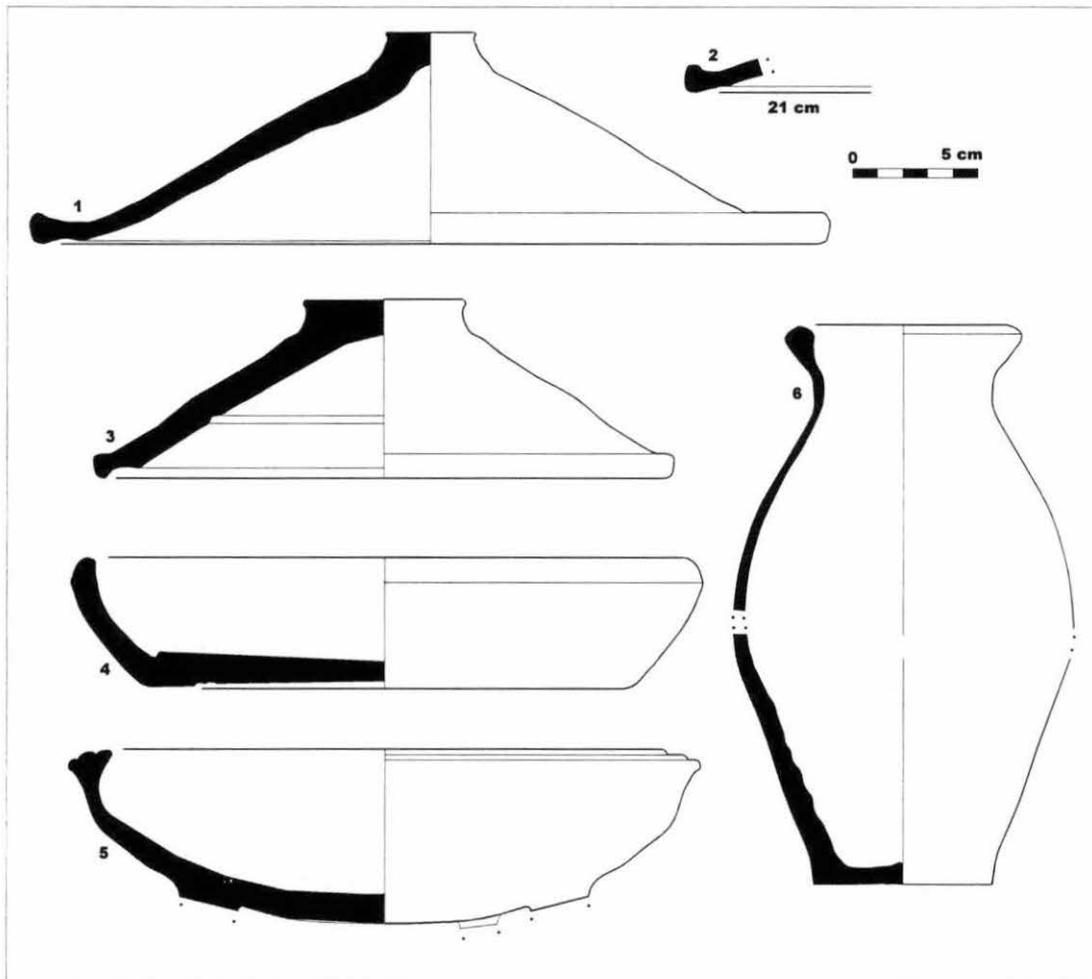


Figure B.2: Vessels from production contexts, *Ilot C*

FOOTED COOKING VESSELS

- Footed cooking plate: *claire*, coarse fabric, temper 2-5 mm, mica application, beige and grey low fired fabric (fig. B.3.1).
- Footed cooking plate: *claire*, coarse fabric, temper 2-5 mm, mica application, beige and grey low fired fabric (fig. B.3.2).
- Footed cooking plate: *sombre*, coarse fabric, temper larger than 5 mm, grog temper in addition to sand and iron oxide inclusions, dark grey fabric (fig. B.3.3).
- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, reduced surfaces, grey fabric (fig. B.3.4). Multiple examples of this vessel form are found in use contexts from *état* three.
- Footed cooking plate: *claire*, coarse fabric, temper 2-5 mm, mica application, beige fabric (fig. B.3.5).
- Footed cooking plate: *sombre*, coarse fabric, temper less than 2 mm, mica application, grey fabric (fig. B.3.6).
- Footed cooking plate: *sombre*, coarse fabric, temper less than 2 mm, grey and beige fabric (not illustrated, for comparison, see Alfonso, forthcoming, fig. 21.2).

The three following cooking plates have a distinctive forked rim which was presumably designed to hold a lid. There are variations on the rim form, with some examples having the innermost portion of the forked rim curving inward (fig. B.4.1), and some vessels having a more pronounced pendant square forming the outer portion of the fork (fig. B.4.2).

- Forked rim cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric (fig. B.4.1). This vessel bore traces of cooking residue, suggesting that it was used, in spite of being found in production contexts.

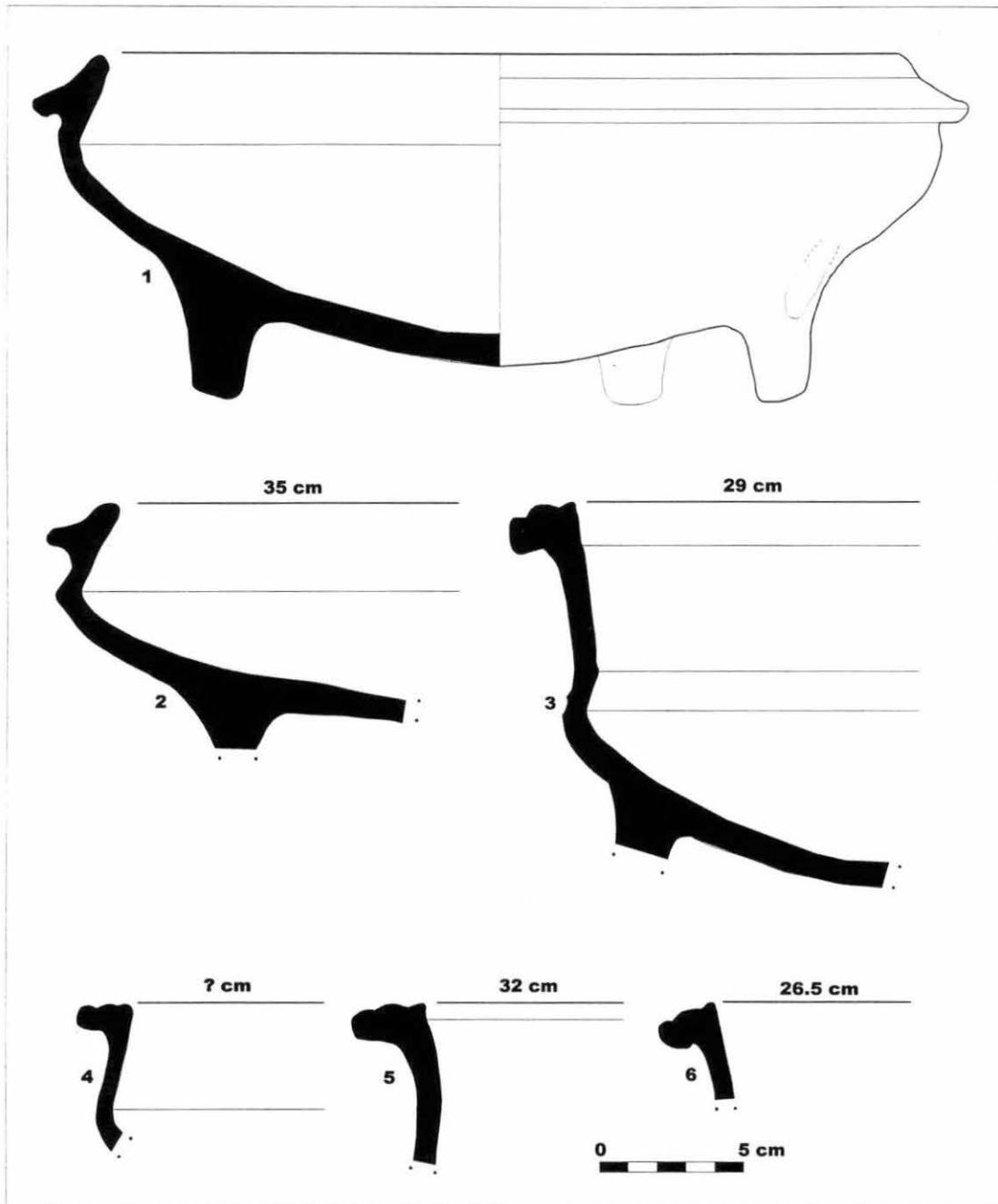


Figure B.3: Footed cooking vessels from production contexts, *Ilot C*

- Forked rim cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, grey (fig. B.4.2).

The following vessel has an open form with a wider outward angle in the slope of its side. This form is more open than the others with the forked rim.

- Forked rim cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, smooth, wiped external surfaces, grey fabric (fig. B.4.3).

The following vessel is a carenated tall form. Its complete profile is unknown in this assemblage. It may have had feet, suggested by its rounded bottom.

- (Footed ?) Marmite: *claire*, medium textured fabric, temper less than 2 mm, mica application, zoned rosy beige and grey low fired fabric (fig. B.4.4). This vessel appears in a use context from *état* three.
- Footed cooking plate: *claire*, coarse fabric, temper 2-5 mm, mica application, beige low fired fabric (fig. B.2.5). Examples of this vessel are found in use contexts of *état* two.

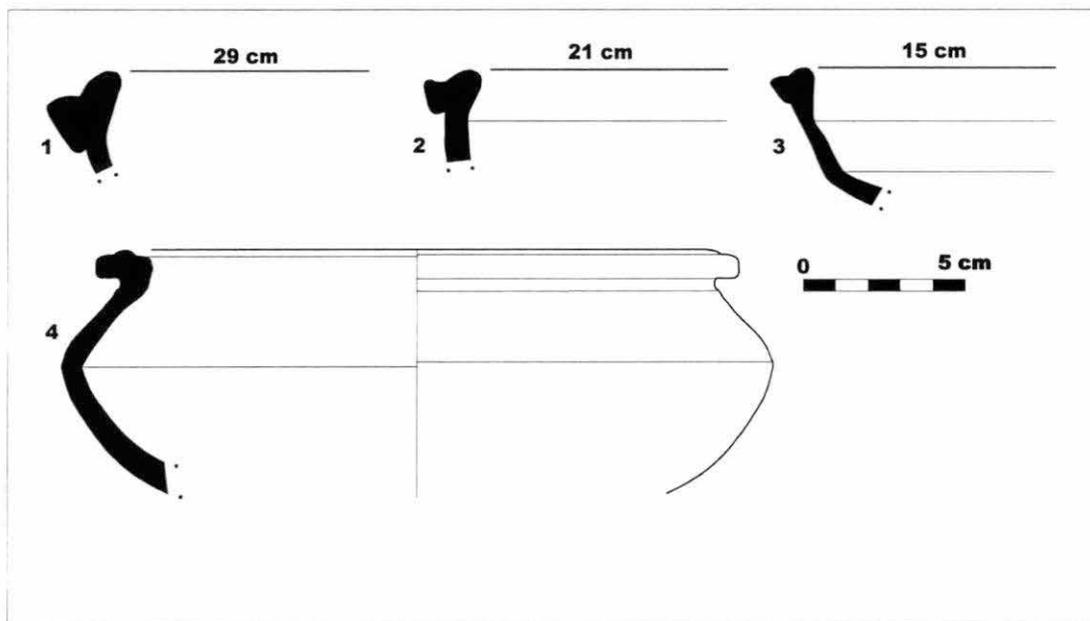


Figure B.4: Footed cooking vessels from production contexts, *Ilot C*

JARS

The following group of jars has an oblique angle in the interior of the vessel mouth. This angle is formed by the eversion of the vessel wall above the most constricted portion of the neck. Like the few vessels of this kind that are found in the productions of *Ilot A*, the many that are present in the productions of *Ilot C* occur in both oxidized and reduced fabrics, seemingly irrespective of variations in rim form. The vessels are high fired, producing a hard fabric. Their shape is presumed to be ovoid, although the same narrow shoulders are observed on these vessels as on the internal oblique angle mouth jars from the productions of *Ilot A*. The range of jars is found in *état* three.

- Jar with internal oblique angle mouth: *sombre*, coarse fabric, temper 2-5 mm, grey, high fired fabric (fig. B.5.1).
- Jar with internal oblique angle mouth: *sombre*, coarse fabric, temper 2-5 mm, reduced surfaces, grey high fired fabric (fig. B.5.2).
- Jar with internal oblique angle mouth: *sombre*, coarse fabric, temper 2-5 mm, reduced surfaces, grey high fired fabric (fig. B.5.3).
- Jar with internal oblique angle mouth: *sombre*, medium textured fabric, temper less than 2 mm, grey high fired fabric (fig. B.5.4).
- Jar with internal oblique angle mouth: *claire*, medium textured fabric, temper less than 2 mm, rosy beige high fired fabric (fig. B.5.2).
- Jar with internal oblique angle mouth: *claire*, medium textured fabric, temper 2-5 mm, beige and grey high fired fabric (not illustrated, see Alfonso, forthcoming, fig. 23.1). This vessel form found in contexts from *état* three.
- Jar with internal oblique angle mouth: *claire*, coarse fabric, temper 2-5 mm, beige high fired fabric (vessel not illustrated, see Alfonso, forthcoming, fig. 23.2). This vessel found in multiple use contexts from *état* three.

- Jar with internal oblique angle mouth: *sombre*, coarse fabric, temper 2-5 mm, bumpy surfaces, grey fabric (vessel not illustrated, see Alfonso, forthcoming, fig. 23.4). This vessel found in multiple use contexts from *état* three.
- Jar with internal oblique angle mouth: *claire*, coarse fabric, temper 2-5 mm, beige high fired fabric (vessel not illustrated, see Alfonso, forthcoming, fig. 23.5).

As in the productions from *Ilot A*, there is a series of jars from *Ilot C* which has rims which are rolled to the exterior, or *en bourrelet*. The vessels from both production contexts share similar rim forms, and both occur in a range of fabrics. The variations of these rims are many, and they are combined with other traits such as a trough neck, squared-off rim, or internal oblique angle on the interior of the mouth. Most of the vessels from *Ilot C* are high fired, producing a hard fabric. This fabric may be *sombre* or *claire*, fine, medium, or coarse textured, possess any temper size from very fine through 2-5 millimeters (although this is not meant to suggest that the temper is unsorted). The jars may be grey or beige, sometimes with a mica application, sometimes smoothed, and the grey fabrics may have reduced surfaces. The bases of these vessels have flat bottoms.

In general, the vessels are found in *états* two, three, and *abandon*, with the highest frequencies identified in *état* three.

- Jar with rim *en bourrelet*: *sombre*, fine fabric, temper very fine or not visible to the naked eye, smooth surfaces, high fired grey fabric (fig. B.5.6).
- Jar with rim *en bourrelet*: *claire*, medium textured fabric, temper less than 2 mm, mica application, orange and black fabric (not illustrated, see Alfonso, forthcoming, fig. 22.4). Multiple examples of this vessel are found in use contexts from *état* three, and an example of a similar vessel is found in a use context from *état* two.
- Jar with rim *en bourrelet* and trough neck: *claire*, medium textured fabric, temper less than 2 mm, mica application, smooth surfaces, orange and black fabric (not illustrated, see Alfonso, forthcoming, fig. 22.4). This vessel form is found in contexts from *états* two and *abandon*, and numerous examples from *état* three.

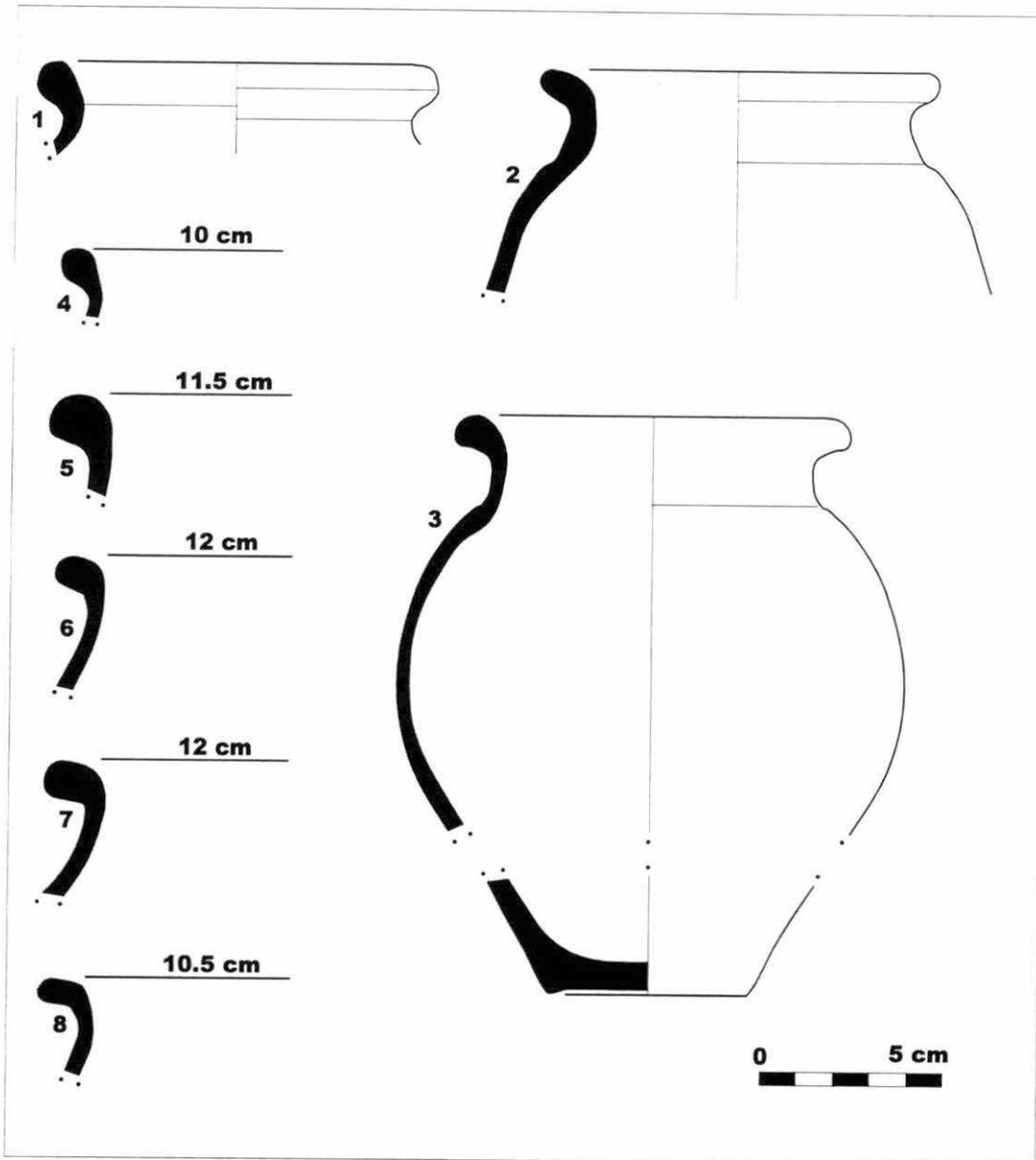


Figure B.5: Jars and small jar or goblet from production contexts, *Ilot C*

- Jar with rim *en bourrelet*/ slightly oblique angle mouth: *sombre*, coarse fabric, temper 2-5 mm, mica application, rough surfaces, grey fabric; soot and residue indicate that this vessel from production contexts was used (vessel not illustrated, see Alfonso, forthcoming, fig. 16.8). This vessel form is found in use contexts from *abandon*.

- Jar with rim *en bourrelet*: *sombre*, medium textured fabric, temper 2-5 mm, reduced surfaces, mica application, grey fabric (fig. B.6.1).
- Jar with rim *en bourrelet*: *sombre*, coarse fabric, temper less than 2 mm, over fired grey fabric (fig. B.6.2).
- Jar with rolled horizontal rim: *claire*, coarse fabric, temper less than 2 mm, beige fabric (fig. B.6.4).

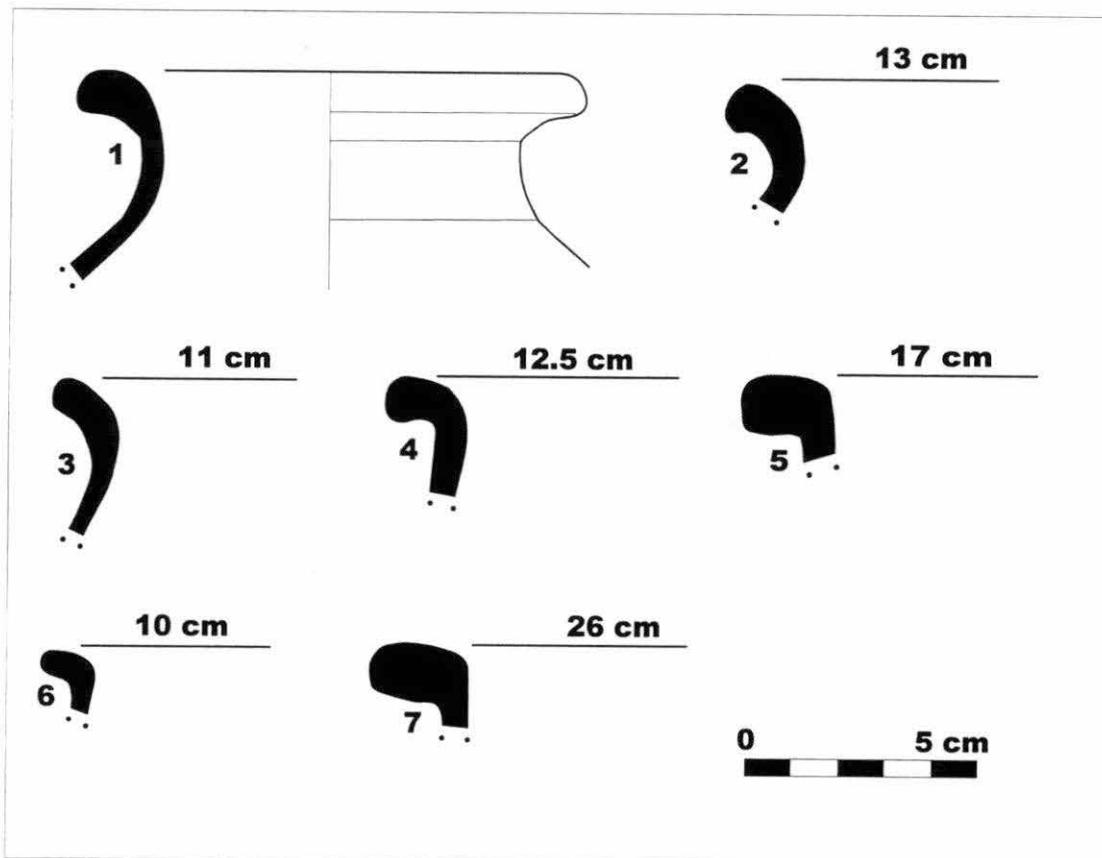


Figure B.6: Jars and goblet from production contexts, *Ilot C*

- Jar with thick horizontal rim: *sombre*, medium textured fabric, temper less than 2 mm, smooth reduced surfaces, grey fabric (fig. B.6.5).

- Jar with almond-shaped horizontal rim: *sombre*, medium textured fabric, temper less than 2 mm, high fired, grey fabric (fig. B.6.7).
- Jar with grooved exterior: *sombre*, medium textured fabric, temper less than 2 mm, smooth surfaces, high fired grey fabric (fig. B.7.2). This vessel has wheel-produced grooves on exterior of shoulder.

The following vessel is similar to two jars illustrated in Alfonso's presentation of the *Ilot C* productions (forthcoming, fig. 16.5 and 7). He identifies the series of vessels as having a vertical or slightly everted rounded rim. He describes a flat bottom, and a vessel belly which is decorated with grooves on the shoulder, and also perhaps on the lower portion, and a partial mica application on some of the examples. An example of his fig. 16.5 was found in use contexts from *état* three.

- Vertical neck jar: *sombre*, medium textured fabric, temper less than 2 mm, grey high fired fabric (fig. B.7.3). This vessel does not have the characteristic external grooves described by Alfonso.

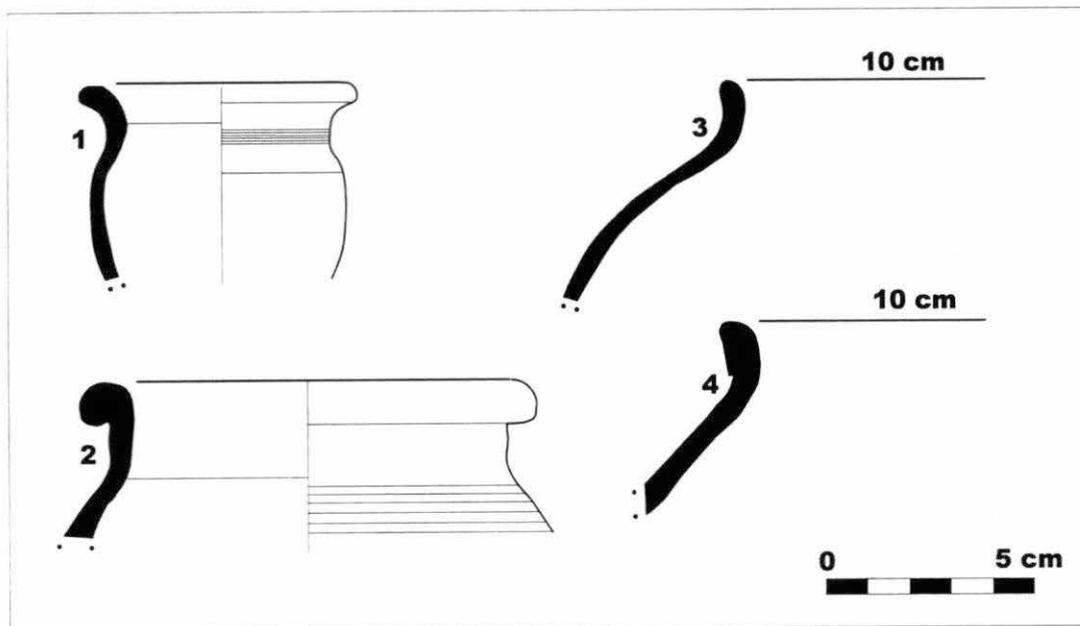


Figure B.7: Goblet and jars from production contexts, *Ilot C*

The following vessel also has a slightly everted vertical rim, although it has a thicker rim which forms almost a band on the exterior. Multiple examples of this type of rim form are found in *état* three (see also Alfonso, forthcoming, fig. 22.3).

- Vertical band neck jar: *sombre*, medium textured fabric, temper less than 2 mm, smooth exterior, high fired grey fabric (fig. B.7.4).
- Lozenge-shaped jar: *claire*, medium textured fabric, temper less than 2 mm, beige fabric, surfaces not smoothed (fig. B.2.6). This vessel appears in use contexts from *état* three and *abandon*.

The production contexts of *Ilot C* present examples of jars with rims *en gouttière*, where the internal rim forms a shelf or ridge, perhaps for supporting a lid (see the jars with rims *en gouttière*, production contexts of *Ilot A*). The shape of the vessel body is on the globular side of ovoid, and can present grooving at the fattest point of the belly. See figures 18.4 and 18.5 in Alfonso (forthcoming).

- Jar with rim *en gouttière*: *claire*, medium textured fabric, temper less than 2 mm. (examples also occur with temper 2-5 mm.), beige (or rosy beige). (Vessel not illustrated, see Alfonso forthcoming, figs. 18.4 and 18.5). A similar form appears in use contexts from *abandon*.

GOBLETS OR SMALL JARS

There is a type of small jar or goblet which has a rosy fabric and reduced, smooth surfaces. The rosy fabric ranges from rosy beige to orange-brown, and has a fine to medium texture. The surfaces are reduced dark charcoal colored grey to dark brown or black, in contrast to the oxidized fabric, and were probably produced by eliminating oxygen from the kiln during the last phase of firing, a process commonly called smudging. The smooth surfaces of the vessels are micaceous, perhaps from the smoothing of the vessel surface before firing. These vessels are abundant in the kiln deposits. The most common rim form of these vessels is illustrated in Alfonso (forthcoming, fig. 22.6). A complete vessel is pictured here in fig. B.5.3.

- Rosy fabric goblet: *claire*, medium textured fabric, temper very fine or not visible to the naked eye, smooth reduced surfaces, orange brown fabric (fig. B.5.3).

- Rosy fabric goblet: *claire*, fine textured fabric, temper very fine or not visible to the naked eye, smooth reduced surfaces, rosy beige fabric (not illustrated, see Alfonso, forthcoming, fig. 22.6).
- Jar or goblet with small horizontal rim: *claire*, medium textured fabric, temper very fine or invisible to the naked eye, reduced surfaces (dark grey), rosy beige fabric (fig. B.6.6).

Another type of goblet appears in the production contexts of *Ilot C*.

- Grooved-neck goblet: *claire*, medium textured fabric, temper very fine or not visible to the naked eye, rosy beige fabric, uneven grooving on vessel neck (fig. B.7.1).

PITCHERS

- Almond-rim pitcher: *sombre*, coarse fabric, temper less than 2 mm, rough surfaces, groove on vessel shoulder above the lower handle attachment, grey fabric (fig. B.8.3). Numerous examples of this form are found in use contexts from *état* three, and smaller versions are found in a context from *état* three and one from *abandon*.
- Ball rim pitcher: *sombre*, medium textured fabric, temper less than 2 mm, bumpy surfaces, grey fabric (fig. B.8.4).
- Ball rim pitcher: *sombre*, medium textured fabric, temper less than 2 mm, smooth surfaces, mica application, light grey fabric with dark grey surfaces (fig. B.8.5).
- Ball rim pitcher: *claire*, medium textured fabric, temper less than 2 mm, wiped surfaces, mica application, red and black fabric (fig. B.8.6).

CRUCHES

The first type of *cruche* from the productions of *Ilot C* is the beige (or rosy beige, or grey when over fired) fabric with an everted rim. These vessels have an annular base in the form of a ring

foot. The bottom of the vessel therefore stands slightly off the surface the vessel is resting on, and the appearance is of a “finished” vessel, with a pinched demarcation of the body and foot. The exterior surfaces of the vessels are often wiped while wet, providing a smooth finish. These vessels are found in use contexts from *état* three. One example from the production contexts bore traces of black residue.

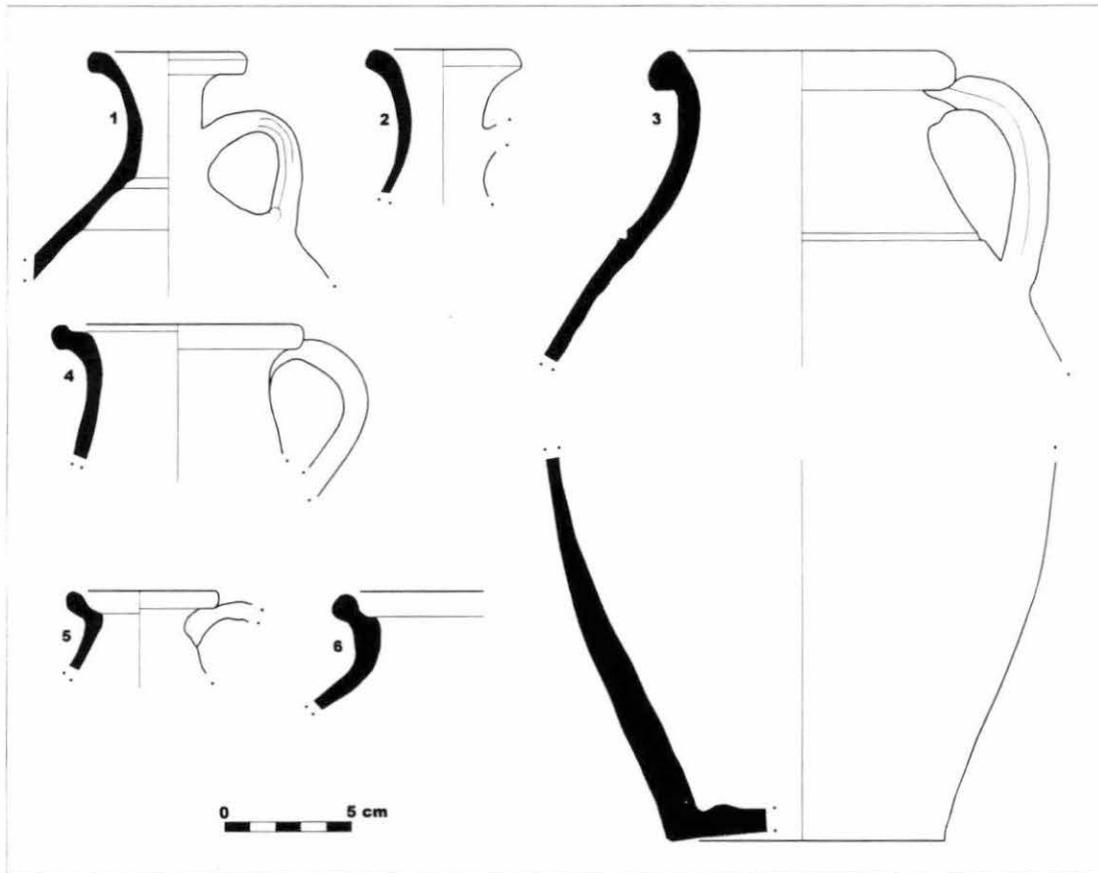


Figure B.8: *Cruches* and pitchers from production contexts, *Ilot C*

- *Cruche, col évasé: claire*, medium textured fabric, temper less than 2 mm, wiped surfaces, rosy beige fabric (fig. B.8.1).
- *Cruche, col évasé: claire*, medium textured fabric, temper less than 2 mm, wiped surfaces, rosy beige fabric (fig. B.8.2).

There is a single example of one variation on the everted rim *cruches*. This appears only in fragmentary form, but is similar to the above vessels.

- *Cruche, col évasé: claire*, medium textured fabric, temper less than 2 mm, wiped surfaces, rosy beige fabric (fig. B.9.3).

Another variation on the everted rim *cruches* is the smaller, unsmoothed everted rim *cruche*.

- Small *cruche, col évasé: claire*, medium textured fabric, temper less than 2 mm, unsmoothed surfaces, rosy beige fabric (not illustrated, see Alfonso, forthcoming, figure 17.4).

There is a full-sized two-handled *cruche* from the productions of *Ilot C*.

- *Two-handled cruche: claire*, medium textured fabric, temper less than 2 mm, bumpy surfaces, beige fabric (not illustrated, see Alfonso, forthcoming, fig. 17.1).

A *cruche* with a spout pinched from a cup-like mouth is found in the production contexts, and also occurs in the use contexts from *état* three.

- Spouted *cruche: claire*, medium textured fabric, temper 2-5 mm, unsmoothed surfaces, beige fabric (also found in rosy beige and in over fired grey) (fig. B.9.6).

A *cruche* with a similar cup-shaped mouth, but without a spout appears in a distinctively slipped fabric. The thick slip is a brick red color. The base of these forms is flat or slightly convex relative to the surface the vessel rests on. They have a slight pinching between the body and base, more pronounced on some individual vessels than others, and some examples but not others have shallow concentric grooves on the bottom of the base. Many examples of this form occur in this production context, and many are identified from use contexts, including one vessel from *état* one, another from *état* two, and examples from *état* three.

- Slipped *cruche, rim en cupule: claire*, fine textured fabric, temper very fine or not visible with the naked eye, heavy red slip, beige or rosy beige fabric (fig 9.5).

A single example of a wide-mouthed *cruche* occurs in this assemblage. It is similar in form to the wide-mouthed *cruches* from the productions of *Ilot A*, but differs in fabric, as the *Ilot C* example is in a reduced, grey fabric.

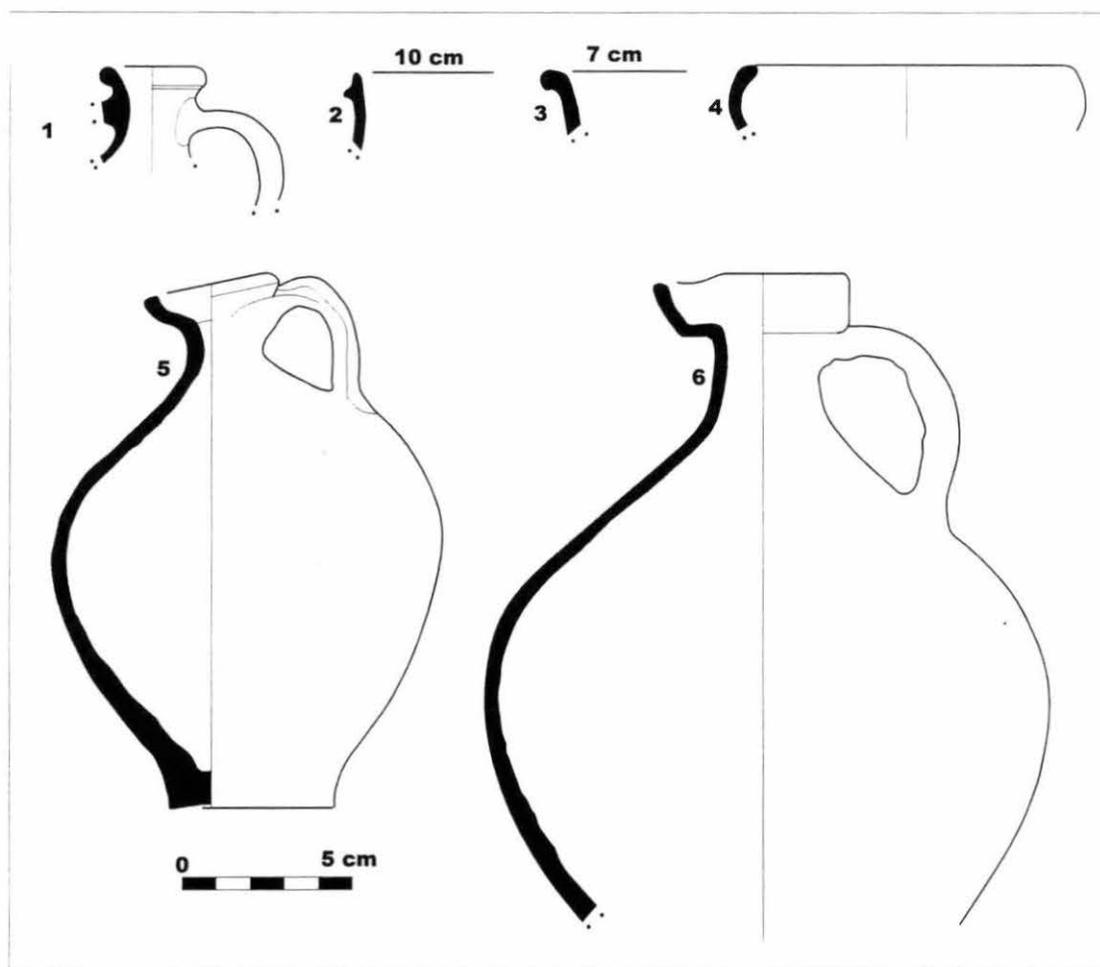


Figure B.9: *Cruches* from production contexts, *Ilot C*

- Wide-mouthed *cruche*: *sombre*, fine textured fabric, temper very fine or not visible to the naked eye, grey fabric (fig. B.9.4).

One miniature *cruche* appears in these contexts. It is a two-handed vessel.

- Two-handled miniature *cruche: claire*, medium textured fabric, temper less than 2 mm, beige fabric (fig. B.9.1).

There is an unusual form which may be a *cruche*. This vessel has a protruding ring around the neck just below the rim.

- *Cruche ?*: *claire*, medium textured fabric, temper less than 2 mm, mica application, rosy beige fabric (fig. B.9.2).
- *Cruche* with *embouchure trilobée*: *sombre*, medium textured fabric, temper 2-5 mm, smoothed surfaces, some with mica application, at least one with reduced surfaces, grey fabric (not illustrated, see Alfonso, forthcoming, fig. 27.2). Multiple examples of this vessel are found in use contexts from *état* three, one vessel was found in use contexts from *abandon*, and a possible identification was made from contexts in *état* two.

The following is a *cruche* which has an elaborate form featuring a decorated vertical buttress on the rim above the handle attachment, and a horn on the apex of the single handle. It has an elongated spout, and a pronounced demarcation of neck and body.

- Elaborate *cruche: claire*, medium textured fabric, temper less than 2 mm, mica application and orange-red paint or slip, beige or rosy beige fabric (not illustrated, see Alfonso, forthcoming, figure 20. 4).

LIDS

- Slightly tunneled rim, ball toe lid: *claire*, coarse fabric, temper 2-5 mm, zoned rosy beige and grey fabric (fig 2.1).
- Slightly tunneled rim, ball toe lid: *claire*, coarse fabric, temper 2-5 mm, beige and grey fabric, rough surfaces (fig. B.2.2). This vessel form is found in use contexts from *état* three.

- Slightly tunneled rim lid: *claire*, coarse fabric, temper 2-5 mm, rosy beige zoned fabric, traces of color on surface which may be paint or slip (fig. B.2.2).

APPENDIX C: THE CERAMICS FROM DÉPOTOIR 8043

The suspected kiln deposit (US 8043) is located outside the block of buildings between the southern corner of *Ilot C* and the city walls. US 8043 was examined in the context of this study to evaluate the possibility that it is a kiln dump, associated or not with either of the known workshops. The presence of kiln wasters indicates that at least some elements contained in the deposit do indeed come from production contexts, although their origins remain uncertain. There were 468 sherds in the collection of *céramique commune*, and these corresponded to a minimum of 108 vessels. The contents of deposit included within this study's definition of *céramique commune* are summarized here.

PLATE

The complete form of this vessel is unknown. It is most likely a flat-bottomed plate, without feet.

- Shallow plate: *sombre*, medium textured fabric, temper less than 2 mm, micaceous application, grey, sooted (fig. C.1.1).

BOWLS

- Cuffed-rim bowl: *sombre*, coarse fabric, temper less than 2 mm, light brown-grey (fig 1.2). This vessel is likely conical in form.
- Inverted-rim bowl: *sombre*, medium textured fabric, temper 2-5 mm, wiped surfaces, grey (fig. C.1.4). Rim in the form of a mushroom cap. Similar vessel found in use contexts from the period of abandonment.
- Large basin: *claire*, coarse but not grainy fabric, temper 2-5 mm, zoned fabric dark orange with grey core, particularly micaceous fabric (fig. C.1.6). Similar vessel found in use contexts in *état* two.

- Large basin: *claire*, coarse fabric, temper 2-5 mm, orange; sooted vessel with sandy, hard fabric (fig. C.1.5).

FOOTED COOKING VESSELS

- Cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, grey; sooted vessel (fig. C.1.3).
- Cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, grey, granular fabric not produced at Autun (not illustrated). Similar to a form occurring in *abandon* contexts.

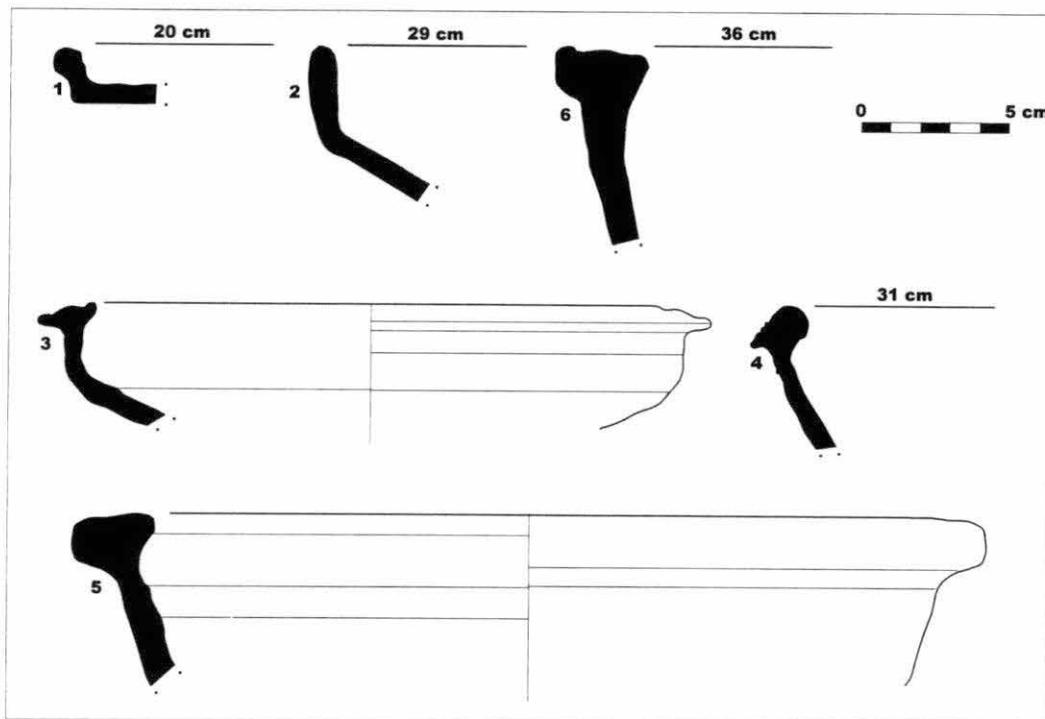


Figure C.1: Vessels from *dépotoir* 8043

- Cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, grey-brown, mica

application (not illustrated). Similar to a form occurring in *état* two.

- Cooking plate or *marmite*: *sombre*, medium textured fabric, temper less than 2 mm, mica application, grey (not illustrated). Similar to a form occurring in *état* three.
- *Marmite*: *sombre*, medium textured fabric, temper less than 2 mm, brown-black, sooty (not illustrated). Similar to a form occurring in *état* three.

MORTARIA

- Mortarium: *claire*, coarse fabric, temper 2-5 mm, zoned beige and rosy beige, red-orange paint, grog temper in addition to standard sand and iron oxide temper (fig. C.2.1).

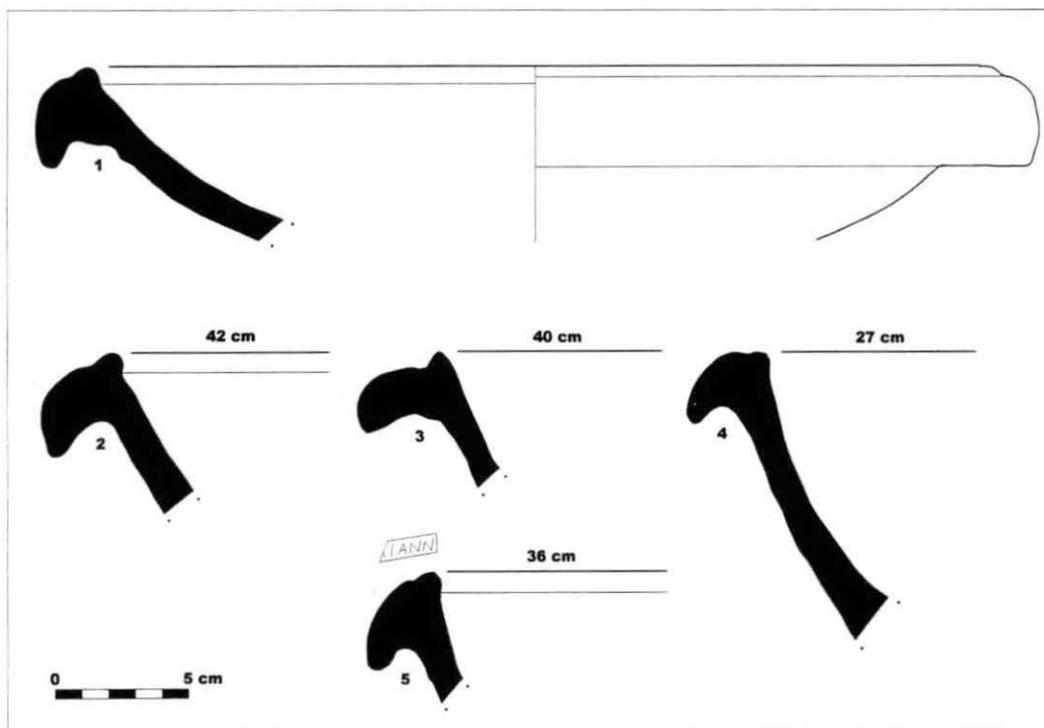


Figure C.2: *Mortaria* from *dépotoir* 8043

- Mortarium: *claire*, coarse fabric, temper 2-5 mm, grey (overfired, but utilized), light brown paint (overfired) (fig. C.2.2).
- Mortarium: *claire*, medium textured fabric, temper 2-5 mm, beige, smooth surfaces (fig. C.2.3).
- Mortarium: *claire*, medium textured fabric, temper 2-5 mm, zoned beige and rosy beige, grog temper in addition to standard sand and iron oxide temper (fig. C.2.4).
- Mortarium: *claire*, coarse fabric, temper 2-5 mm, zoned beige and rosy beige, red-orange paint, stamped (fig. C.2.5).

STORAGE JARS

The two vessels from this dump represent the two Roman-style storage jars or *dolia* which appeared in the *c ramique commune* collections from either *B timent Est* or the productions dumps. They are markedly different from the Celtic-style storage jars on site and have distinctly hard and dense fabrics fired in an oxidizing atmosphere.

- Dolium: *claire*, coarse fabric, temper 2-5 mm, beige, sand temper, very micaceous fabric (fig. C.3.1).

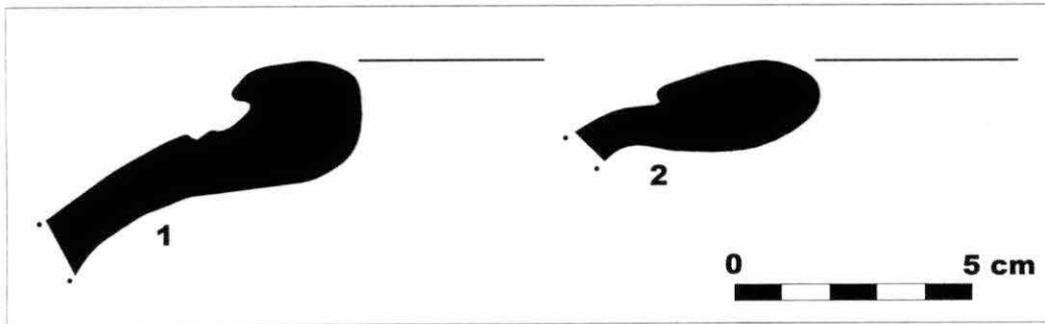


Figure C.3: *Dolia*, d potoir 8043

- Dolium: *claire*, coarse fabric, temper 2-5 mm, beige, sand temper (fig. C.3.2).

JARS

The first set of jars is similar to the Besançon type, either with horizontally flat grooved rims or rolled grooved rims. These are ovoid jars of Celtic tradition, in these examples wheel turned. They possess a finer texture than many Besançon type jars, and have a relatively small temper size for jars which were presumably used for cooking as well as storage and preservation of foodstuffs. Similar rims are also found on bowls and footed *marmites*, so there is a chance of confusion with those forms.

- Besançon type jar: *sombre*, medium textured fabric, temper less than 2 mm, grey, rough surfaces (fig. C.4.1).
- Besançon type jar: *sombre*, medium textured fabric, temper less than 2 mm, grey, rough surfaces (fig. C.4.2). Similar rim form found in use contexts of *état* two.
- Besançon type jar: *sombre*, medium textured fabric, temper less than 2 mm, mica application, grey (fig. C.4.3).
- Besançon type jar: *sombre*, medium textured fabric, temper less than 2 mm, grey, hard fabric (fig. C.4.4).

The following two vessels are likely jars, but possibly other vessels such as a pitcher (fig 4.5) or another type of fairly small-mouthed vessel. One may even be a short open form such as bowl or basin (fig. C.4.6).

- Jar or pitcher: *sombre*, medium textured fabric, temper less than 2 mm, grey, rough fabric (fig 4.5).
- Jar (?): *claire*, coarse fabric, temper 2-5 mm, orange and grey, bumpy surfaces (fig 4.6).

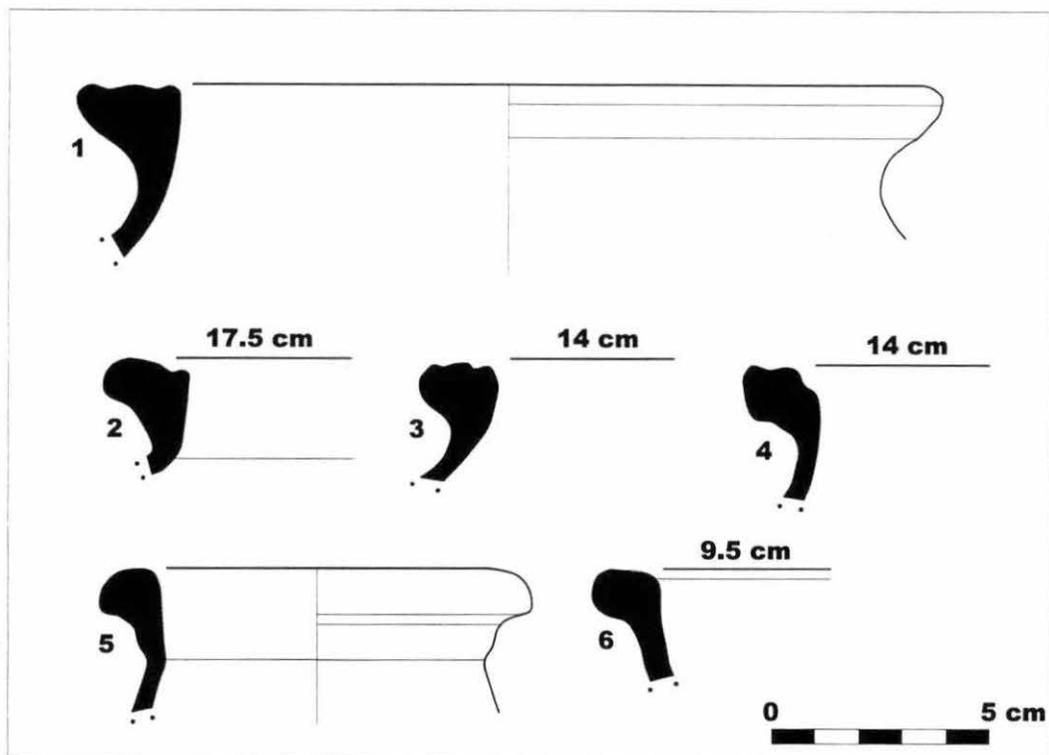


Figure C.4: Jars, *dépotoir* 8043

Grooved-neck jars as in fig. C.5.1 have been identified as belonging to the earliest Gallo-Roman period (*Gallo-Romaine précoce*). In numerous Saône River deposits these first century A.D. jars contained residue of millet, perhaps in the form of a porridge, and have been interpreted diversely as either vessels used in the transport of foodstuffs or as offerings (Tuffreau-Libre 1992:138).

- Grooved-neck jar: *sombre*, medium textured fabric, temper less than 2 mm, grey, thin vessel walls (fig. C.5.1).

The two following vessels have a distinctive vertical neck above the demarcation ending the vessel body and under the vessel rim. They have differing rim forms which are both common among the ceramics produced on the site, but share the characteristic of the vertical neck.

- Trough neck jar (with rim en *gouttière*): *sombre*, medium textured fabric, temper less than 2 mm, grey, thin vessel walls (fig. C.5.2).

- Trough neck jar (with slightly rolled rim): *sombre*, medium textured fabric, temper less than 2 mm, grey, thin vessel walls (fig. C.5.3).

The following form has been identified from the productions of *Ilot C* and published in the survey of those vessels by Alfonso (Alfonso, fig. 18.1). It is a lozenge-shaped jar in profile, more angular and attenuated than the loosely ovoid shape of most jars.

- Lozenge-shaped jar: *claire*, medium textured fabric, temper less than 2 mm, beige with rosy surfaces (not illustrated).

The first of the following two forms (fig. C.5.4) has a straight shoulder which angles down to a sharp direction change for the belly of the vessel. This sharp direction change produces a weakness in

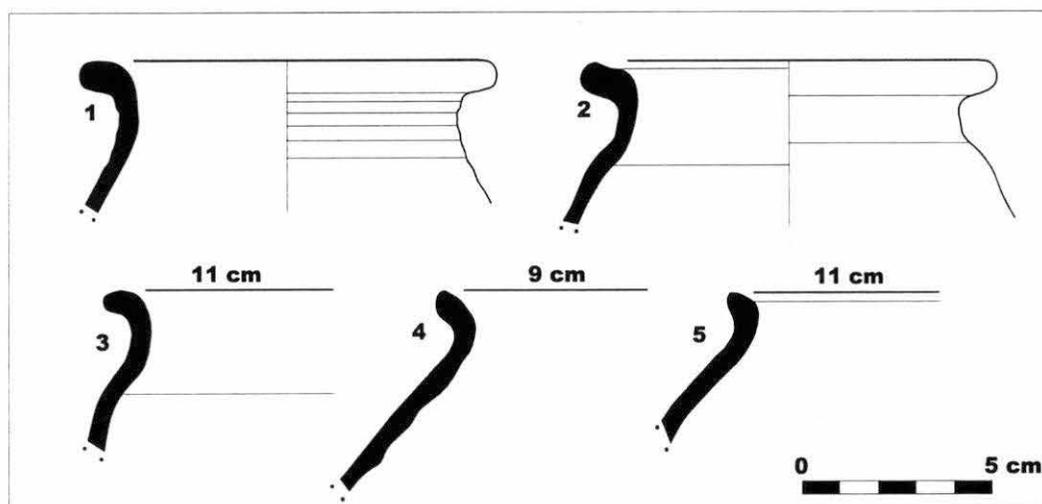


Figure C.5: Jars, *dépotoir* 8043

the vessel, and the shoulder and belly are often broken apart. In similar forms the portion of the belly just below the angle change is furnished with a combed decoration. The second of the two next forms (fig. C.5.5) may be like the first in form, suggested by the angle between shoulder and rim.

- Angle-shouldered jar: *sombre*, medium textured fabric, grey, hard fabric (fig. C.5.4).

- Angle-shouldered jar (?) : *sombre*, medium textured fabric, grey, hard fabric (fig. C.5.5).

CRUCHE

This form differs from the usual *cruche* forms in that it occurs in a beige fabric and has a strongly everted beak-like rim more closely resembling some smaller *amphorae* than many *cruches*. The handle is large and its upper attachment is directly against the rim.

- *Cruche: claire*, fine fabric, temper very fine or not visible to the naked eye, beige, smooth fabric (fig. C.6.1).

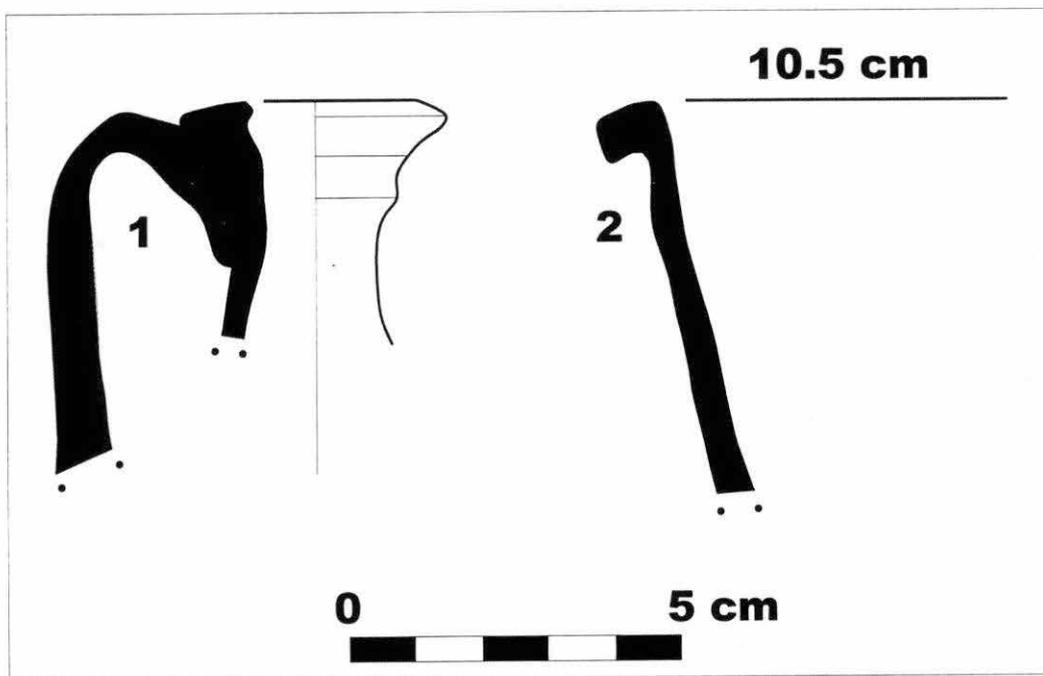


Figure C.6: *Cruche* and unidentified form, *dépotoir* 8043

UNIDENTIFIED

This form is unidentified. It may be a short straight-sided vessel or the upper portion of a vessel with straight, everted sides.

- Unknown: *sombre*, fine fabric, temper very fine or not visible to the naked eye, grey, smooth

fabric (fig. C.6.2).

LIDS

- Ball-toe lid: *sombre*, medium textured fabric, temper less than 2 mm, grey with reduced surfaces, smooth (fig. C.7.1).
- Slight ball-toe lid: *sombre*, medium textured fabric, temper 2-5 mm, brown-black, grainy fabric, bumpy surfaces, thin walls (fig. C.7.2).

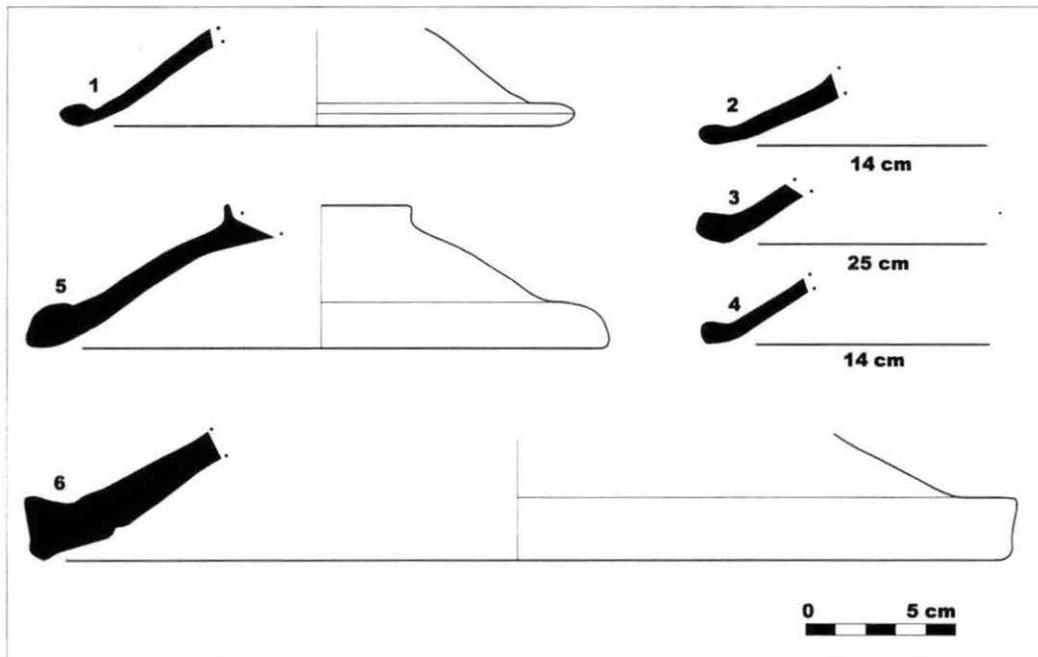


Figure C.7: Lids, *dépotoir* 8043

- Plain-toe lid: *sombre*, medium textured fabric, temper less than 2 mm, grey with reduced surfaces, smooth (fig. C.7.3).
- Slightly angled lid: *sombre*, medium textured fabric, temper less than 2 mm, orange-black (fig.

C.7.4).

- Straight ball-toe lid: *claire*, coarse fabric, temper 2-5 mm, orange-brown, surfaces darkened by reduction (fig. C.7.5).
- Large lid: *sombre*, coarse fabric, temper 2-5 mm, grey, some copper or bronze inclusions as well as usual sand and iron oxide temper (fig. C.7.6).

APPENDIX D: CERAMICS FROM THE USE CONTEXTS AT THE *LYCÉE MILITAIRE*

The following ceramics come from use contexts within the *Lycée Militaire* rather than the production contexts examined in previous chapters. The ceramics represent the entire collection of *céramique commune* from the *Bâtiment Est*. The *Bâtiment Est*, or eastern building, is located in *Ilot C* alongside the secondary *cardo* and the space adjacent to the city wall. It is a fully excavated building providing a significant quantity of the total sherds excavated from the *Lycée Militaire*. The ceramics here are illustrated and described in order to present a cross-section of the greater assemblage in appropriate detail to recognize trends in the assemblage and to allow future identification of similar vessels.

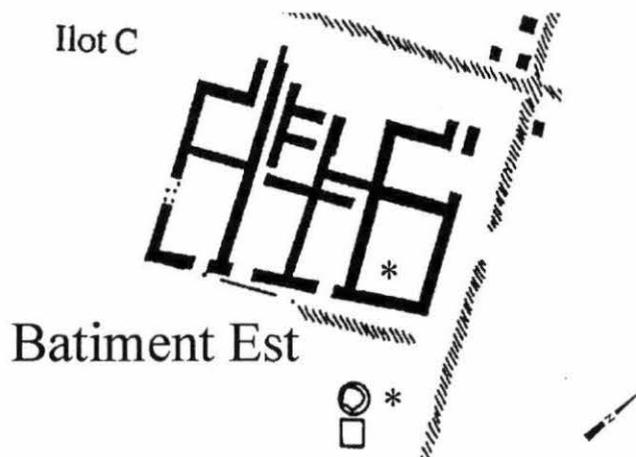


Figure D.1: The Bâtiment Est of Lycée Militaire, showing ceramic production sites (*)

In some cases it is possible to identify sherds as products of the *Lycée Militaire* workshops. This is accomplished with comparisons with vessels from production contexts and by the recognition of attributes such as fabric texture which fall within the range of those in the vessels from the kiln dumps. In other cases a *Lycée Militaire* origin can be ruled out on the basis of fabric texture. Sherds which exhibit the grainy mortar-like fabric are considered to have been produced elsewhere.

Like the production-context ceramics described in the preceding chapters, the temper in the sherds from the use contexts is generally a combination of sand and iron-rich particles, and on occasion includes grog or organic materials. This appears to hold true for both the ceramics produced at the site and those produced elsewhere. Because of this consistency, when not noted otherwise in the description, temper is a combination of sand and iron-rich particles. The sand is presumed to be of the same or similar origin as that described by the thin section analysis as a cataclysmic granite composed of quartz, feldspars and mica (Geokit 1995:9). The appearance of these sherds often includes a micaceous or brilliant aspect apart from any surface application of a mica slip or wash, as described above (Chapter three). At times the mica application is combined with pigment, in which case it is described here as a micaceous paint, with an indication of the colors of pigment.

ÉTAT ZERO

The interpretation of the *céramique fine* from *état zero* indicates that the majority of material is of the Augustan period, and the deposit itself dates to early in the reign of Tiberius (14-37 A.D.). The *céramique commune* assemblage from *état zero* is relatively small, consisting of 129 sherds and 15 vessels. The artifacts from *état zero* come from contexts unassociated with architectural remains and represent the first traces of the site's occupation.

The first two *cruches* have small rim diameters and fine fabrics, consistent with a *cruche* template. They are only represented by the rim and neck portions of the vessels. In this incomplete state they do not provide handles. It may be assumed that these vessels probably had one handle which attached on the shoulder and the neck. These *état zero cruches* present ridged outer rims, apparently a decorative feature. Similar *cruches* with ridged rims appear in the published literature. They are different in the details of the rim shapes, but they are of a similar style in the external ridging which rings the rim of the vessel. At Alésia similar forms date from Augustus to early in the reign of Tiberius (Sénéchal 1975:11). Sénéchal also notes that like forms at Vindonissa belong to the mid first century A.D., associated with Tiberian and Tiberio-Caligulan dates (Sénéchal 1975:13). They are also reported with a calcareous fabric in Burgundian contexts from the late first to early second century (Joly 1994:307, and figs. 50-51), and specifically from productions at Nevers dating from the end of the reign of Augustus through the Claudian period (Joly 1996a:122 and fig. 10.6).

- Ridged rim *cruche: claire*, fine textured fabric, temper very fine or not visible to naked eye, beige fabric (fig. D.2.1).

- Ridged rim *cruche: claire*, fine textured fabric, temper very fine or not visible to naked eye, orange fabric (fig. D.2.2).

The third vessel presented here is a thin-walled bowl or basin, perhaps intended for table use or the preparation and cooking of foods. It has grooves on a horizontal rim, and a slight trough below the rim at the meeting of rim and body.

- Bowl: *sombre*, coarse fabric, angular temper composed of sand, iron oxide, and perhaps grog, 2-5 mm, brown-black fabric (fig. D.2.3).

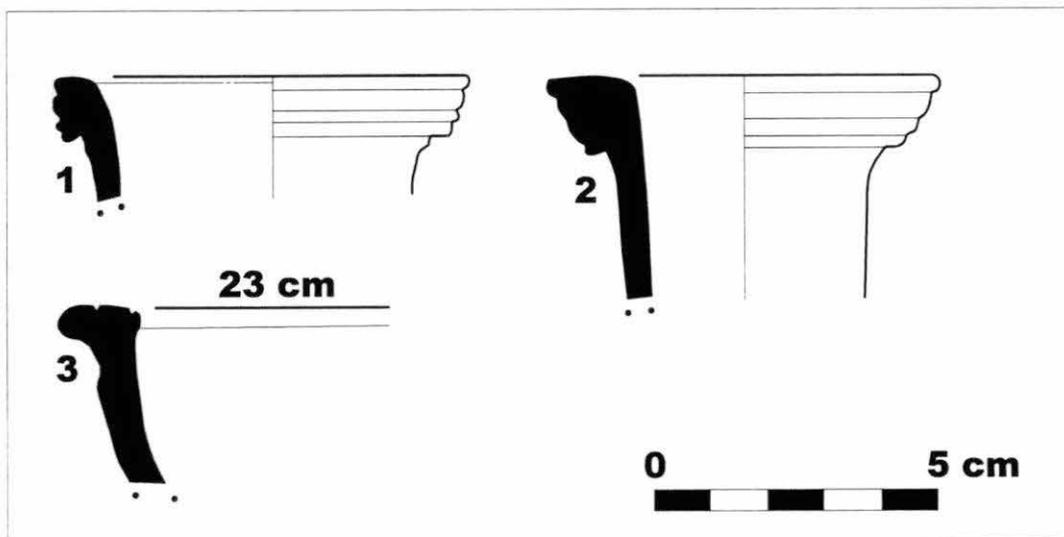


Figure D.2: État zero

ÉTAT ONE

État One, in *Bâtiment Est*, comprises roughly the second half of the first century A.D. These contexts produced 1217 sherds of *céramique commune* which belonged to 149 vessels. These vessels show certain correlations with other ceramic assemblages of similar dates. In particular, the rim forms and decorations of some jars is characteristic of this and slightly earlier periods. These consistent trends among utilitarian ceramics do not necessarily indicate the wide distribution of particular utilitarian vessels, as the origins of these individual vessels is not known. It does confirm

what archaeologists of many periods have already described, which is the distribution of elements of style for the utilitarian vessels as well as the fine wares.

BOWLS

Figure three contains three bowls, all more or less conical in shape. The first has a thick vertical rim, and the latter two have inverted rims.

- Vertical rim bowl: *claire*, medium textured fabric, temper less than 2 mm, smooth burnished surfaces, white fabric (fig. D.3.1).
- Inverted rim bowl: *sombre*, medium textured fabric, temper less than two mm, grey fabric with darker grey reduced surfaces (fig. D.3.2).
- Inverted rim bowl: *sombre*, medium textured fabric, temper less than two mm, brown-grey fabric with darker reduced surfaces, smoothed (fig. D.3.3).

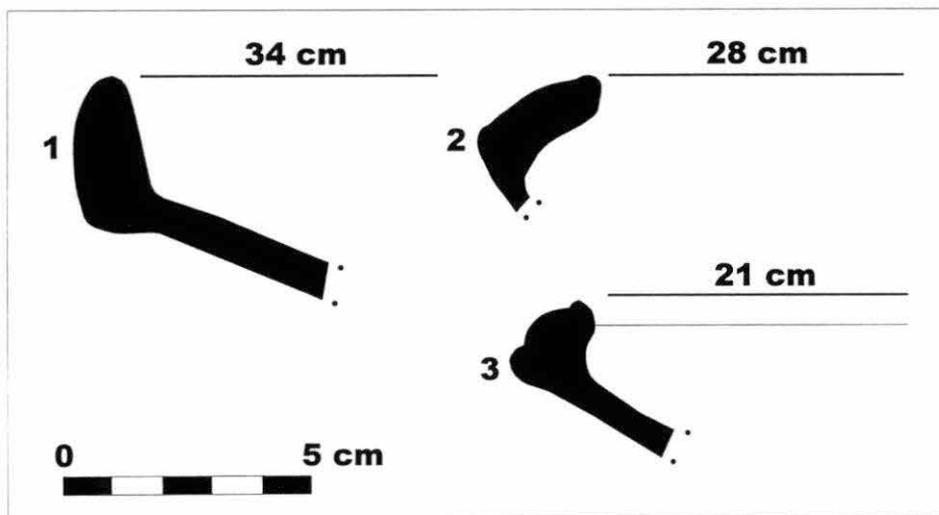


Figure D.3: État one, bowls

The footed cooking vessels from *état* one have rims which fall loosely into two categories. The first (fig. D.4.1) has a straight rim which is very simple apart from a slight ball at the topmost point. The others all have bifurcated rims on a variety of vessel sizes, and varying from a very small pendant square (fig. D.4.2) through nearly heart-shaped versions (fig. D.4.5).

- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, sooty surfaces, grey fabric (fig. D.4.1).
- Footed cooking plate: *sombre*, medium textured fabric, temper 2-5 mm, sand temper with very little mica present in the fabric, darker reduced surfaces on grey fabric (fig. D.4.2).
- Footed cooking plate: *sombre*, medium textured fabric, temper 2-5 mm, orange, brown, grey, and black fabric (fig. D.4.3).
- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, thin walls with bumpy surfaces, grey-black fabric (fig. D.4.4).

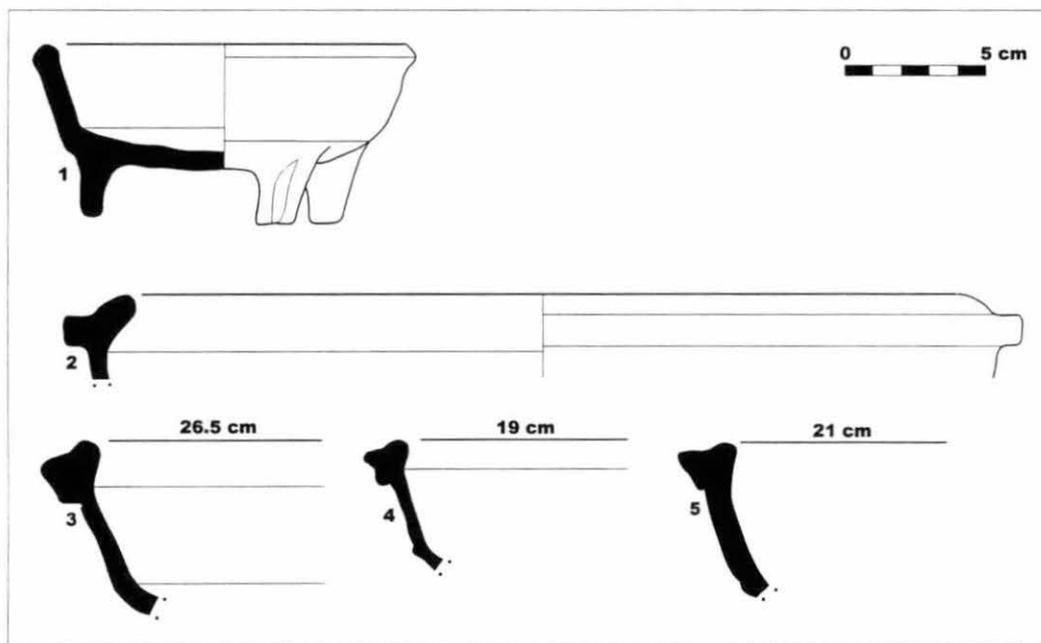


Figure D.4: *État* one, footed cooking vessels

- Footed cooking plate: *sombre*, coarse fabric, temper less than 2 mm, brown-black fabric with orange clouding (fig. D.4.5).

JARS

Grooved-neck ovoid jars, usually in *sombre* fabrics have been associated with first century A.D. contexts in several parts of Burgundy, as well as elsewhere in France. Joly identifies their production at Chalon-sur-Saône and Chenôves (Joly 1996a:122 and figs. 11 and 13). Tuffreau-Libre cites similar forms from Lyon (Tuffreau-Libre 1992:68). At the *Lycée Militaire* the vessels usually occur in reduced fabrics, and often have a mica application on the exterior surface, sometimes only on portions of the vessel, most often the neck or neck and shoulder. These are often thin-walled vessels with a fine or finished appearance. The presence of these vessels in *état one* contexts is in keeping with their association with first century A.D. contexts.

A second common jar form in early Roman contexts in Burgundy is the Besançon style jar as described by Ferdière and Ferdière (1972). This common form was originally identified as indicator of the transition period from La Tène III to early Gallo-Roman. The extents of the two phases of production of these jars and the variation among rims included in this category has been presented more recently by Joly (1996a). These ovoid jars are a continuation of an indigenous vessel tradition. While most often reported as entirely hand built or hand built and then finished on a slow wheel, the forms can appear in hand-built or wheel-turned versions. The miniature Besançon style jars in these *état one* contexts are wheel built.

- Grooved-neck jar: *sombre*, medium texture fabric, temper 2-5 mm, grooving on neck, grey fabric (fig. D.5.1).
- Combed-neck jar: *sombre*, medium textured fabric, temper less than 2 mm, brown and black fabric with traces of soot and cooking residue (fig. D.5.2).
- Grooved-neck jar: *sombre*, medium textured fabric, temper less than 2 mm, mica application on grey fabric (fig. D.5.3).
- Small Besançon form: *sombre*, fine fabric, temper less than 2 mm, crumbly fabric with sand temper, grey and brown (fig. D.5.4).

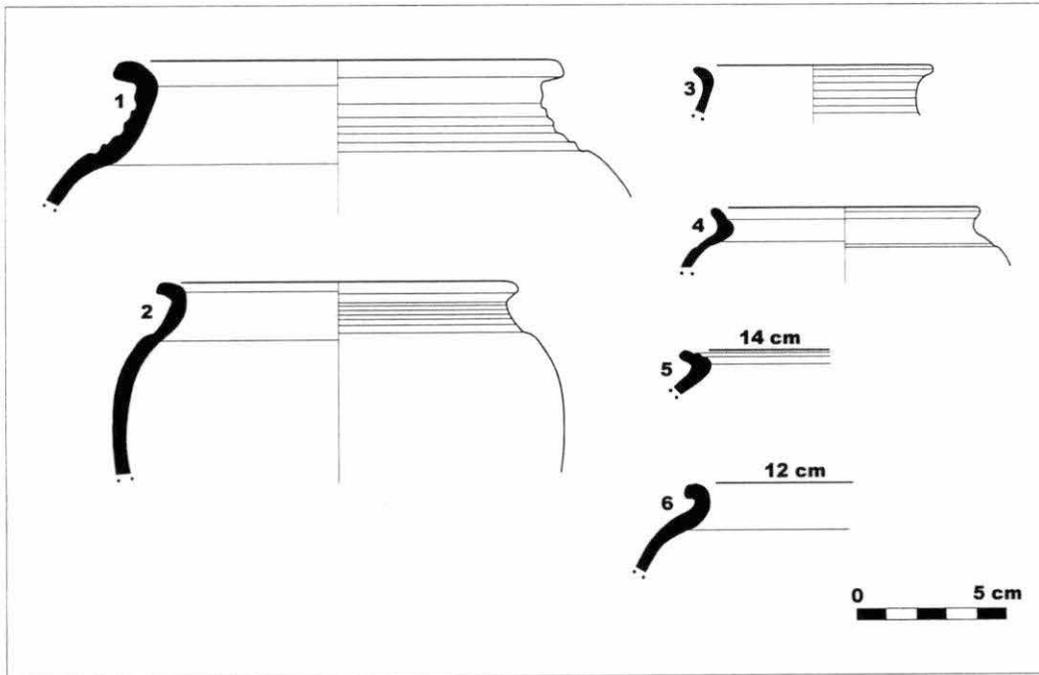


Figure D.5: *État one*, jars

- Small Besançon form: *sombre*, medium textured fabric, temper less than 2 mm, dense, fine grained fabric, high fired, grey with darker reduced surfaces (fig. D.5.5).
- Grooved-neck jar: *claire*, medium textured fabric, sand and iron temper and perhaps grog, temper less than 2 mm, mica application on grooved neck only, rosy beige to grey with grey reduced surfaces (fig. D.6.1).

The following small jar or goblet has a rolled rim with a groove on the top or horizontal portion of the lip formed by the rolled rim.

- Grooved rim jar: *sombre*, medium textured fabric, temper less than 2 mm, grey with darker reduced surfaces (fig. D.5.6).

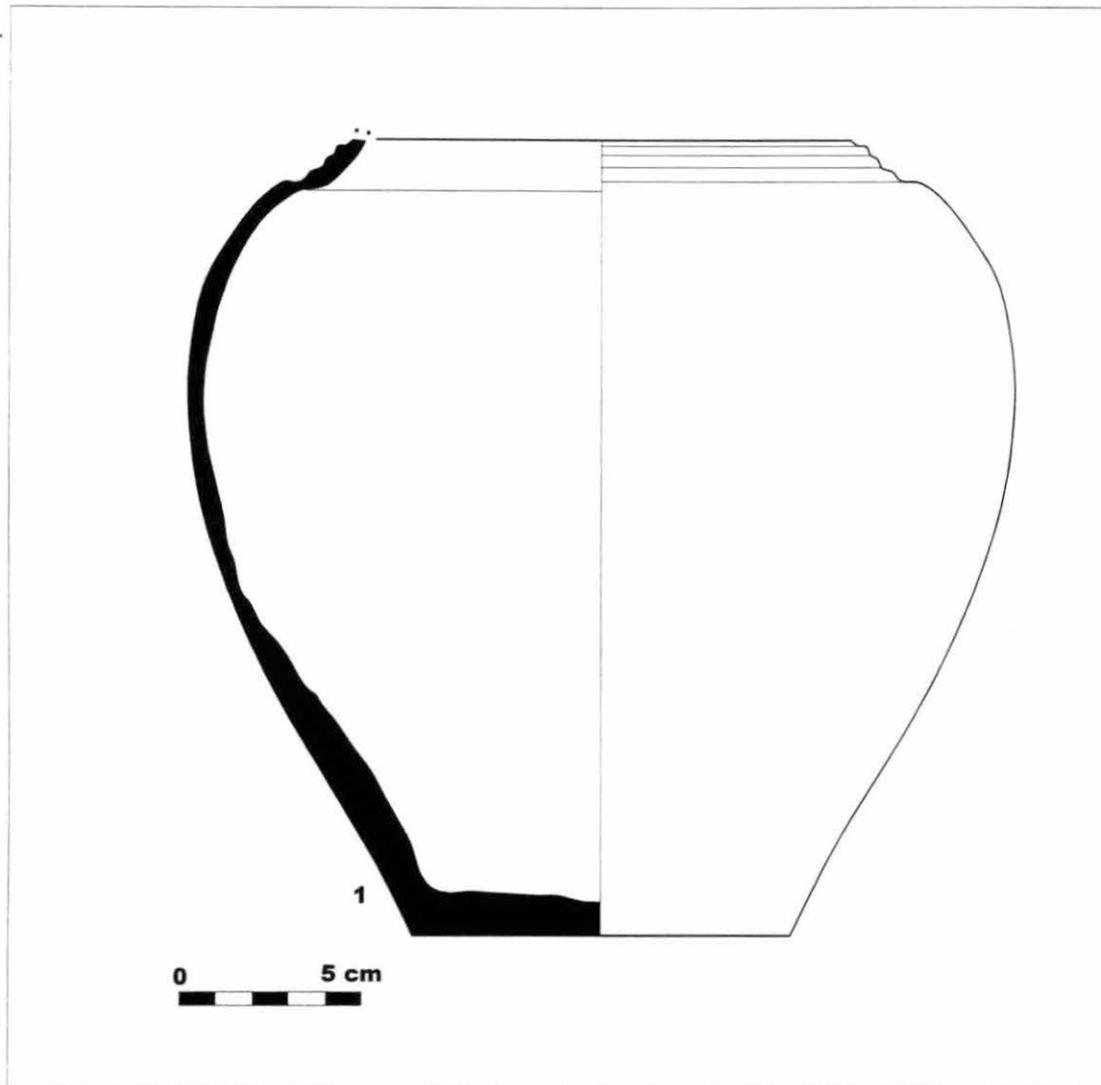


Figure D.6: *État one*, jar

- Besançon rim jar: *sombre*, medium textured fabric, temper 2-5 mm, mica application on grey fabric (fig. D.7.1).
- Besançon rim jar: *sombre*, medium textured fabric, temper 2-5 mm, hard grey fabric (fig. D.7.2).
- Small Besançon rim jar: *claire*, coarse fabric, sand temper 2-5 mm, bumpy surfaces on beige and blackened fabric with sooting and cooking residue (fig. D.7.3).

- Besançon rim jar with elongated interior rim: *claire*, coarse fabric, temper 2-5 mm, zoned beige and grey fabric (fig. D.7.4).
- Angled-rim jar: *sombre*, medium textured fabric, sand temper less than 2 mm, bumpy black fabric with sooting and cooking residue (fig. D.7.5).

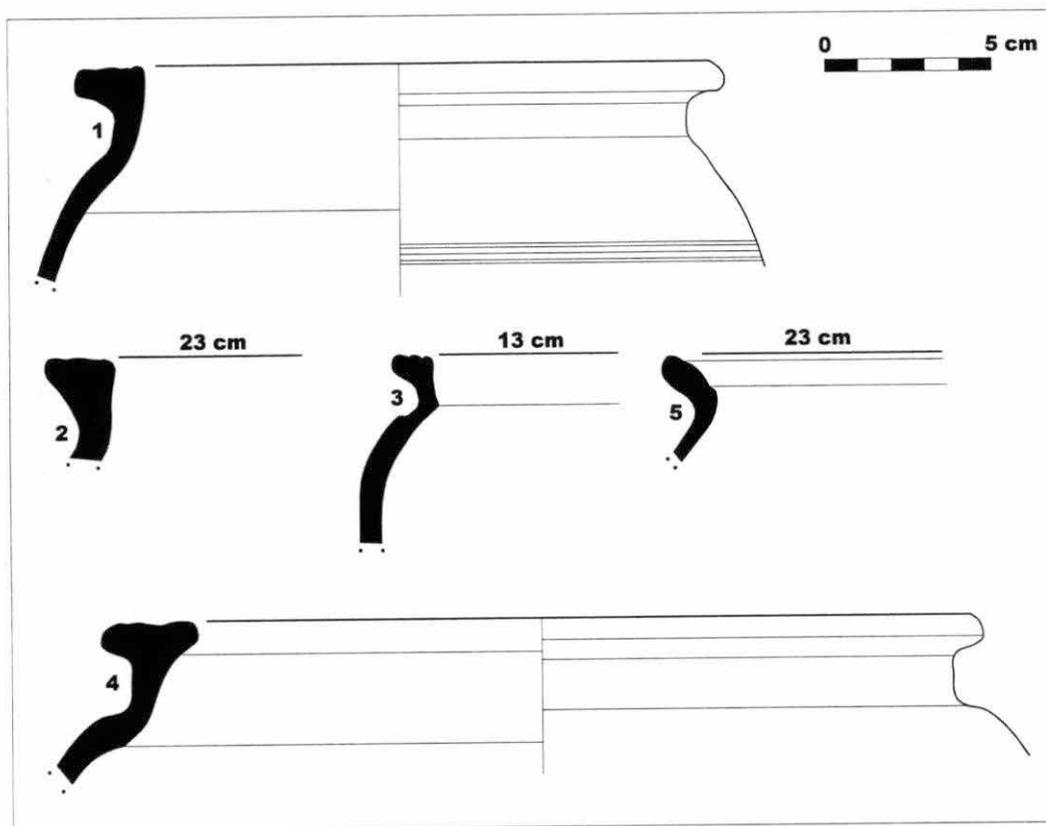


Figure D.7: *État one*, jars

The following jars are *céramique commune claire*, and do not belong to a single type. They are a combination of rim forms, and one presents a large zone of combing on the vessel body.

- Horizontal rim jar: *claire*, medium textured fabric, temper less than 2 mm, light grey (cf. 20, 23, 25) (fig. D.8.1).

- Square rim jar: *claire*, medium textured fabric, temper less than 2 mm, mica application, brown fabric with grey surfaces, sooting (fig. D.8.2).
- jar: *claire*, fine textured fabric, sand temper 2-5 mm, orange, brown and black fabric smoothed on top of rim, and mica application on rim (fig. D.8.3). Compare with productions, use that description of rim form.
- Combed jar: *claire*, medium textured fabric, temper less than 2 mm, orange fabric with dark reduced surfaces, combed decoration on belly of vessel (fig. D.8.4).

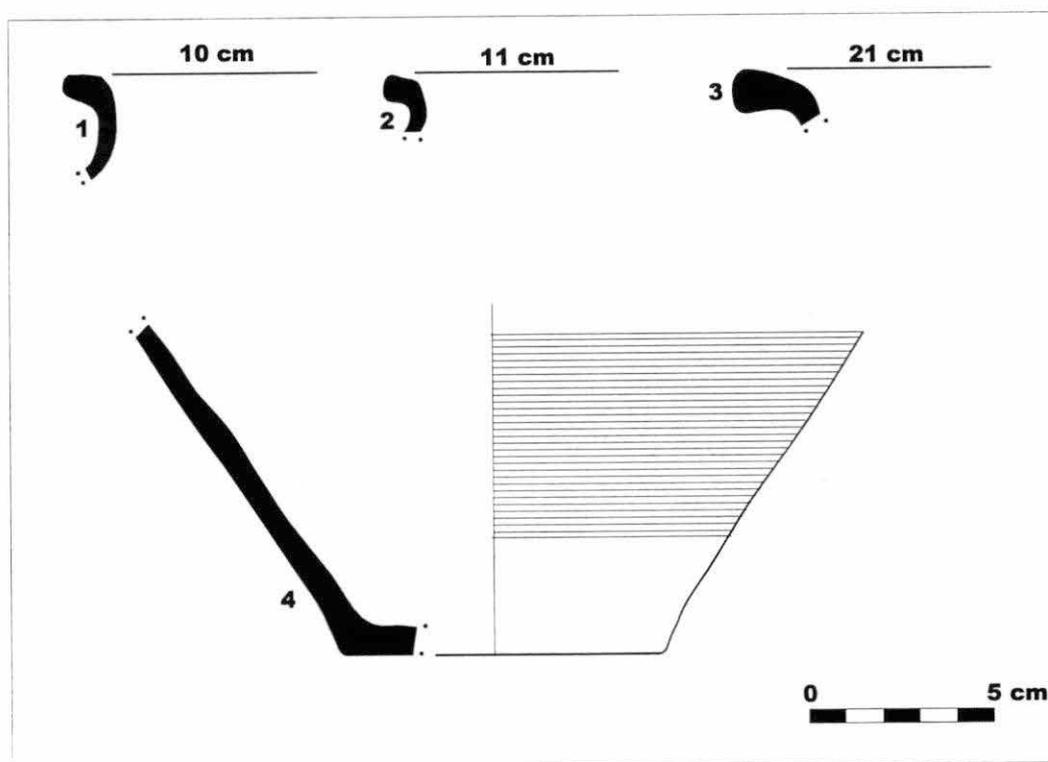


Figure D.8: État one, jars

ÉTAT TWO

ÉTAT two in the *Bâtiment Est* is the second half of the first century A.D. This horizon produced 3318 sherds of *céramique commune* from 323 vessels.

BOWLS

- Small bowl or dish: *claire*, medium textured fabric, temper less than 2 mm, rosy brown and burned black (fig. D.9.1).
- Conical bowl: *claire*, coarse textured fabric, temper 2-5 mm, orange fabric with brown burnished surfaces (fig. D.9.2).
- Conical bowl: *claire*, coarse textured fabric, temper less than 2 mm, brown-orange fabric, dark surfaces (fig. D.9.3).
- Conical bowl: *sombre*, medium textured fabric, sand temper less than 2 mm, hard grey fabric with smooth surfaces (fig. D.9.4).
- Conical bowl: *sombre*, medium textured fabric, sand temper less than 2 mm, slightly grainy hard grey fabric (fig. D.9.5).
- Conical bowl: *claire*, medium textured fabric, temper less than 2 mm, brown-black fabric (fig. D.9.6).
- Conical bowl: *claire*, medium textured fabric, temper less than 2 mm, orange fabric with grey surfaces (fig. D.9.7).
- Conical bowl: *claire*, medium textured fabric, temper less than 2 mm, pale orange and grey zoned fabric, smooth surfaces (fig. D.9.8).
- Bowl: *sombre*, coarse textured fabric, temper less than 2 mm, mica application on grey fabric, probable production at Autun (fig. D.9.9).

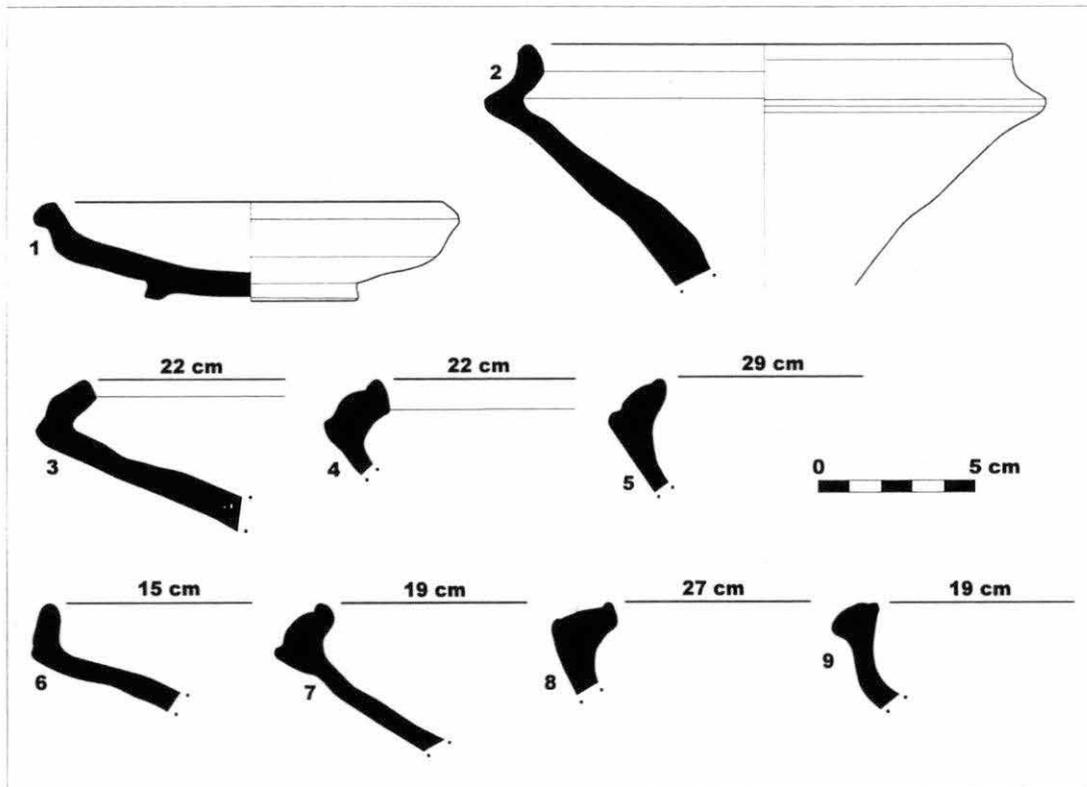


Figure D.9: *État* two, bowls

FOOTED COOKING VESSELS

The footed cooking vessels from *État* two show several basic rim forms and two kinds of feet. The rim forms include forked rims with pendant squares of various sizes, variations on rims which are triangular in profile or crown-shaped with crenellations on the exterior or upper facets, and simple vertical rims ending in a small ball or nodule.

- Footed cooking plate: *claire*, medium textured fabric, temper less than 2 mm, grainy fabric, pale orange with brown-black exterior, sooted (fig. D.10.1).
- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, grey, tube foot (fig. D.10.2).
- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, hard grey fabric, tube foot (fig. D.10.3).

- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with smooth surfaces (fig. D.10.4).
- Footed cooking plate: *sombre*, coarse textured fabric, temper less than 2 mm, hard grey fabric (fig. D.10.5).
- Footed cooking plate, *sombre*, coarse textured fabric, temper less than 2 mm, grey-brown grainy fabric, residue on interior of vessel (fig. D.10.6).

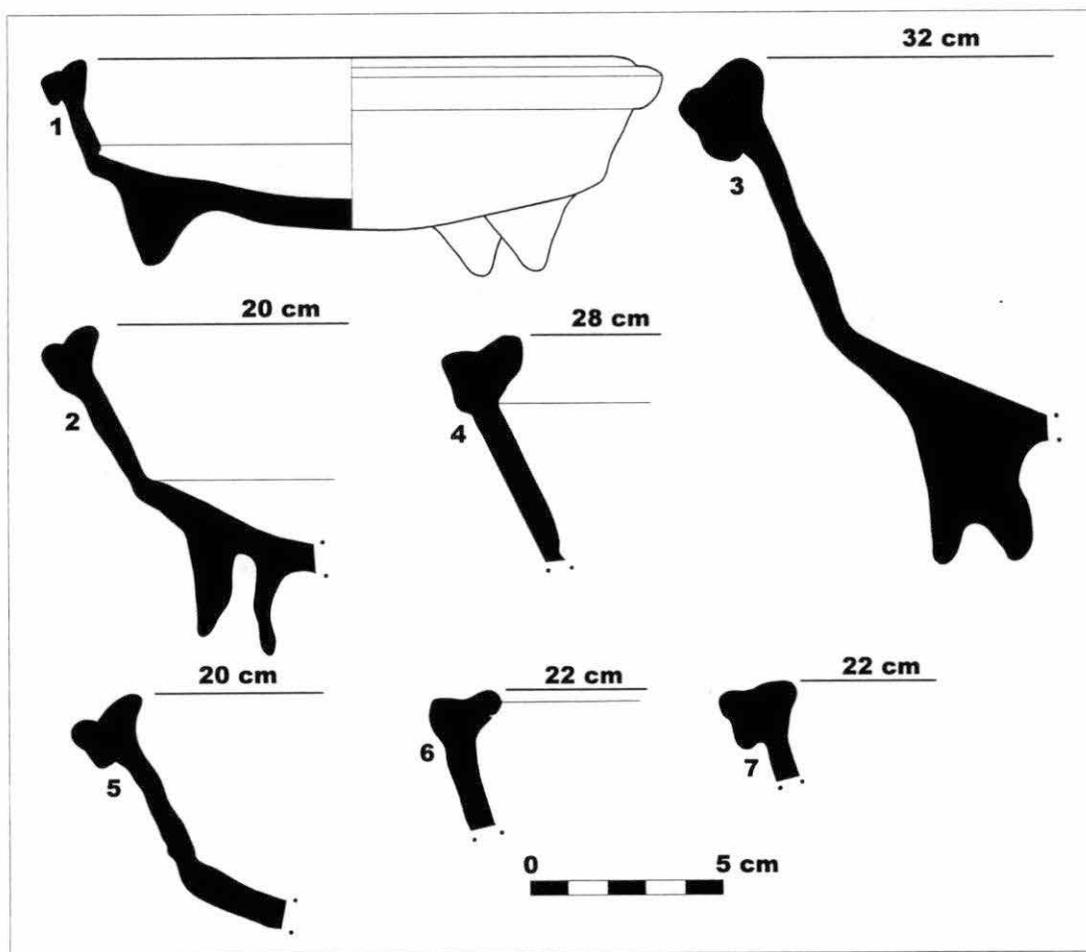


Figure D.10: *États* two, footed cooking vessels

- Footed cooking plate: *claire*, medium textured fabric, temper less than 2 mm, brown orange fabric with darker surfaces (fig. D.10.7).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, grey laminated fabric, possible production at Autun (fig. D.11.1).
- Footed cooking vessel: *claire*, medium textured fabric, sand temper less than 2 mm, beige-brown and black soft fabric, mica application (fig. D.11.2).

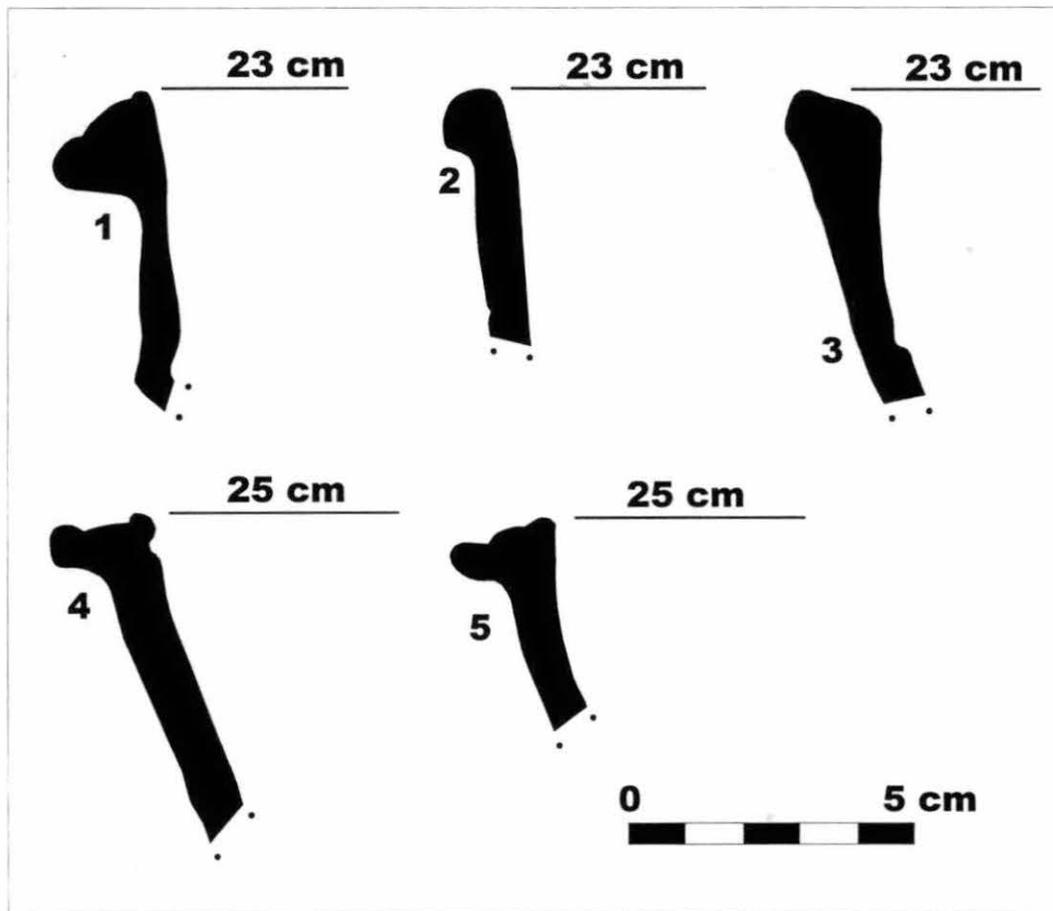


Figure D.11: *État* two, footed cooking vessels

- Footed cooking vessel: *claire*, coarse textured fabric, sand, iron oxide, and organic temper less than 2 mm, light brown and black fabric with combing and residue on vessel interior (fig. D.11.3).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric (fig. D.11.4).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, grey with light brown patches (fig. D.11.5).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, grey, grooving on exterior (fig. D.12.1).
- Footed cooking vessel: *sombre*, medium textured fabric, temper 2-5 mm, grey, grooving on exterior, cooking residue on interior (fig. D.12.2).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, grey-black slightly grainy fabric (fig. D.12.3).
- Footed cooking vessel: *claire*, coarse textured fabric, temper 2-5 mm, rosy beige with mica application (fig. D.12.4).
- Footed cooking vessel: *sombre*, fine textured fabric, sand, iron oxide, and possible grog temper less than 2 mm, grey fabric with darker reduced surfaces, mica application (fig. D.12.5).

JARS AND GOBLETS

- Goblet/ Small Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey, sooty residue on interior (fig. D.13.1).
- Small Jar: *sombre*, medium textured fabric, temper less than 2 mm, black (fig. D.13.2).

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, brown-grey with combing on exterior (fig. D.13.3).
- Goblet/ Small Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with reduced surfaces and mica application (fig. D.13.4).

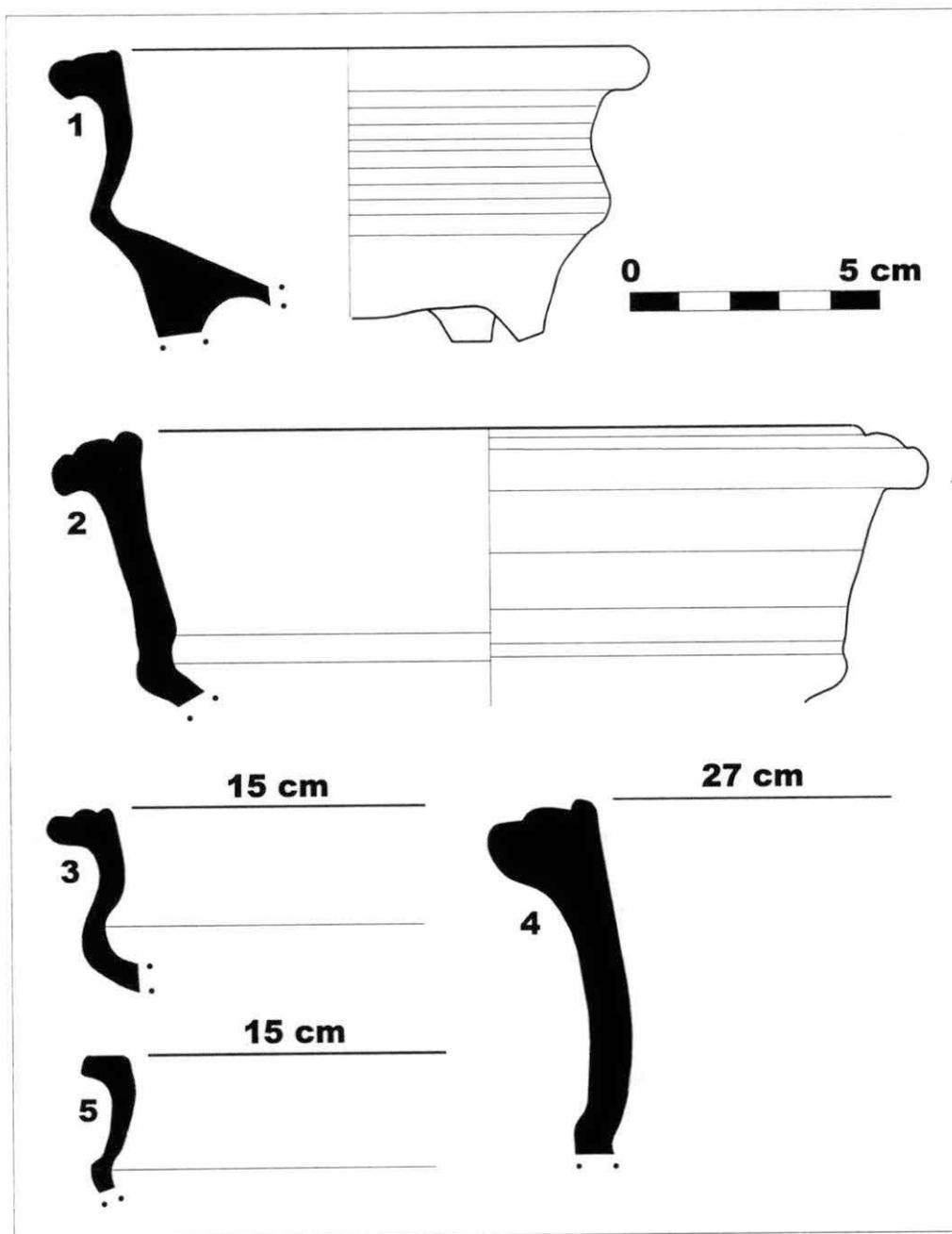


Figure D.12: *État two*, footed cooking vessels

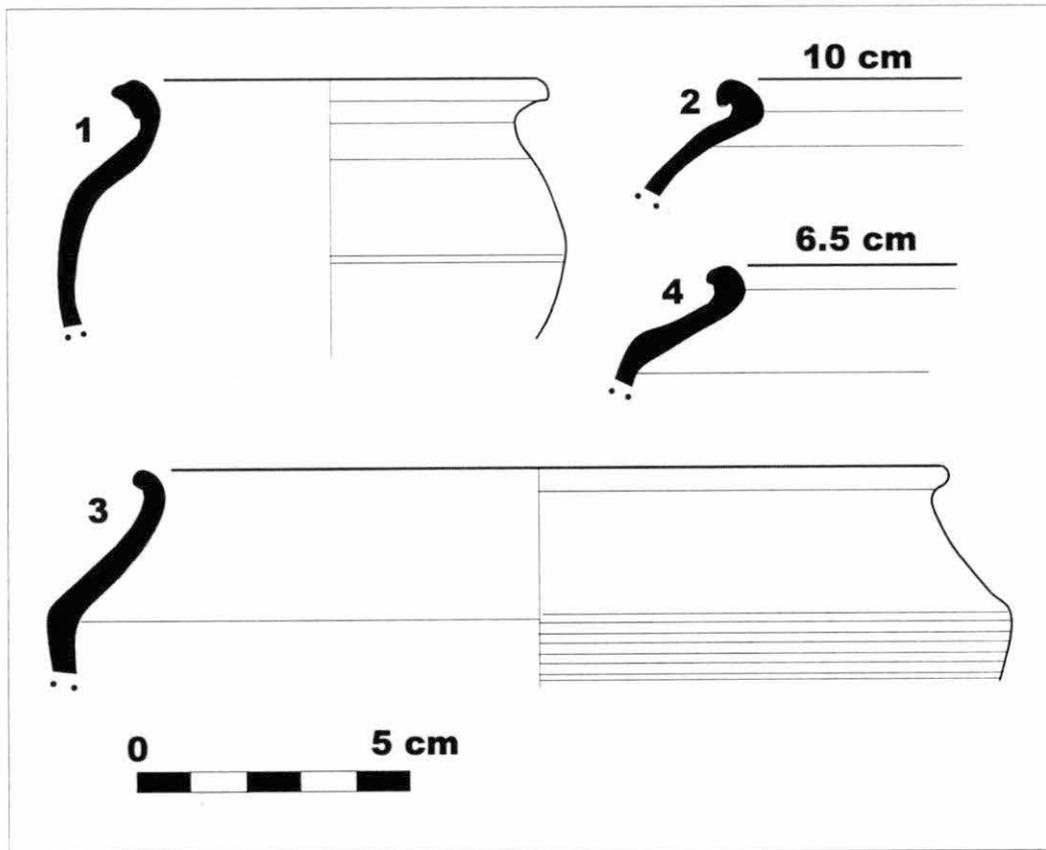


Figure D.13: *État two*, goblets or small jars

- Jar: *claire*, medium textured fabric, sand, iron oxide, and organic temper 2-5 mm, orange fabric with rough surfaces, decorated with grooving on exterior, sooty surfaces (fig. D.14.1).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with mica application and grooving on exterior (fig. D.15.1).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with grooving on exterior (fig. D.15.2).

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey brown fabric with grooved vessel neck, sooting on exterior (fig. D.15.3).

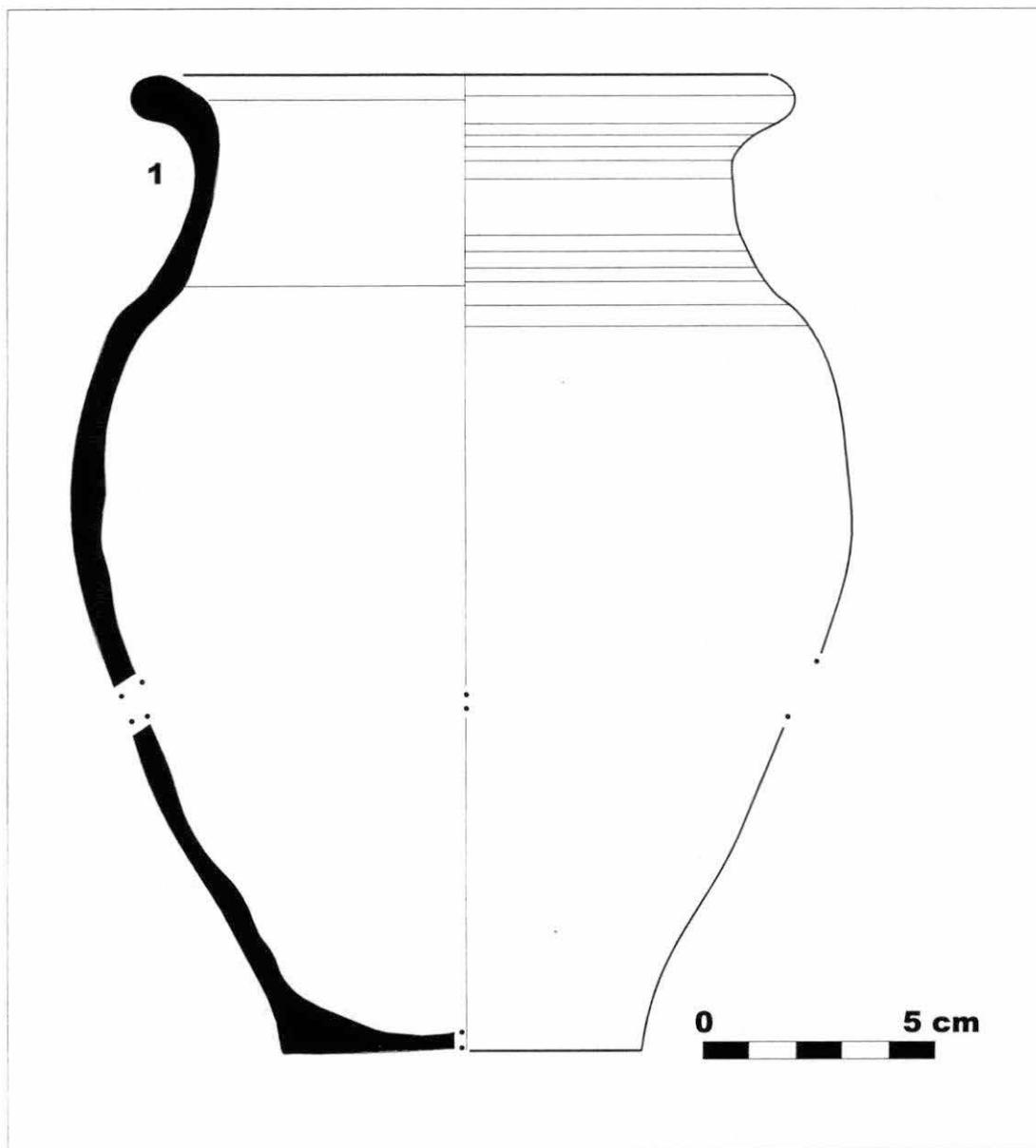


Figure D.14: *État* two, jar

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey with darker grey surfaces, combing on vessel shoulder (fig. D.16.1).

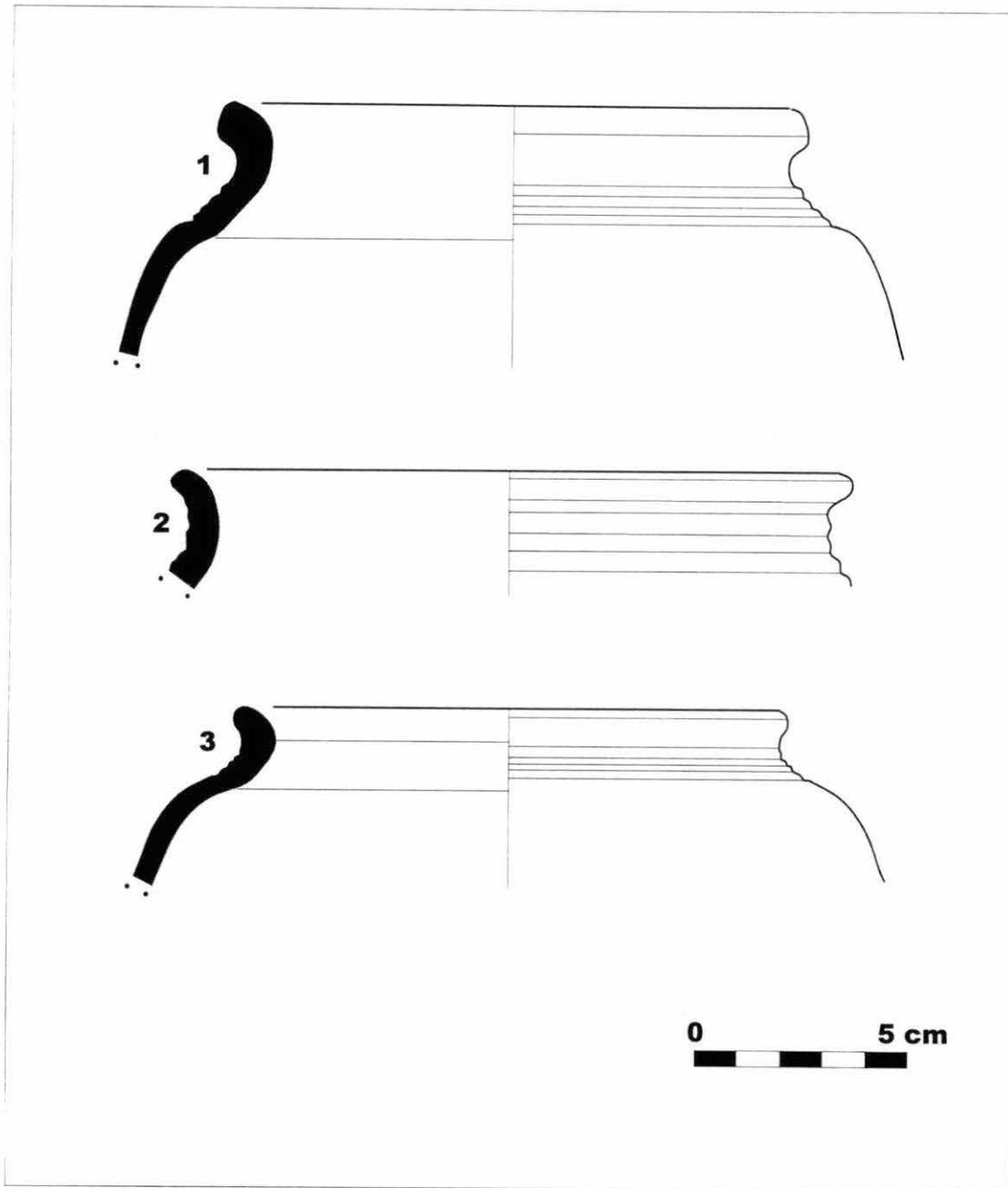


Figure D.15: *État two*, jars

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey with mica application (fig. 16.2).
- Jar: *sombre*, coarse textured fabric, temper 2-5 mm, high fired grey fabric (fig. D.16.3).

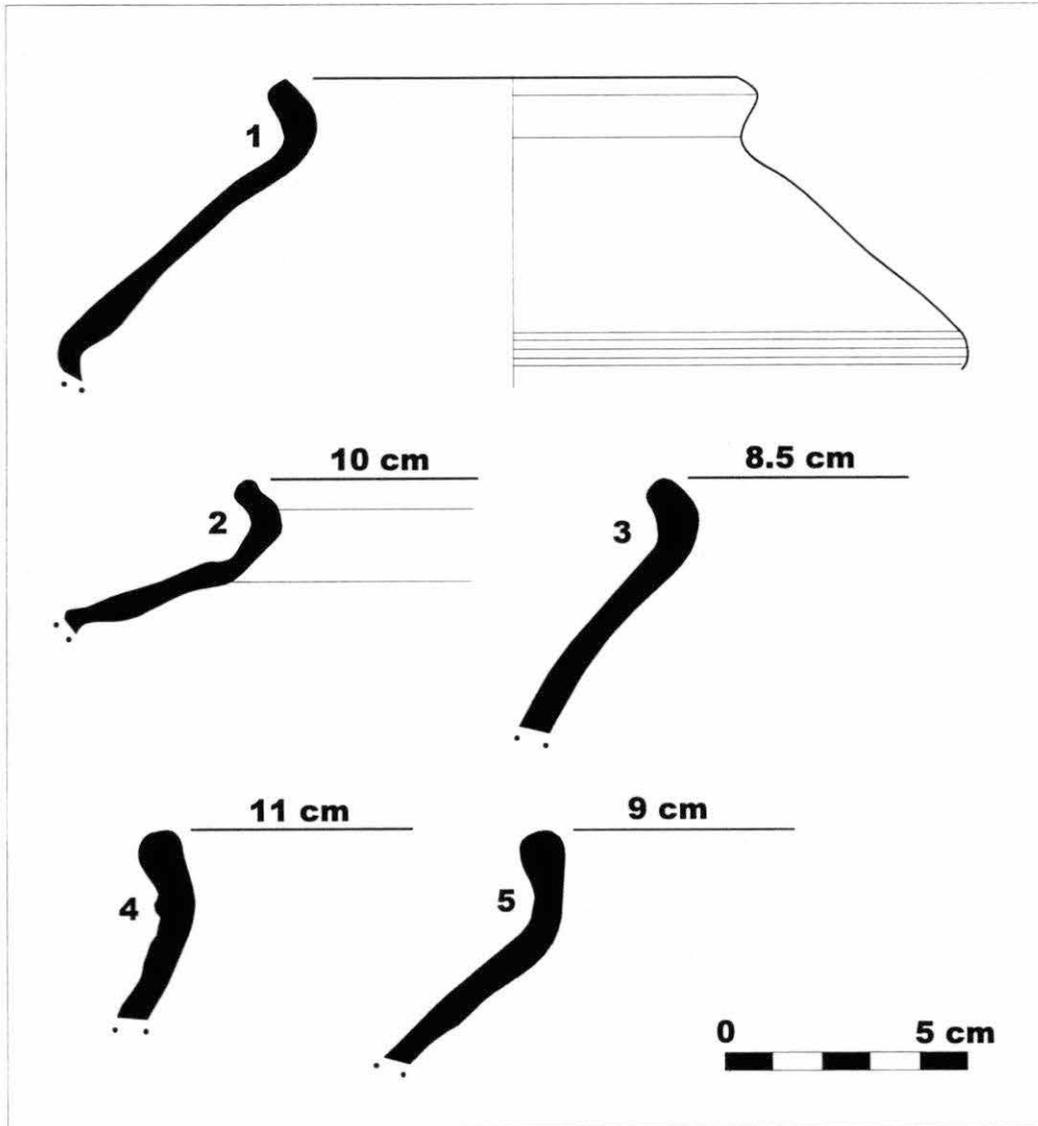


Figure D.16: *État two*, jars

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey burnished fabric (fig. D.16.4).

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker grey surfaces (fig. D.16.5).
- Jar: *sombre*, coarse textured fabric, temper less than 2 mm, very hard and rough grey fabric, produced at Autun, *Ilot C* (fig. D.17.1).

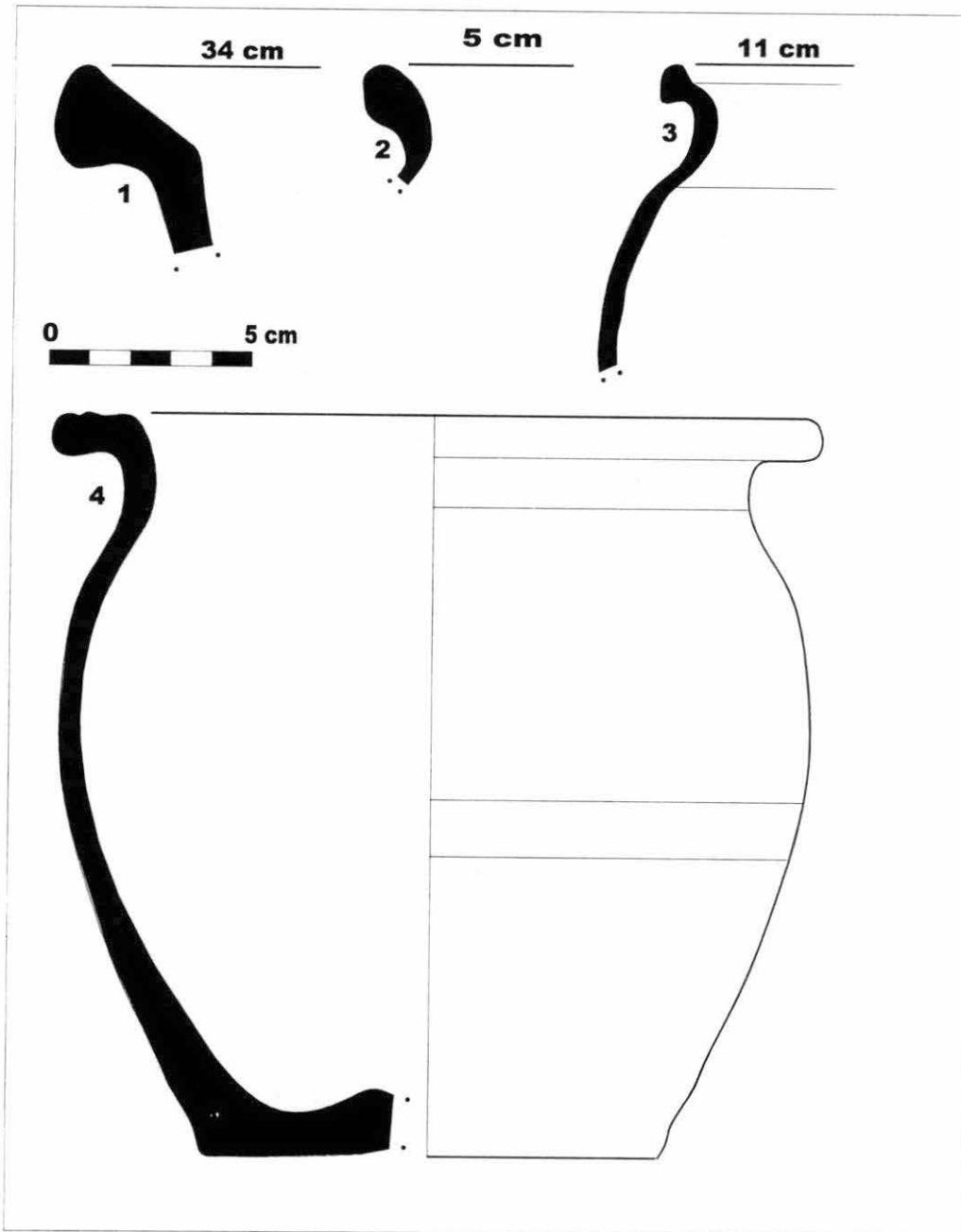


Figure D.17: *État two*, jars

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grainy grey fabric (fig. D.17.2).
- Jar: *sombre*, medium textured fabric, temper 2-5 mm, grey fabric with very bumpy surfaces (fig. D.17.3).
- Jar: *sombre*, coarse textured fabric, temper 2-5 mm, grey zoned fabric with rough surfaces (fig. D.17.4).

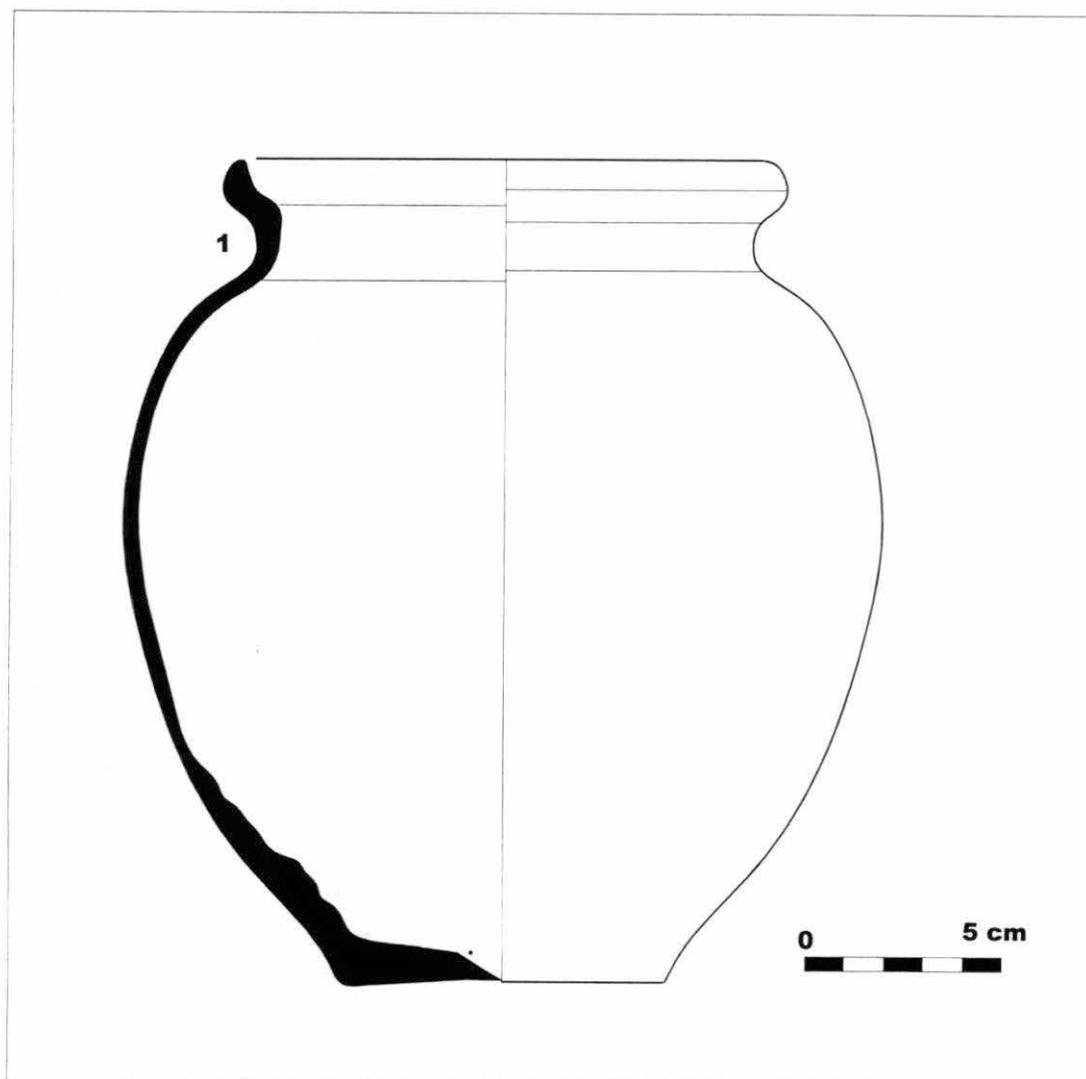


Figure D.18: *État two*, jar

- Jar: *sombre*, medium textured fabric, sand temper 2-5 mm, grey-tan fabric with bumpy surfaces, and soot on extremely thin walls (fig. D.18.1).

STORAGE JARS

The storage jars shown here are an indigenous type of large jar. They follow the late La Tène tradition of the Besançon rim form (Ferdière and Ferdère 1972) and were large jars whose size made them impractical to move. Their indigenous style contrasts with the Mediterranean style *dolium* which was an even larger vessel made in an oxidized fabric with its own distinctive set of rim forms.

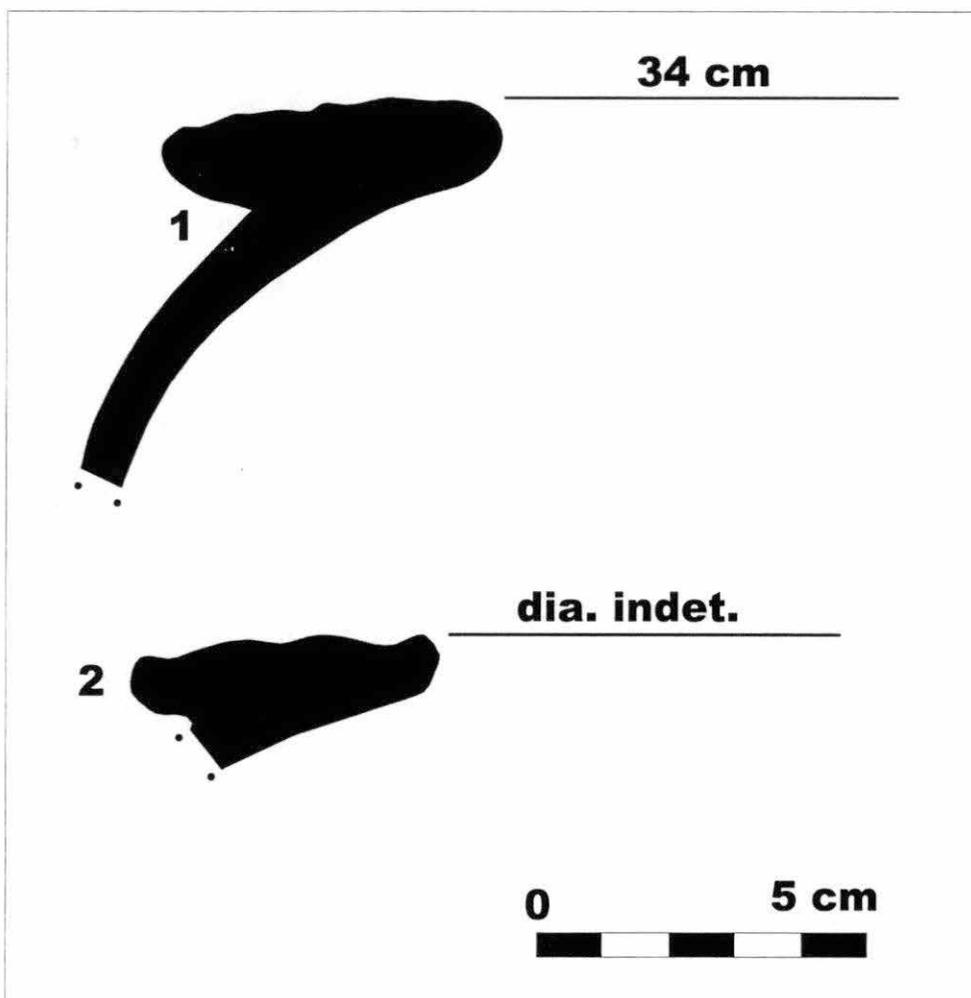


Figure D.19: *État two*, storage jars

- Storage jar: *claire*, coarse textured fabric, temper 2-5 mm, rosy light brown and grey zoned sandy fabric (fig. D.19.1).
- Storage jar: *claire*, coarse textured fabric, temper 2-5 mm, orange brown zoned fabric with grey core (fig. D.19.2).

PITCHERS

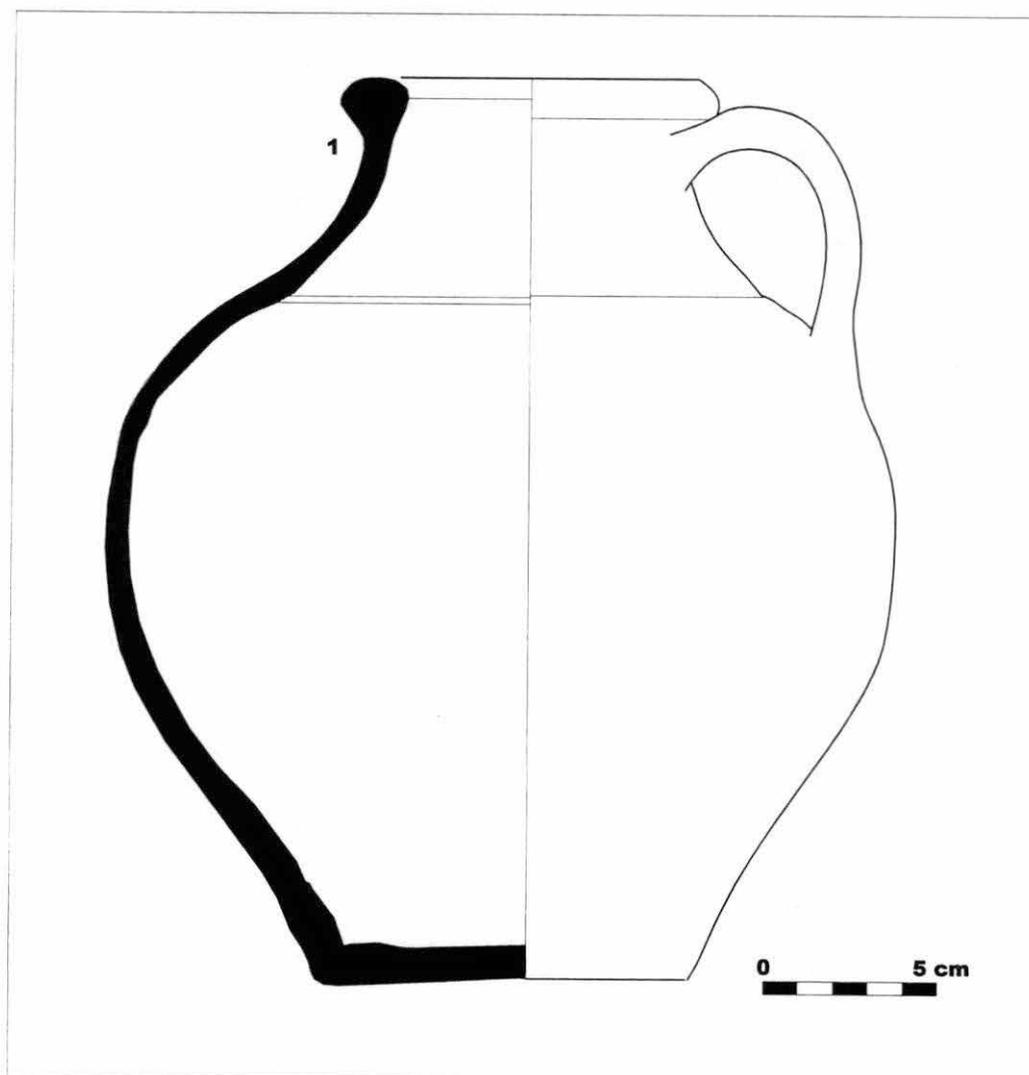


Figure D.20: *État two*, pitcher

The pitchers from *état* two have a single handle, or a presumed single handle (fig. D.22.1, form incomplete). One of the two vessels has soot on its surfaces, supporting the interpretation that pitchers were used for cooking or heating liquids as well as use at the table.

- Pitcher: *sombre*, coarse textured fabric, sand, iron oxide, and organic temper 2-5 mm, high fired grey fabric with rough surfaces (fig. D.20.1).

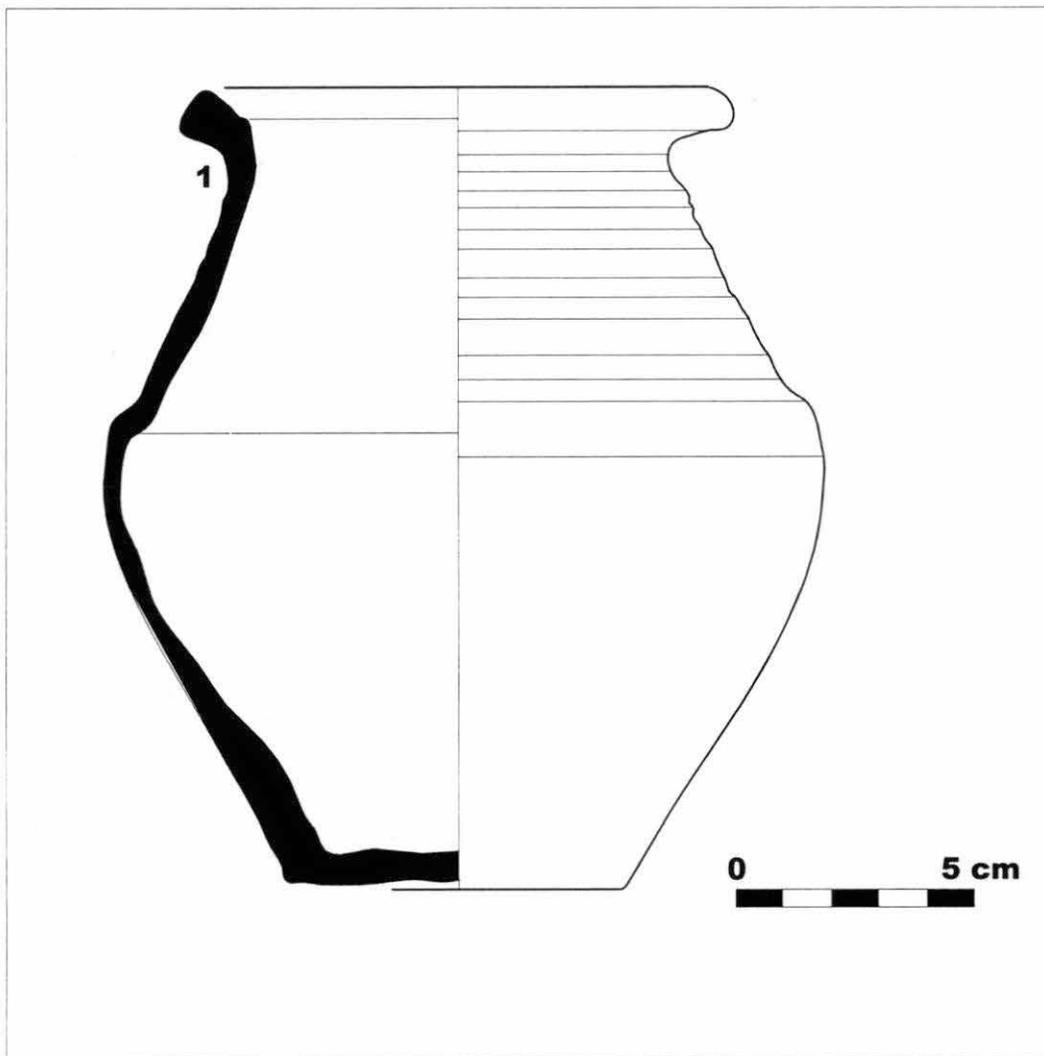


Figure D. 21: *État* two, incomplete pitcher (or possible jar)

- Pitcher or possible jar: *sombre*, coarse textured fabric, temper less than 2 mm, grey fabric with thin bumpy walls, decorated with grooving on exterior, soot on interior and exterior of vessel (fig. D.21.1).

CRUCHE

- Cruche: *claire*, fine textured fabric, temper very fine or not visible with the naked eye, beige (fig. D.22.1).
- Cruche: *claire*, fine textured fabric, temper very fine or not visible with the naked eye, very soft orange fabric (fig. D.22.2).

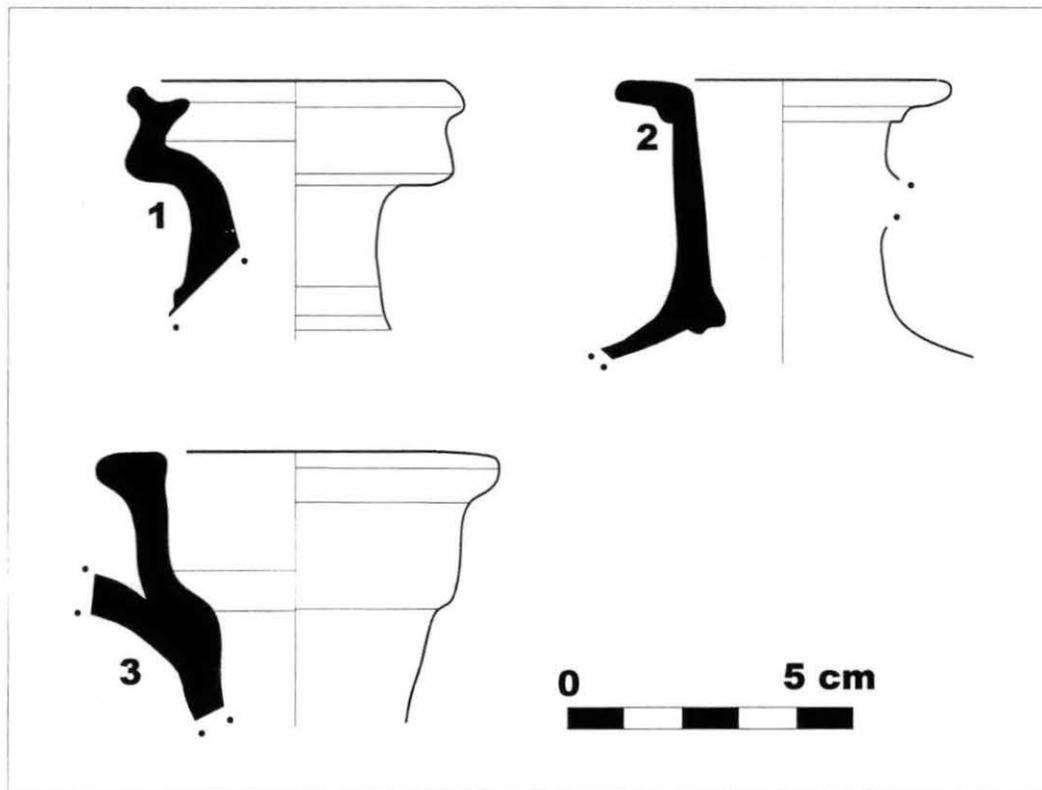


Figure D.22: *État two, cruches*

- Cruche: *claire*, fine textured fabric, temper very fine or not visible with the naked eye, rosy beige fabric with wiped surfaces (fig. D.22.3).

LIDS

- Lid: *claire*, medium textured fabric, temper less than 2 mm, beige fabric with mica application (fig. D.23.1).
- Lid: *sombre*, coarse textured fabric, temper 2-5 mm, grey (fig. D.23.2).

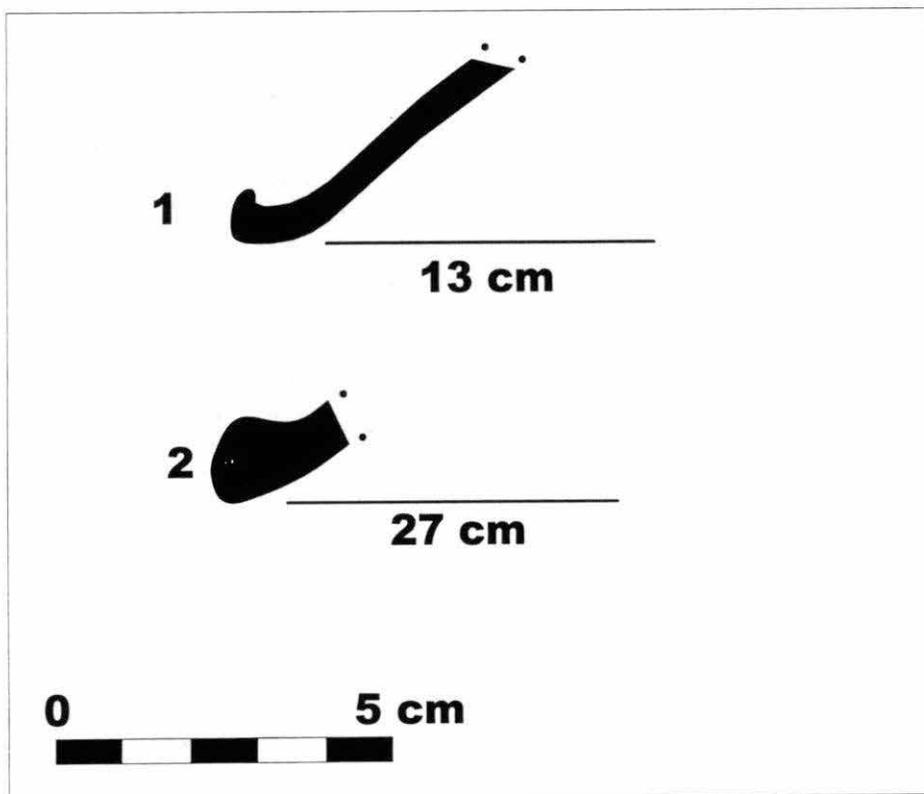


Figure D.23: *État* two, lids

ÉTAT THREE

État three in *Bâtiment Est* contained 4742 sherds of *céramique commune* pertaining to 586 vessels. This was the largest assemblage among the occupation *états*, and represents a diversity of forms within the categories represented. État three is dated to the third century, and there is considerable residual material in these contexts, noted both in the finewares and here in the utilitarian wares.

PLATES

The plates from *état* three use contexts are more diverse than those from the *Lycée Militaire*'s production contexts. They include simple forms (fig. D.24.1) and also several more varied low, open forms. The more elaborate forms include shallow dishes with thickened rims and fairly simple shallow forms.

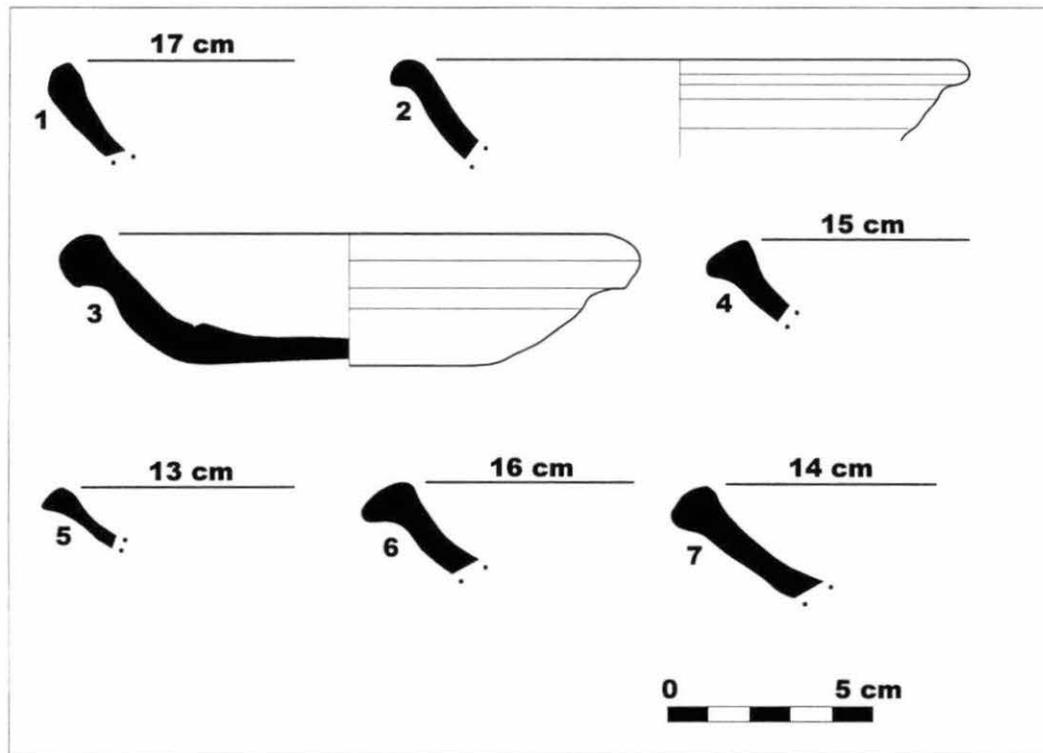


Figure D.24: État three, plates and shallow dishes

- Plate: *claire*, medium textured fabric, temper very fine or invisible to the naked eye, mica application, pale orange fabric (fig. D.24.1).
- Plate: *claire*, fine textured fabric, temper less than 2 mm, zoned rosy orange, beige, and grey fabric, smooth surfaces (fig. D.24.2).
- Plate: *claire*, medium textured fabric, abundant temper less than 2 mm, mica application, high fired orange fabric (fig. D.24.3).
- Plate: *sombre*, medium textured fabric, temper less than 2 mm, grey brown fabric, sooted (fig. D.24.4).
- Plate: *claire*, medium textured fabric, temper less than 2 mm, pale orange fabric, sooted (fig. D.24.5).
- Plate: *claire*, fine textured fabric, temper less than 2 mm, smooth exterior, heavily sooted (fig. D.24.6).
- Plate: *sombre*, medium textured fabric, temper less than 2 mm, reduced surfaces with mica application, grey fabric (fig. D.24.7).

BOWLS

The bowls from *état* three show a variety of conical bowls with inverted rims including nearly horizontal rims (fig. D.25.7), mushroom-headed rims (fig. D.25.2), and slightly grooved inverted rims with a moderate angle (figs. D.25.1, and 25.4-6). Some of these bowls have internal grit for grinding, and some have smooth interiors. There is also a variant with a vertical, band rim. It is presumed that this form is also a conical bowl (fig. D.25.3).

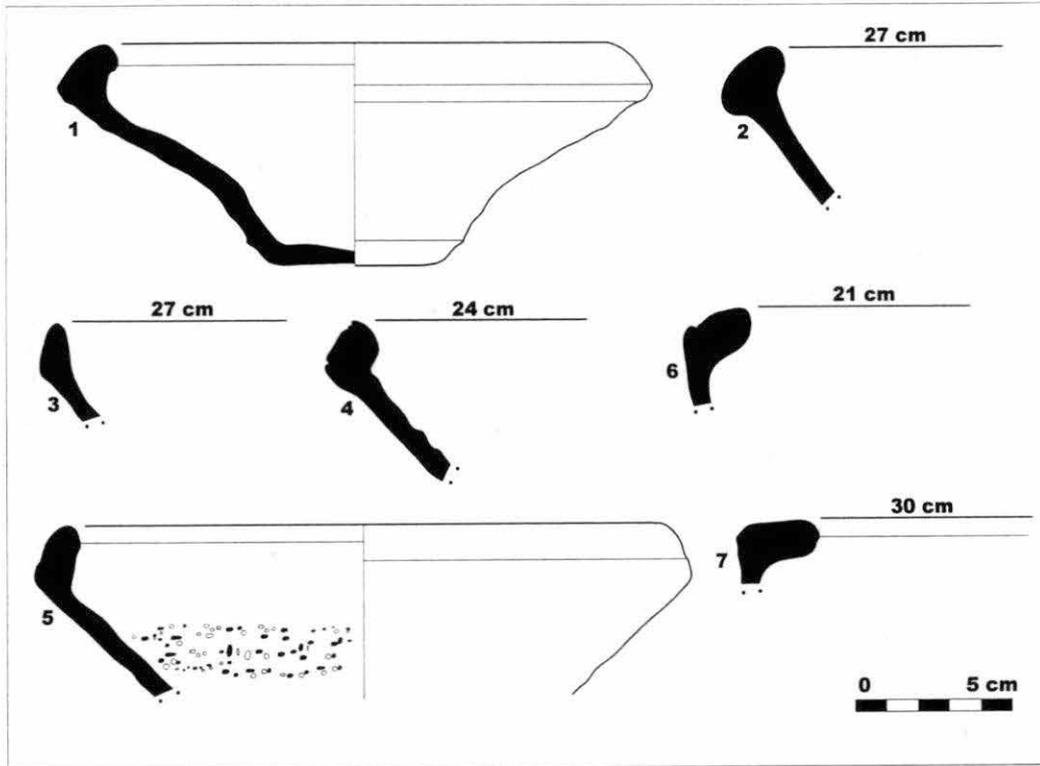


Figure D.25: *État* three, conical bowls

- Conical bowl: *sombre*, coarse textured fabric, temper 2-5 mm, light brown fabric with dark grey very smooth surfaces, grainy fabric (fig. D.25.1).
- Conical bowl: *sombre*, medium textured fabric, temper less than 2 mm, grainy grey fabric with very smooth surfaces (fig. D.25.2).
- Conical bowl: *sombre*, medium textured fabric, temper less than 2 mm, orange fabric with red-orange micaceous paint (fig. D.25.3).
- Conical bowl: *sombre*, coarse textured fabric, temper 2-5 mm, grey fabric with internal sand grit (fig. D.25.4).

- Conical bowl: *sombre*, coarse textured fabric, temper 2-5 mm, zoned brown and grey fabric (fig. D.25.5).
- Conical bowl: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with reduced surfaces (fig. D.25.6).
- Conical bowl: *sombre*, medium textured fabric, temper less than 2 mm, hard grey grainy fabric (fig. D.25.7).

The conical bowls from *état* three also include a series where the grooving on the rims is more pronounced. Some of these rims also have a particularly pointed uppermost edge. Like the previous set of conical bowls, some of these have smooth interiors, whereas others have surfaces prepared for grinding. The conical bowls exhibit the distinction between the softer, non-grainy fabrics and the grainy, mortar-like fabrics that have been interpreted as likely not produced at the *Lycée Militaire*. Some of the bowls from the following set (figs. D.26.1, 2, 6, and 7) include both rim forms and fabric types consistent with the *Lycée Militaire* productions from *Ilot C*.

- Conical bowl: *sombre*, medium textured fabric, temper less than 2 mm, grey-beige fabric, internal grit (fig. D.26.1).
- Conical bowl: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric, internal grit (fig. D.26.2).
- Conical bowl: *sombre*, medium textured fabric, temper less than 2 mm, pale grey fabric with very smooth surfaces (fig. D.26.3).
- Conical bowl: *sombre*, coarse textured fabric, temper less than 2 mm, grey fabric with reduced surfaces and a mortar-like texture (fig. D.26.4).
- Conical bowl: *sombre*, medium textured fabric, temper less than 2 mm, beige-grey fabric with darker reduced surfaces, slightly grainy texture (fig. D.26.5).

- Conical bowl: *claire*, medium textured fabric, temper less than 2 mm, beige-grey fabric (fig. D.26.6).
- Conical bowl: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric (fig 26.7).

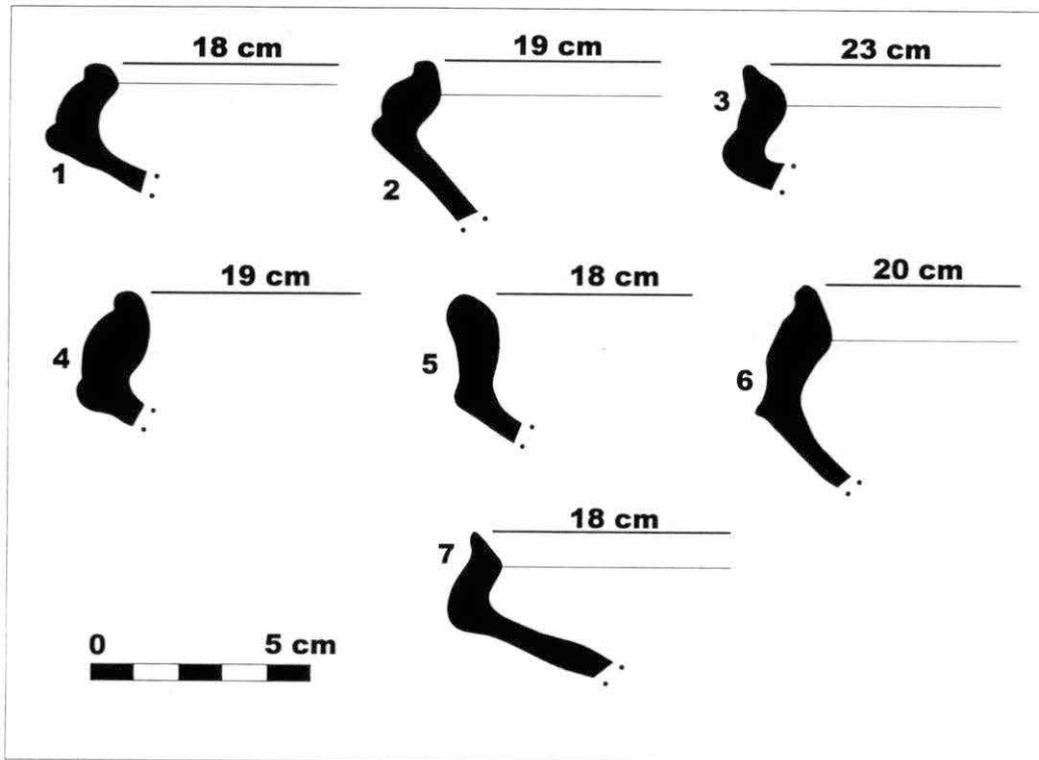


Figure D.26: *État* three, conical bowls

The following set of bowls contains a variety of distinctive rim forms. The first of these (fig. D.27.1) is similar to those which have been identified as the Besançon rim form bowls. In production contexts from Nevers, these have been dated to the Augustan-Claudian period (Joly 1996a:122 and fig. 10.3). This is an accepted date for the Besançon rim forms in general (Ferdrière and Ferdrière 1972), and if that date is consistent for production of the vessels in the Autun area, then the presence of this vessel in *état* three represents a residual event.

This form and the others in the group were vessels which were probably used for cooking. This function is attested in the sooting which is apparent on several of the examples. This use

probably altered the color of the vessels from its original color at production. These changes were likely both the darkening of some patches through sooting, and also the oxidizing of other patches through contact with flames.

The use of these open forms for cooking also overlaps with the function of the footed cooking vessels. In both cases, these were open forms which were used over a heat source, and some may have had rims which were adapted to hold a lid. The distinction between these forms and the footed forms is in part based on the tradition from which they emerged. The bowls are at least partly an indigenous tradition, with the Besançon form attested in late La Tène contexts. The footed vessels appear to belong to a Mediterranean tradition and represent an innovation in cooking method. The bowls depicted below are not all from completely known forms. The shapes of the rim and body of each vessel suggests bowl form rather than footed plate, although it is possible that some of these forms might be footed rather than resting on flat-bottoms.

- Besançon rim bowl: *sombre*, coarse textured fabric, sand temper 2-5 mm, brown and grey grainy fabric (fig. D.27.1).
- Bowl: *claire*, medium textured fabric, temper less than 2 mm, rosy beige fabric with mica application (fig. D.27.2).
- Bowl: *claire*, medium textured fabric, sand temper less than 2 mm, beige and grey fabric with mica application (fig. D.27.3).
- Bowl: *claire*, coarse textured fabric, sand temper less than 2 mm, pale rosy brown fabric with heavy soot and cooking residue on surfaces (fig. D.27.4).
- Bowl: *claire*, coarse textured fabric, temper 2-5 mm, orange fabric (fig. D.27.5).
- Bowl?: *claire*, medium textured fabric, temper less than 2 mm, rosy brown and grey fabric with mica application (fig. D.27.6).
- Bowl: *claire*, coarse textured fabric, temper 2-5 mm, pale orange and grey fabric with soot on surface (fig. D.27.7).

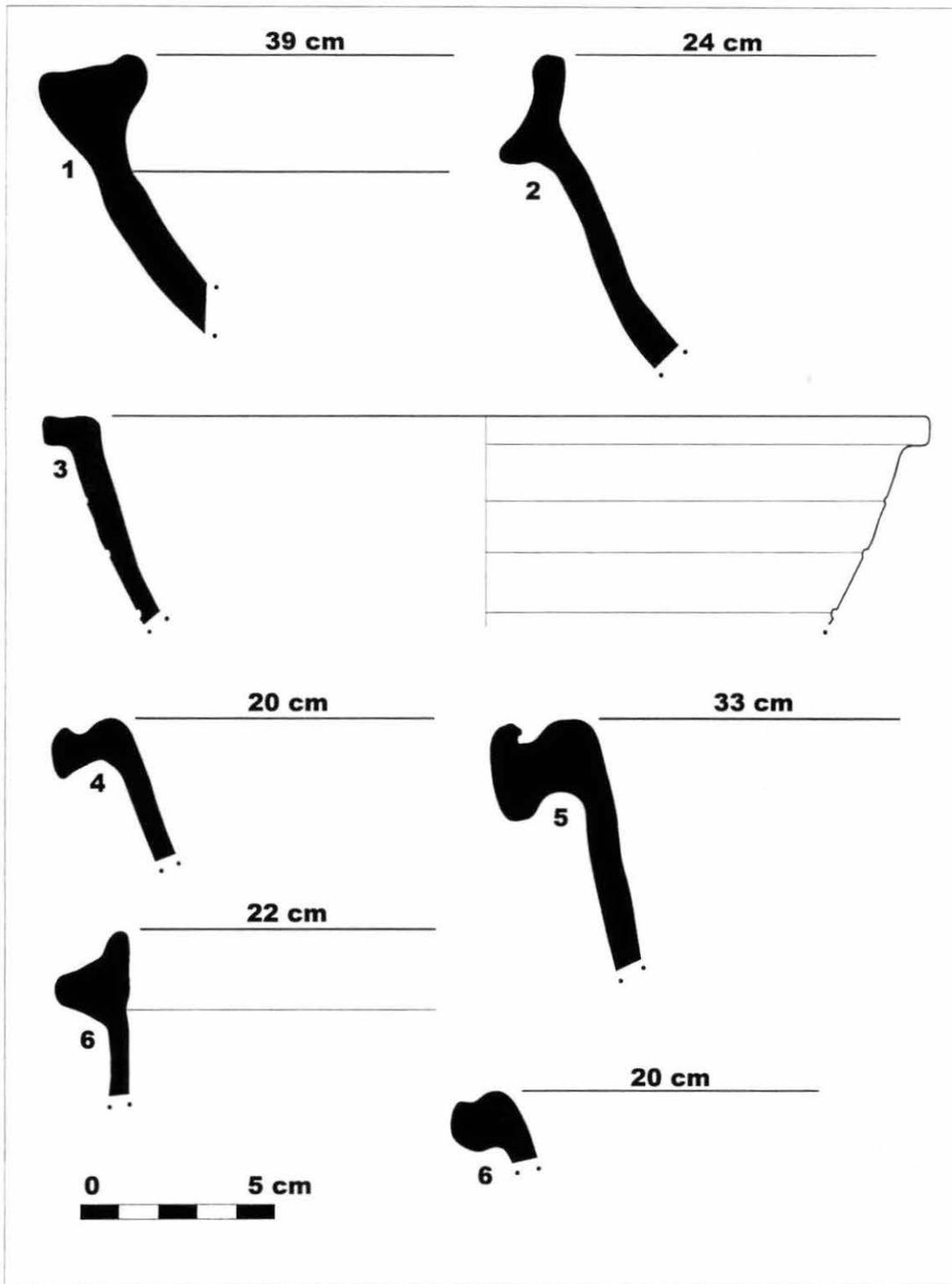


Figure D.27: *État* three, bowls

FOOTED COOKING VESSELS

The following vessels belong to the category of footed cooking vessel. These were both low plates and taller *marmites*. They were used for cooking over a fire, and may have been used with lids. Like the above bowls, they show sooting and some discoloration which resulted from their use as cooking vessels. They show a variety of rim forms similar to those in *état* two. They have relatively simple everted rims, crown-like rims, and rims with pendant squares. The predominance in *état* three is of the crown-like, crenellated rims, rather than *état* two's pendant-square rims.

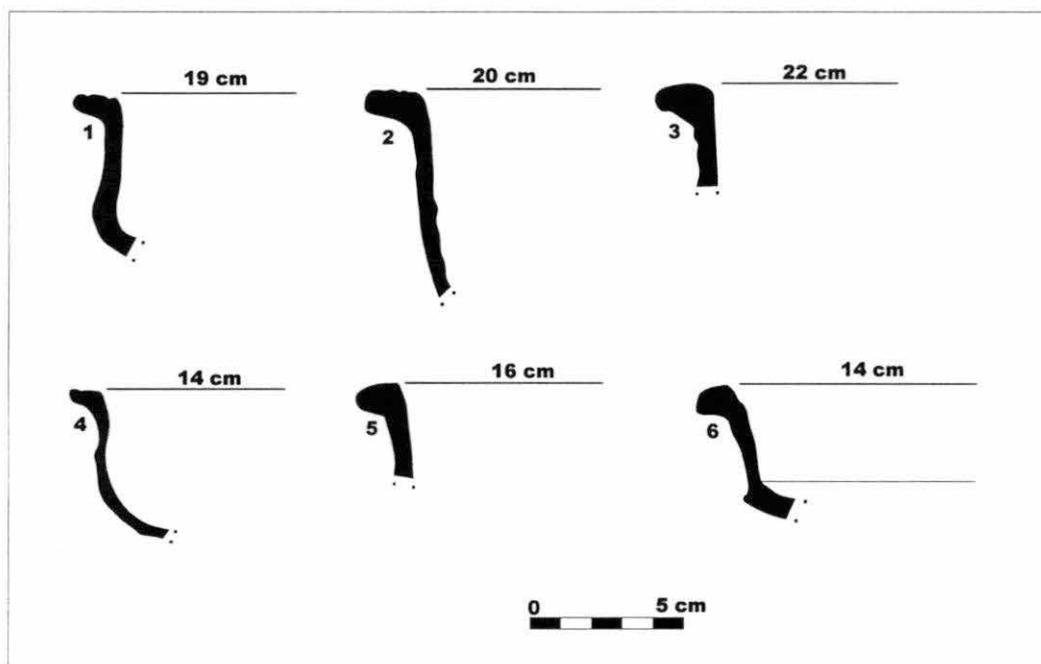


Figure D.28: *État* three, footed cooking vessels

- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, orange fabric with mica application and soot (fig. D.28.1).
- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, orange fabric (fig. D.28.2).

- Footed cooking vessel: *sombre*, coarse textured fabric, temper less than 2 mm, grey fabric with mica application and grooved exterior (fig. D.28.3).
- Footed cooking vessel: *claire*, coarse textured fabric, temper 2-5 mm, thin vessel walls, rough surface, orange-brown fabric, soot (fig. D.28.4).

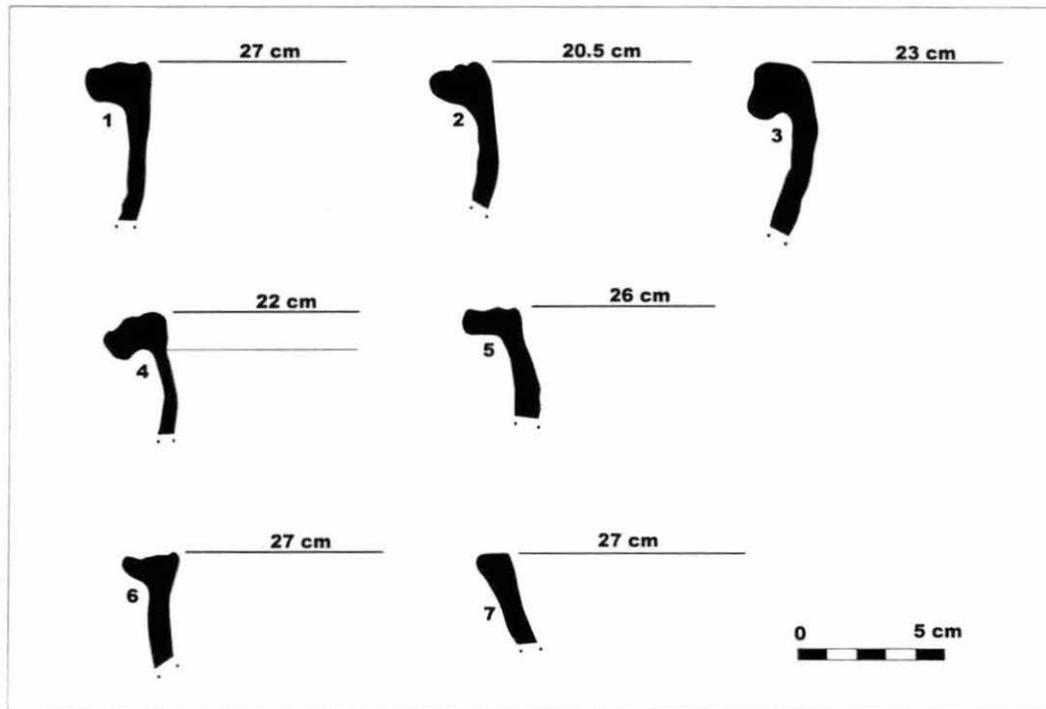


Figure D.29: *État* three, footed cooking vessels

- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, grey, soot (fig. D.28.5).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with cooking residue on interior surface, soot on exterior (fig. 28.6).

- Footed cooking vessel: *sombre*, coarse textured fabric, temper 2-5 mm, grey high fired fabric (fig. D.29.1).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, grey with darker reduced surfaces (fig. D.29.2).
- Footed cooking vessel: *sombre*, coarse textured fabric, sand temper 2-5 mm, grey fabric with rough surfaces (fig. D.29.3). It is possible that this form is not a footed cooking vessel but an wide-mouthed jar.
- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, grainy orange brown fabric with darker reduced surfaces and mica application (fig. D.29.4).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with wide combing (fig. D.29.5).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, zoned grey fabric (fig 29.6).
- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, pale orange fabric with grey and sooted exterior, mica application (fig. D.29.7). This might be a straight-sided plate form rather than a footed plate.
- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, rosy beige fabric with mica application, soot (fig. D.30.1).
- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, rosy beige fabric with red-orange paint and mica application (fig. D.30.2).
- Footed cooking plate: *sombre*, medium textured fabric, temper 2-5 mm, grey fabric with mica application (fig. D.30.3).
- Footed cooking plate: *sombre*, medium textured fabric, temper 2-5 mm, grey fabric (fig. 30.4).

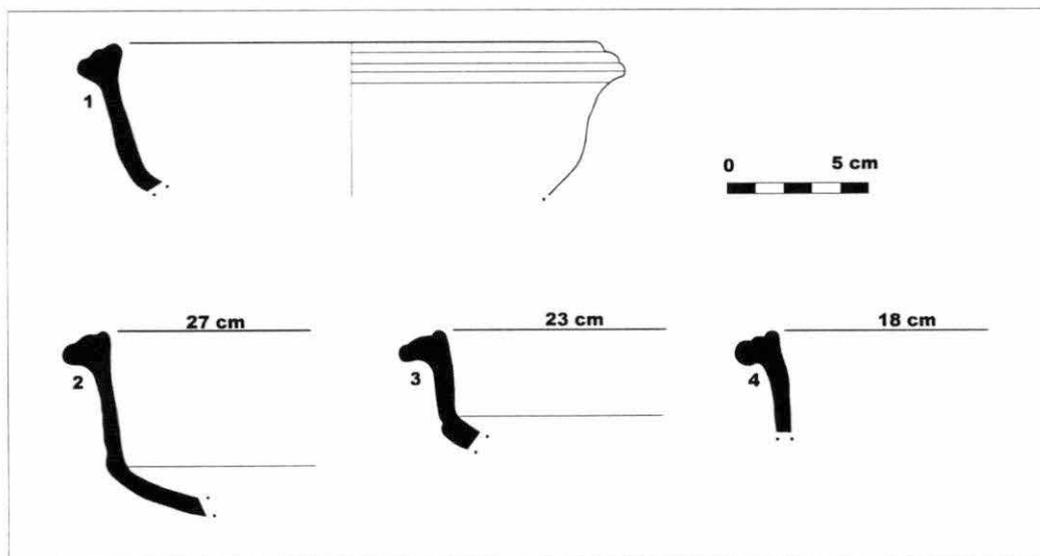


Figure D.30: État three, footed cooking vessels

- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, smooth grey high fired fabric, grooved exterior (fig. D.31.1).
- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric (fig. D.31.2).
- Footed cooking plate: *sombre*, medium textured fabric, sand temper less than 2 mm, crumbly grey-black fabric (fig. D.31.3).
- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, brown-black fabric (fig. D.31.4)

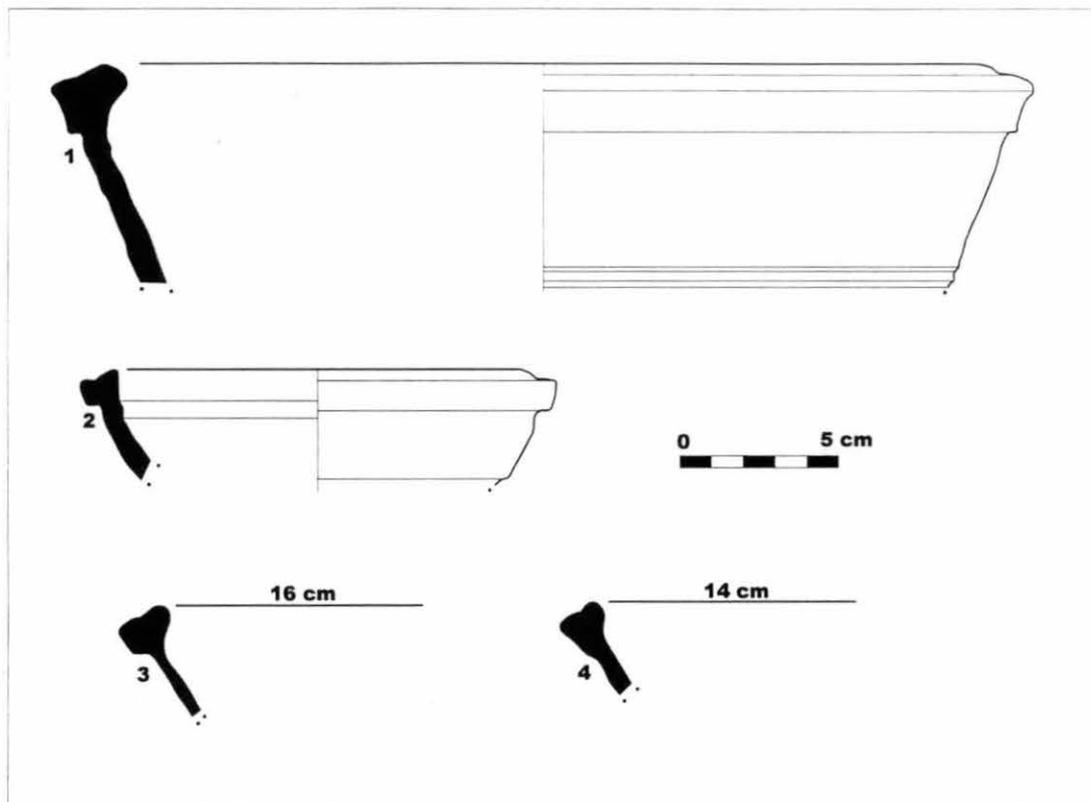


Figure D.31: *État* three, footed cooking vessels

État three produced a unique vessel which had a single handle, carenated profile, and open mouth. This vessel was likely either a *marmite* with a handle, or a handled basin of another sort. It appears as though the vessel has a rounded bottom, a feature which could stand alone, or which might imply that the vessel had feet.

- Open handled vessel: *claire*, coarse textured fabric, sand temper 2-5 mm, orange fabric burned grey in places (fig. 32.1).

Another handled vessel in *état* three is a small jug. It does not have the tall narrow neck of a *cruche*, but it does have a single handle.

- Jug: *claire*, fine textured fabric, temper very fine or not visible to the naked eye, white fabric (fig. D.32.2).

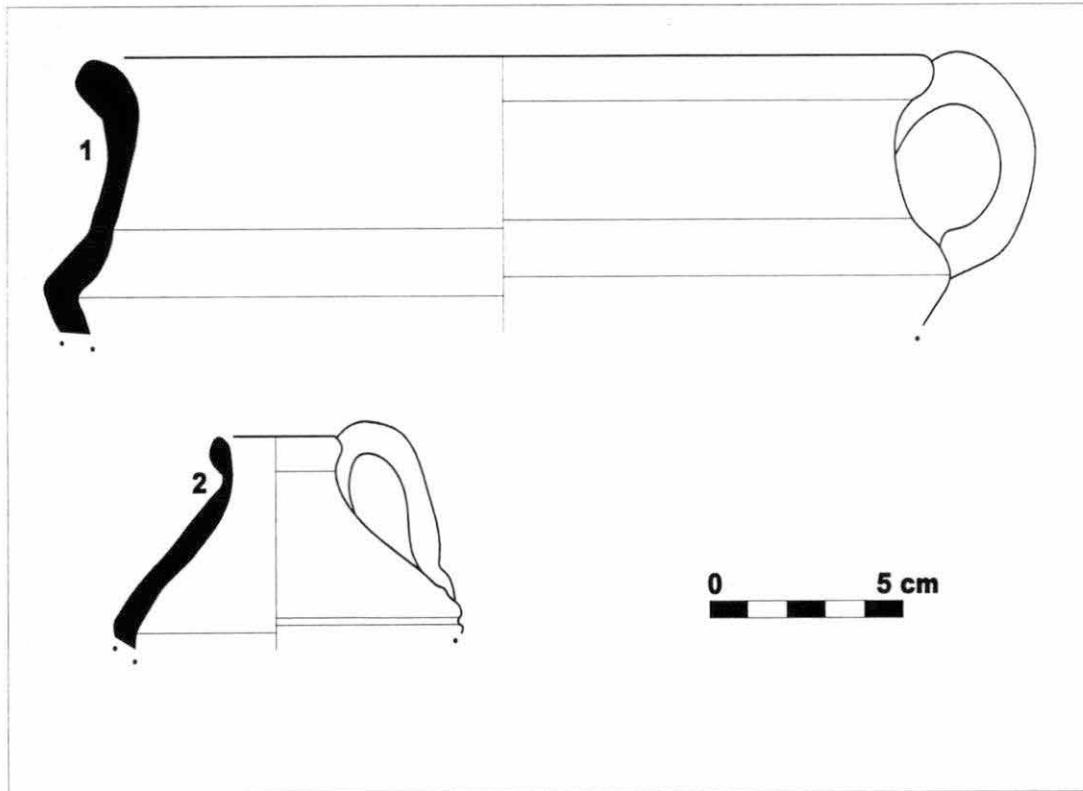


Figure D.32: *État* three, vessels

JARS

The jars from *état* three include grooved-neck jars which are likely residual, and two thin-walled goblet forms. The goblet forms include a rim shape which also appears in *état* one. This rim is rolled to the exterior and has a groove on its topmost or horizontal portion (see fig. D.5.6). The other goblet or small jar form is also reminiscent of an earlier form, as it is a rolled and grooved rim, or miniature Besançon form (see figs. D.5.4-5).

- Grooved-neck jar: *sombre*, medium textured fabric, sand temper 2-5 mm, high fired grey fabric (fig. D.33.1).
- Grooved-neck jar: *sombre*, medium textured fabric, temper less than two mm, non-micaceous grey fabric (fig. D.33.2).

- Grooved-rim goblet or small jar: *claire*, medium textured fabric, temper less than 2 mm, orange fabric with grey reduced surfaces (fig. D.33.3).

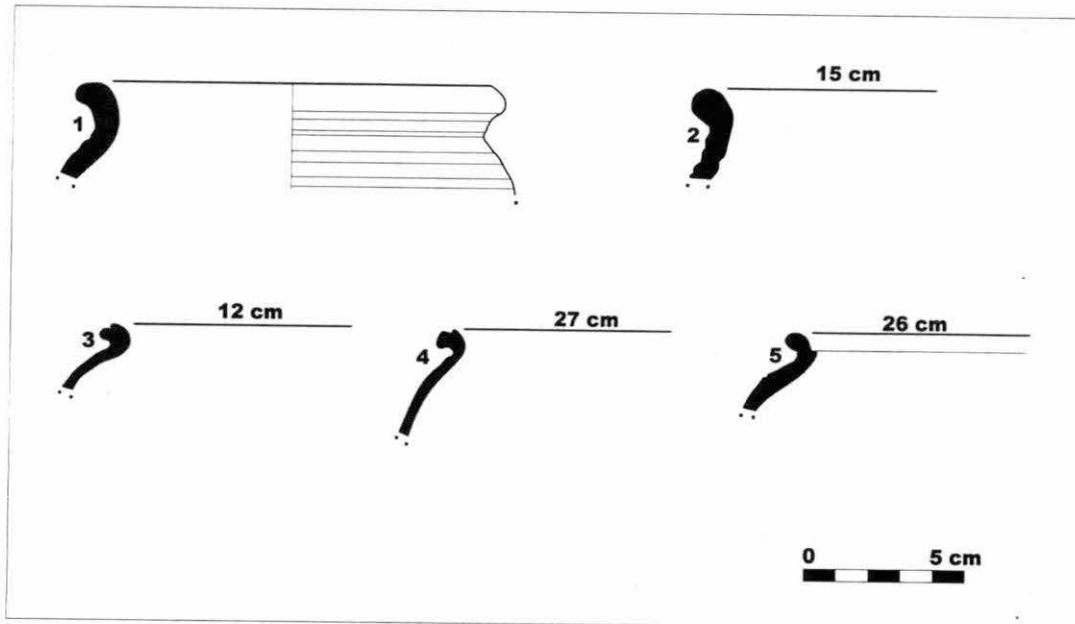


Figure D.33: État three, jars and goblets

- Grooved-rim goblet or small jar: grey, fine textured fabric, sand temper less than 2 mm, grey fabric with darker reduced surfaces (fig. D.33.4).
- Miniature Besançon form: *claire*, medium textured fabric, temper 2-5 mm, light orange fabric with reduced light grey surfaces, bumpy (fig. D.33.5).

État three contexts also contained standard-sized Besançon rim jars (figs. D.34.1-2). It can be assumed that these are residual elements in *état* three.

- Besançon rim jar: *claire*, medium textured fabric, temper 2-5 mm, beige and grey fabric (fig. 34.1).

- Besançon rim jar: *sombre*, coarse textured fabric, temper less than 2 mm, zoned grey fabric with mica application (fig. D.34.2).

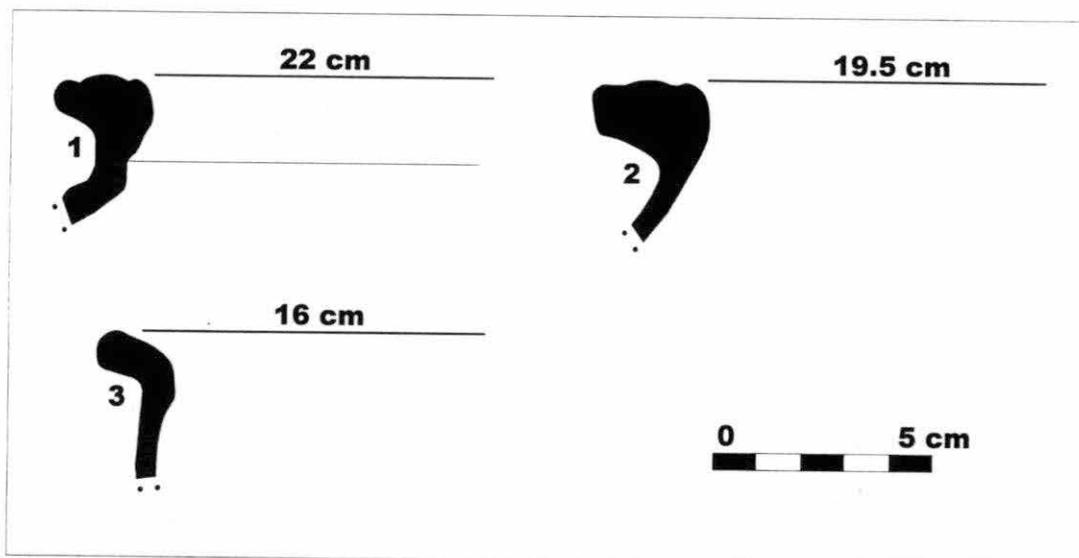


Figure D.34: *État* three, jars

Two thick-walled small jars or goblets appears in the *état* three contexts. In the characteristics of fairly thick vessel walls and vessel shape they resemble a small jar or goblet in *état* two contexts (fig. D.35.1).

- Small jar or goblet: *claire*, medium textured fabric, temper less than 2 mm, orange fabric with mica application (fig. D.35.1).
- Small jar or goblet: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker reduced surfaces (fig. D.35.2).

A large quantity of the jars from *état* three belong to the general category of everted or rolled rim jars. The individual variations on these rim forms are numerous, and can be described according to the characteristics of a trough neck, grooved external lip, almond-shaped rims, or rims *en bourrelet*.

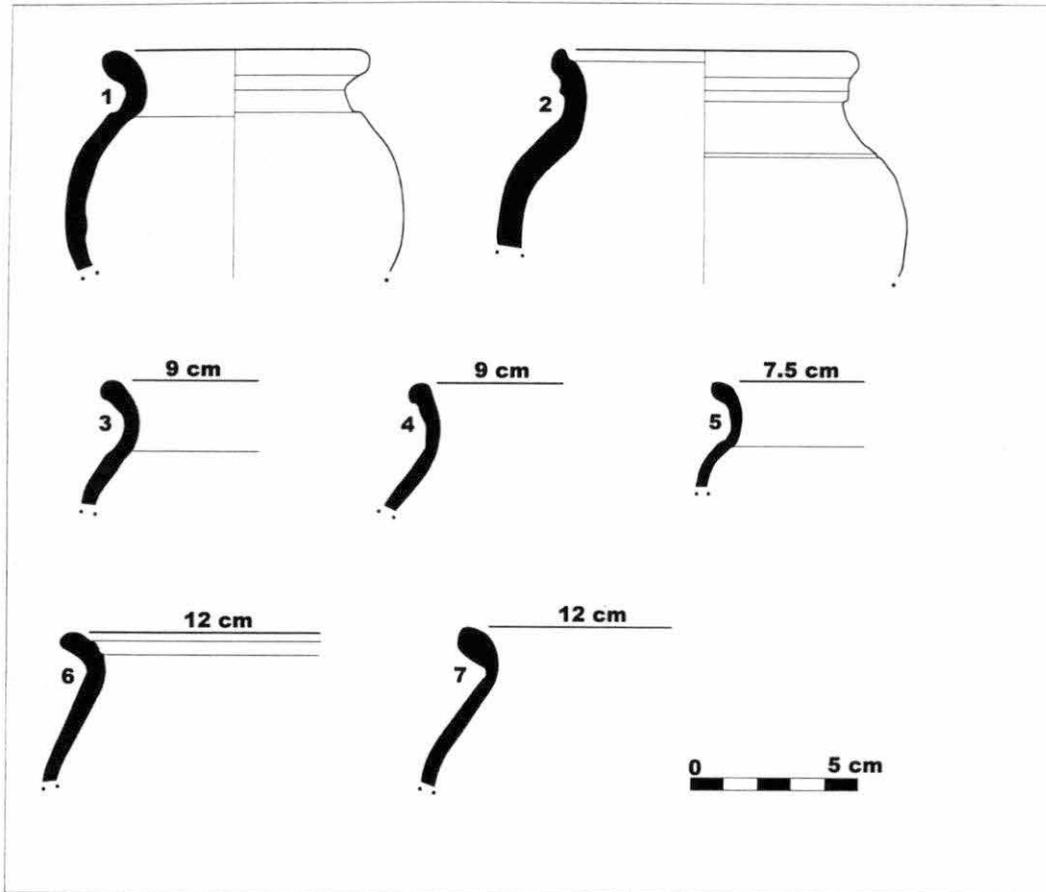


Figure D.35: *État* three, goblets and jars

- Everted rim jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric (fig. D.34.3).
- Everted rim jar: *sombre*, medium textured fabric, temper less than 2 mm, grey (fig. D.35.3).
- Everted rim jar: *sombre*, fine textured fabric, temper less than 2 mm, grey fabric with smooth surfaces (fig. D.35.4).
- Trough-neck jar with everted rim: *sombre*, fine textured fabric, temper less than 2 mm, hard grey fabric (fig. D.35.5). This vessel is roughly similar to ones produced in *Ilot C* (Alfonso,

forthcoming, fig. 22.1), although there are also distinct differences in the angle formed by the trough neck, and the shape of the external lip.

- Jar (?): *claire*, medium textured fabric, sand temper less than 2 mm, orange brown with mica application, soot (fig. D.35.6).
- Jar (?): *claire*, medium textured fabric, temper less than 2 mm, orange brown smooth fabric with mica application (fig. D.35.7).

The following jars have a divided or grooved external lip. In most cases, the rim is simply curved outward, and the vertical (or most vertical) face formed by the rim is grooved. The other variants have a thickened rim which is also grooved on its vertical face (figs. D.36.5-6). None of these rims is associated with a complete form from use contexts, and it is possible that the range may include pitchers as well as jars. Jars with similar rims are found in *Ilot A* contexts (see Appendix A, fig. A.11).

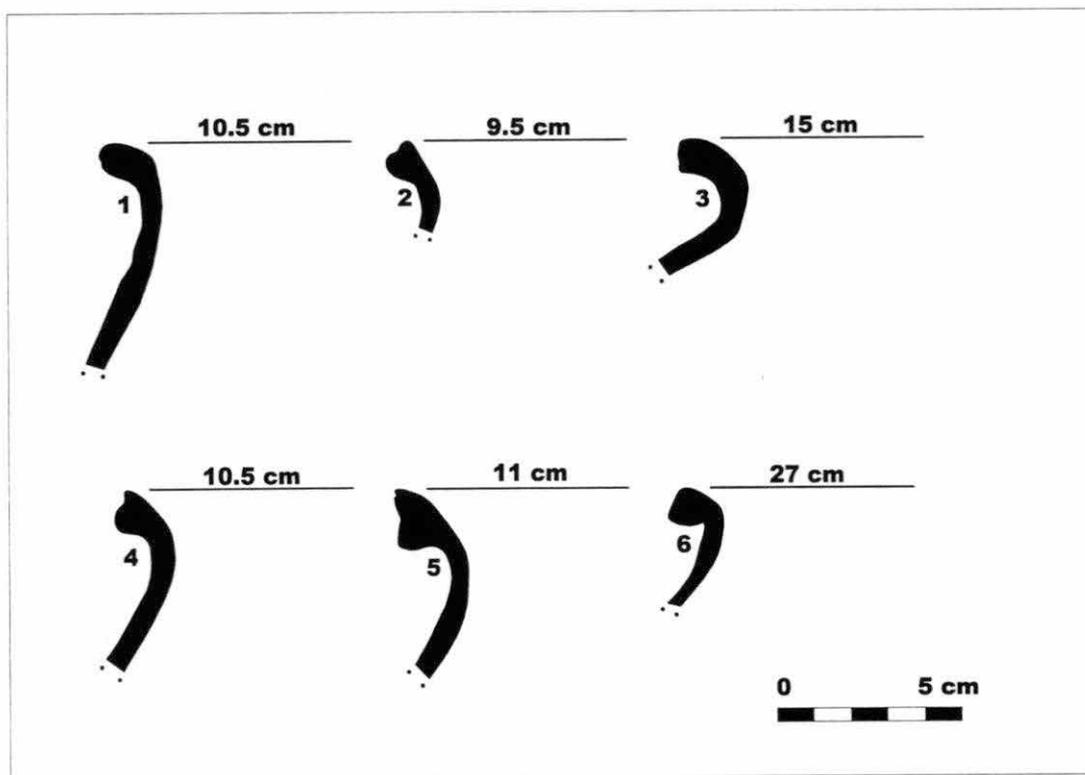


Figure D.36: *État three*, jars

- Jar: *claire*, medium textured fabric, sand temper 2-5 mm, bumpy beige fabric burned grey (fig. D.36.1).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with mica application (fig. D.36.2).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric (fig. D.36.3).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with soot on vessel exterior (fig. D.36.4).
- Jar: *claire*, medium textured fabric, temper less than 2 mm, rosy brown and black fabric with heavy sooting on vessel interior (fig. D.36.5).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker grey reduced surfaces (fig. D.36.6).

The following ovoid jars have simple rolled rims (*en bourrelet*), almond-shaped rims, or rims that are rolled and slightly squared. These jars in general share characteristics with a set produced in *Ilot C*. See for comparison, Appendix B, figs. B.5 and 6, and see Alfonso, forthcoming, figure 22.

- Jar: *sombre*, coarse textured fabric, temper less than 2 mm, grey fabric (fig. D.37.1).
- Jar: *sombre*, medium textured fabric, sand, iron oxide, and grog temper less than 2 mm, grey fabric (fig. D.37.2). Note particularly the demarcation between neck and body which forms a slight trough.
- Jar: *claire*, medium textured fabric, temper less than 2 mm, beige fabric with red-orange micaceous paint, fire clouding on vessel exterior (fig. D.37.3).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric (fig. D.37.4).

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker grey reduced surfaces (fig. D.37.5).
- Jar: *sombre*, medium textured fabric, temper 2-5 mm, grey high fired fabric (fig. D.37.5).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker reduced surfaces (fig. D.37.6).

The next four jars have some of the same characteristics, but they have thicker rims, some round in profile, others almond-shaped. These have comparisons in *Ilots* A and C production contexts (see Appendix A, fig. A.10, and Appendix B, figs. B.5-6). The two jars following these have more elaborate rim forms. The first has a peak at the highest point of the rim and shows a slight facet on the interior of the mouth, similar to the jars with an internal oblique facet (Appendix A, fig. A.7 and Appendix B, fig. B.5, and fig. D.40, below). The second has a rim *en gouttière* as seen in *Lycée Militaire* productions (Appendix A, fig. A.7).

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, brown and grey grainy fabric (fig. D.38.1).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker grey reduced surfaces (fig. D.38.2).
- Jar: *claire*, coarse textured fabric, sand and possible grog temper 2-5 mm, orange fabric with mica application and fire clouding on surface (fig. 38.3).
- Jar: *claire*, medium textured fabric, temper less than 2 mm, orange fabric (fig. D.38.4).
- Jar: *sombre*, coarse textured fabric, temper 2-5 mm, grey high fired fabric (fig. D.38.5).
- Jar: *sombre*, coarse textured fabric, sand temper less than 2 mm, grey fabric with rough surfaces (fig. D.38.6).

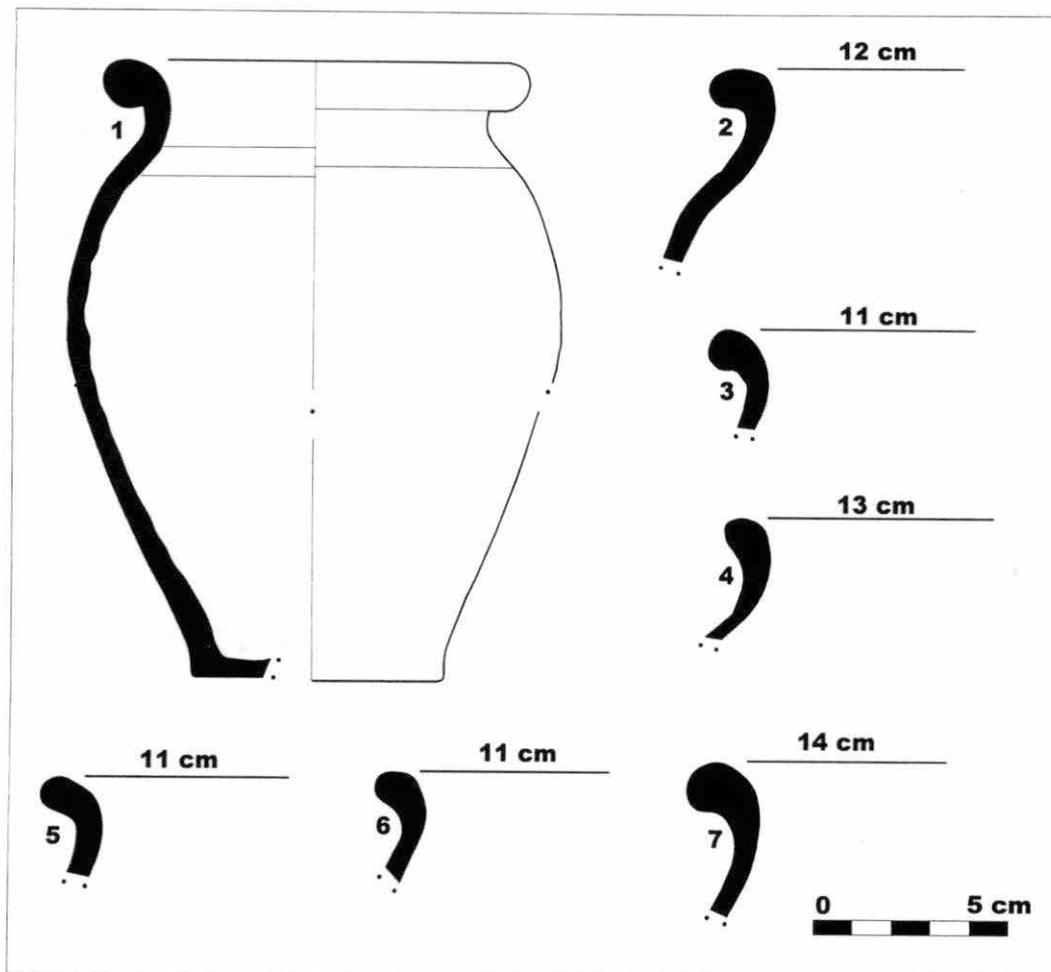


Figure D.37: État three, jars

The following jars have facets on the interior of the mouth. These facets form an oblique angle, and in some of the examples form a channel or groove. They have comparisons in production contexts of *Ilots* A and C (Appendix A, fig. A.7, Appendix B, fig. B.5).

- Jar: *sombre*, coarse textured fabric, temper 2-5 mm, grey and high fired (fig. D.39.1).
- Jar: *sombre*, coarse textured fabric, temper less than 2 mm, grey hard (fig. D.39.2).

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, hard grey fabric with darker grey reduced and smooth surfaces (fig. D.39.3).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey (fig. D.39.4). It is possible that this vessel is grey from cooking use, and that it was originally an oxidized fabric.

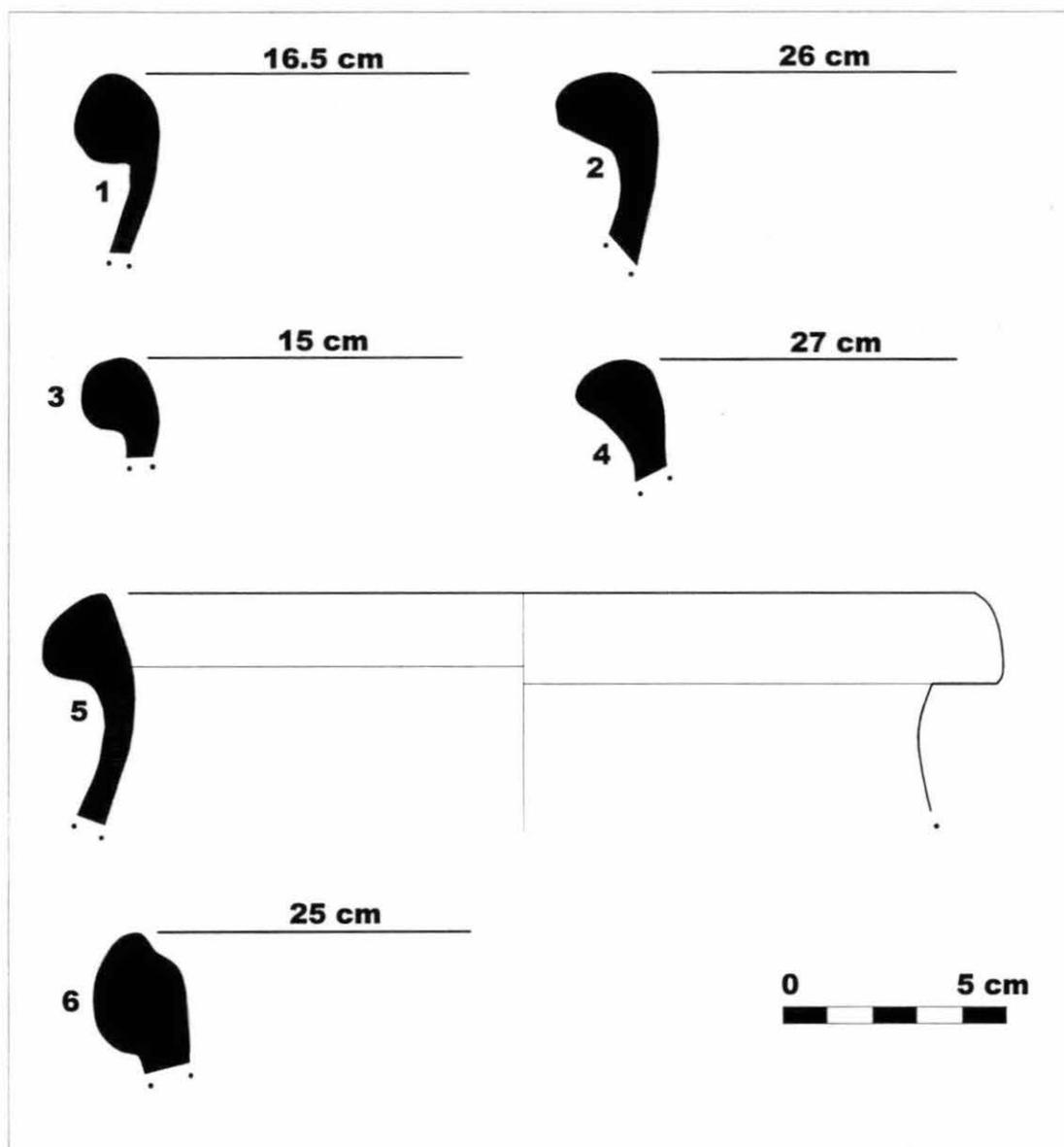


Figure D.38: *État* three, jars

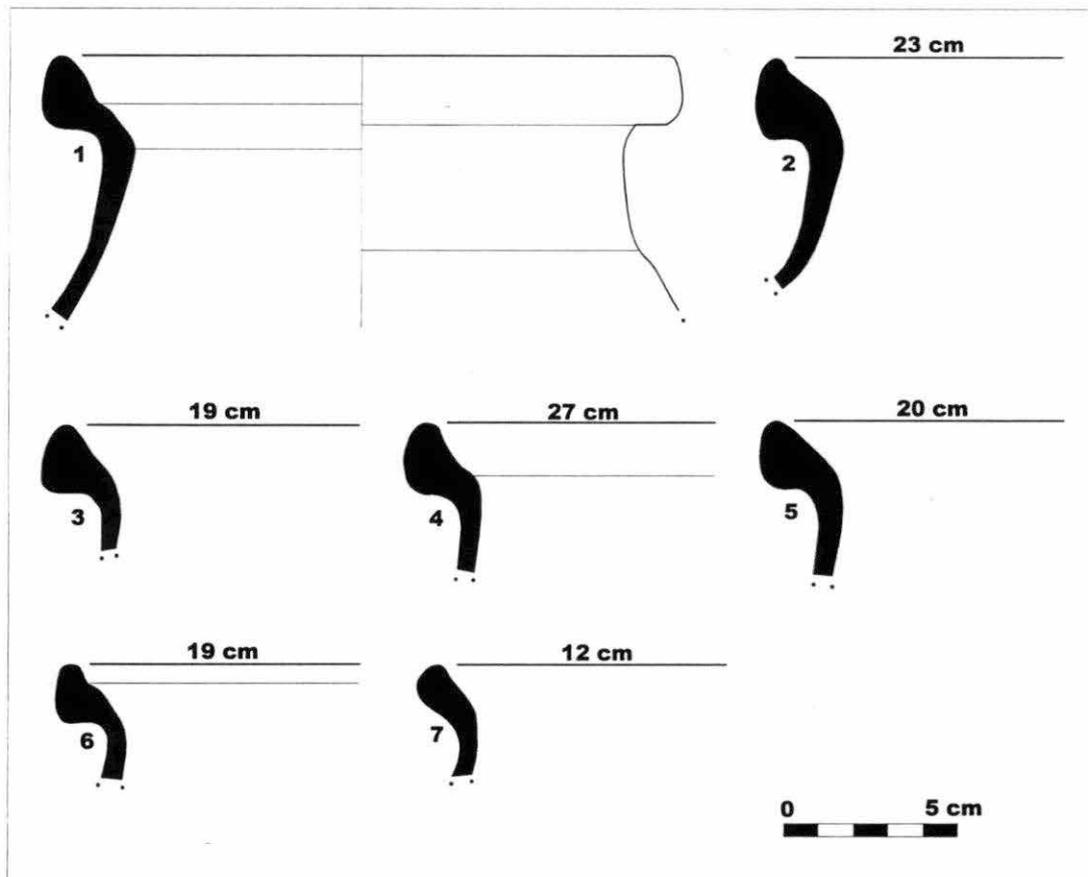


Figure D.39: *État* three, jars

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, hard grey fabric with darker grey reduced surfaces (fig. D.39.5).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker grey reduced surfaces (fig. D.39.6).
- Jar: *sombre*, coarse textured fabric, temper 2-5 mm, grey (fig. D.39.7).

The next group of jars includes variations on the preceding traits. There are trough neck jars (fig. D.40.1 and 40.5), and various everted and thickened everted rims.

- Jar: *sombre*, medium textured fabric, temper 2-5 mm, grey fabric with reduced darker grey surfaces (fig. D.40.1).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey and sooty (fig. D.40.2).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey with rough surfaces (fig. D.40.3).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, hard grey fabric with darker grey reduced exterior surface (fig. D.40.4).
- Jar: *claire*, medium textured fabric, temper less than 2 mm, thin walled vessel, orange fabric with orange-brown micaceous paint (fig. D.40.5).

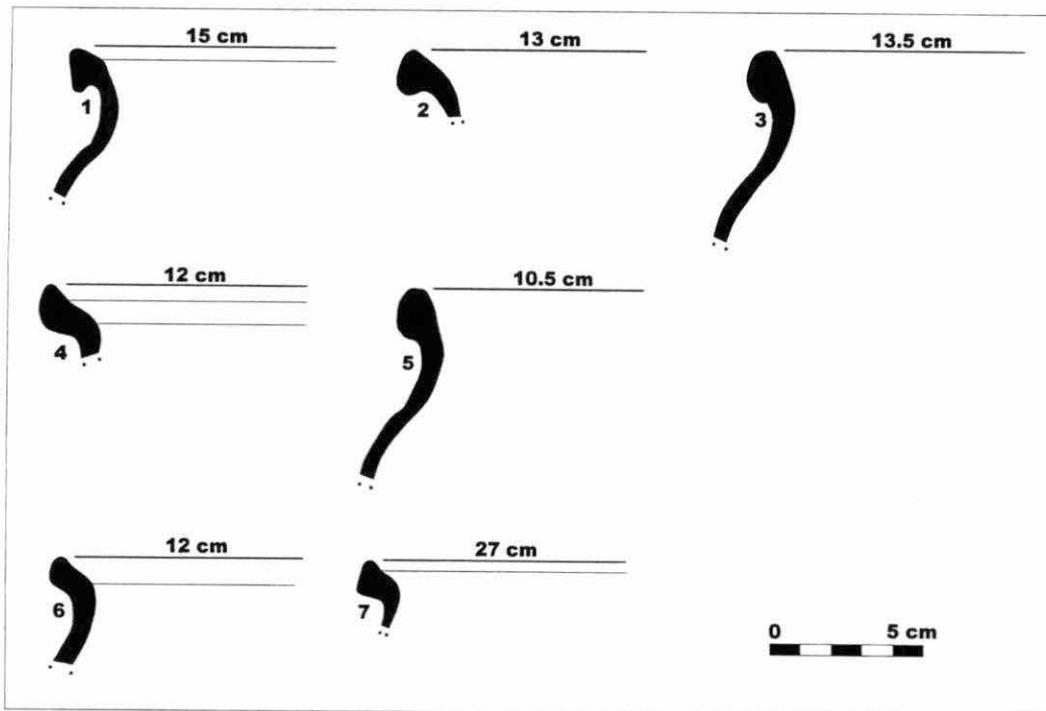


Figure D.40: *État* three, jars

- Jar: *sombre*, coarse textured fabric, temper less than 2 mm, overfired grey fabric with pocked surface (fig. D.40.6).
- Jar: *claire*, coarse textured fabric, temper with high sand component less than 2 mm, rosy brown fabric with mica application (fig. D.40.7).

The following jars have rims *en gouttière* (figs.D.41.1-2, 5-7). The others are everted (fig. D.41.3) and square in profile (fig. D.41.4).

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grainy grey fabric (fig. D.41.1).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, high fired grey fabric (fig. 41.2).
- Jar: *sombre*, fine textured fabric, grey with smooth surfaces (fig. D.41.3).
- Jar: *claire*, medium textured fabric, temper less than 2 mm, pale orange fabric with light grey reduced surfaces (fig. D.41.4).
- Jar: *sombre*, coarse textured fabric, temper less than 2 mm, grey with mica application (fig. D.41.5).
- Jar: *claire*, medium textured fabric, temper with high sand component less than 2 mm, rough rosy beige fabric with mica coating (fig. D.41.6).
- Jar: *claire*, fine textured fabric, temper very small or not visible with the naked eye, pale orange fabric (fig. D.41.7).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, pitted grey fabric (fig. D.41.8).

The next jars are simple everted and horizontal rims in reduced fabrics.

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey (fig. D.42.1).

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey (fig. D.42.2).

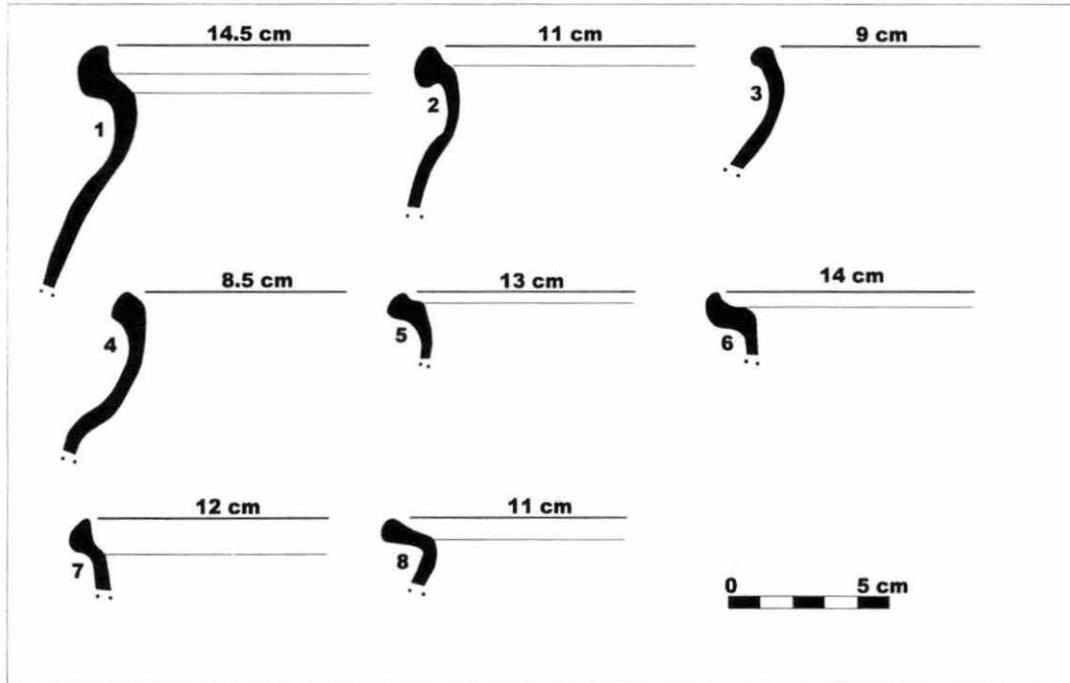


Figure D.41: *État Three*, jars

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey (fig. D.42.3).

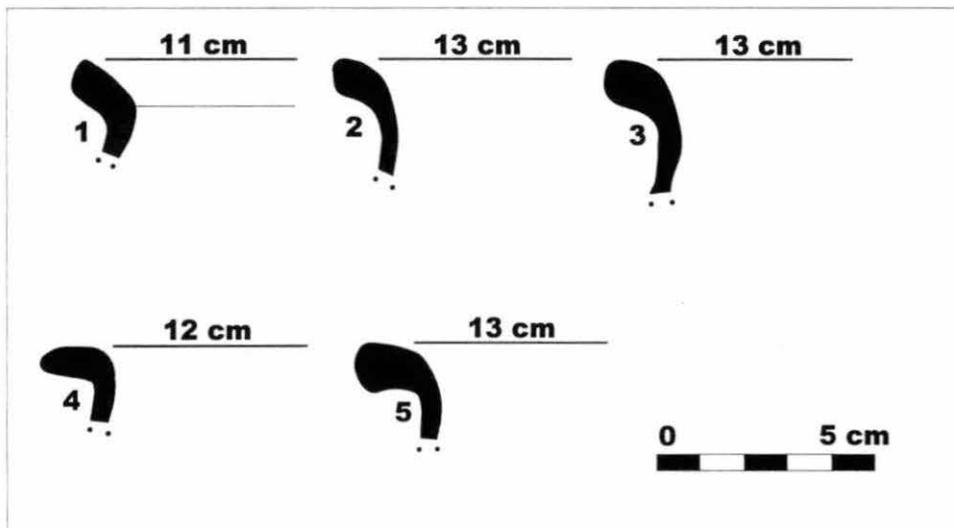


Figure D.42: *État three*, jars

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey with darker grey reduced surfaces (fig. D.42.4).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, high fired grey fabric (fig. D.42.5).

STORAGE JARS

The storage jars presented here from *état* three include one example of the Celtic tradition storage jar, and one example of a Mediterranean tradition storage jar. The Celtic one (fig. D.43.1) has an ridged, inverted rim. The Mediterranean jar has a rim which is rolled toward the exterior. Although the rim diameter of this second jar is not enormous, the angle of the neck and shoulder indicated that the vessel was large and rounded, expanding outward from the neck down to a large, round belly.

- Storage jar: *claire*, medium textured fabric, temper less than 2 mm, orange, brown, and grey fabric (fig. D.43.1).

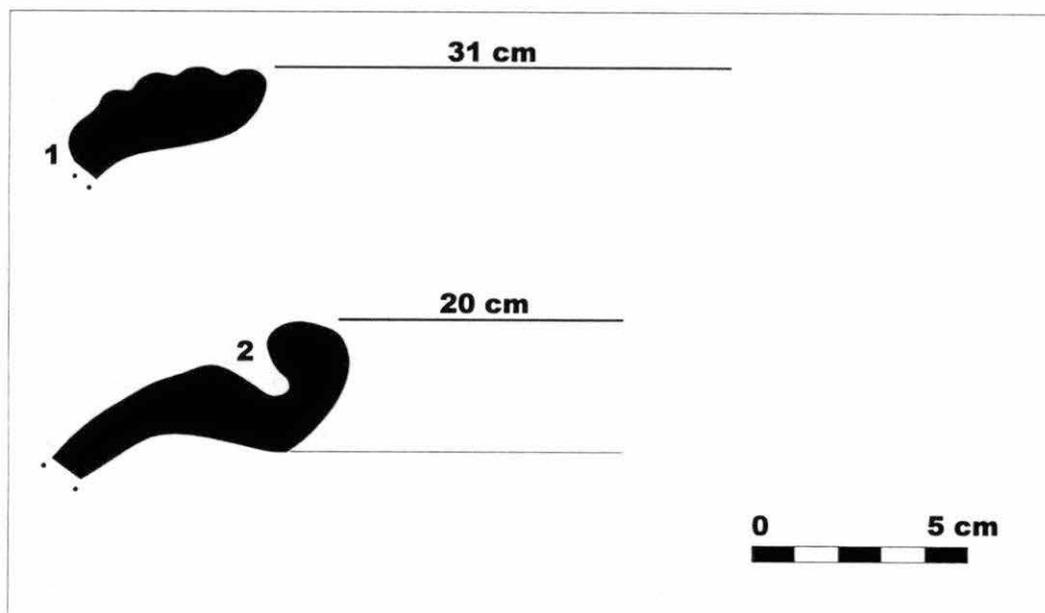


Figure D.43: *État* three, storage jars

- *Dolium: claire*, coarse textured fabric, temper 2-5 mm, zoned beige fabric with grey core (fig. D.43.2).

CRUCHES

Two of the *cruches* depicted here from the *état* three assemblage can be identified with the *Lycée Militaire* workshops. These two *cruches* have simple everted rims (*col évasé*). Similar forms were produced in *Ilot C* (see Alfonso, forthcoming, figure 17; and see Appendix C, figs. C.8.1-2, above). The other *cruche* forms found in *état* three contexts have comparisons elsewhere. A rim form labeled *en bandeau concave* by Joly (1996a) is similar to fig. D.44.2 here, although there are also notable differences between these *cruche* rims. Both rims have a smooth generally-vertical band which is concave in profile from the exterior, forming a trough-like rim. Fig. D.44.1 is similar to these forms, but has a more elaborate rim with a groove in the top of the lip. The final *cruche* form here has a tall, vertical neck with a simple rim which is triangular in profile (fig. D.44.5).

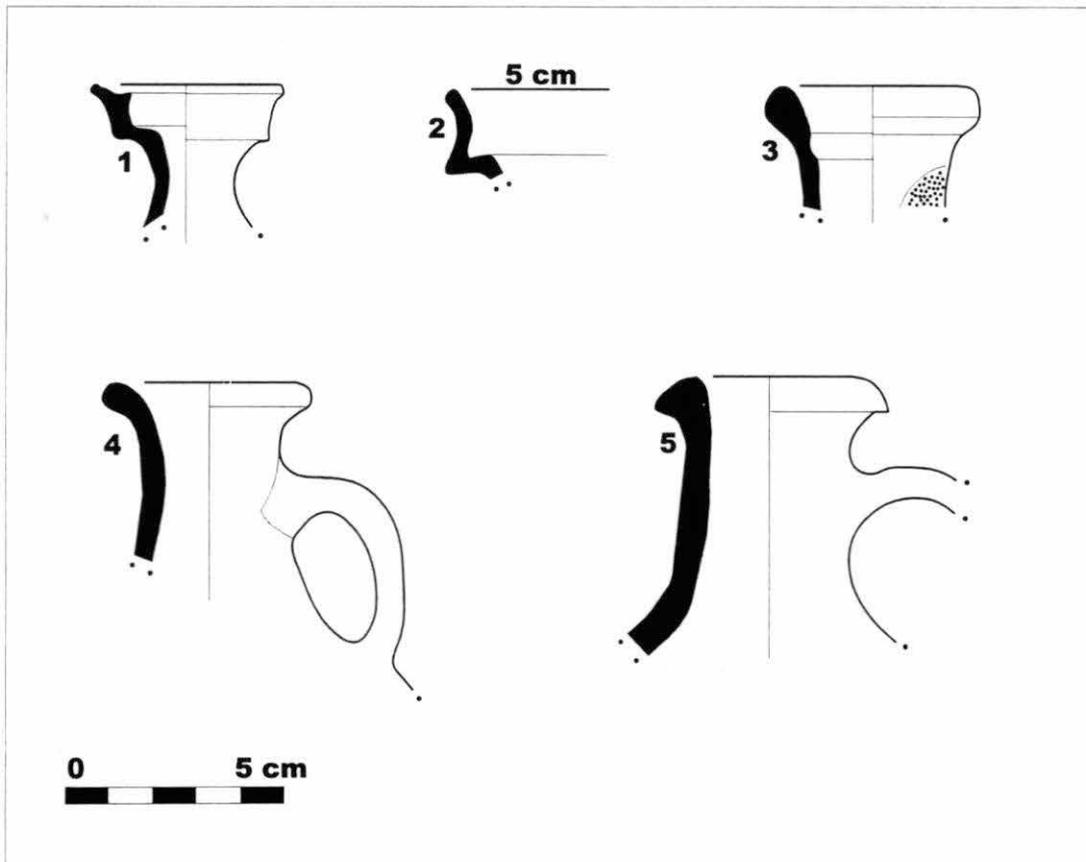


Figure D.44: *État* three, *cruches*

- *Cruche: claire*, medium textured fabric, temper less than 2 mm, pale orange fabric (fig. D.44.1).
- *Cruche: claire*, fine textured fabric, temper very fine or invisible to the naked eye, rosy beige fabric with a white layer on surface, either a result of firing or application (fig. D.44.2).
- *Cruche: claire*, fine textured fabric, temper very fine or invisible to the naked eye, orange fabric (fig. D.44.3).
- *Cruche: claire*, medium textured fabric, temper less than 2 mm, beige (fig. D.44.4).
- *Cruche: claire*, fine textured fabric, temper very fine or invisible to the naked eye, orange (fig. D.44.5).

LIDS

The lids illustrated here are common forms with hook rims, one larger than the other. Both show some grooving on the external facet of the lip. These examples show discoloration from use in cooking.

- Lid: *claire*, medium textured fabric, temper less than 2 mm, orange, brown and grey fabric (fig. D.45.1).

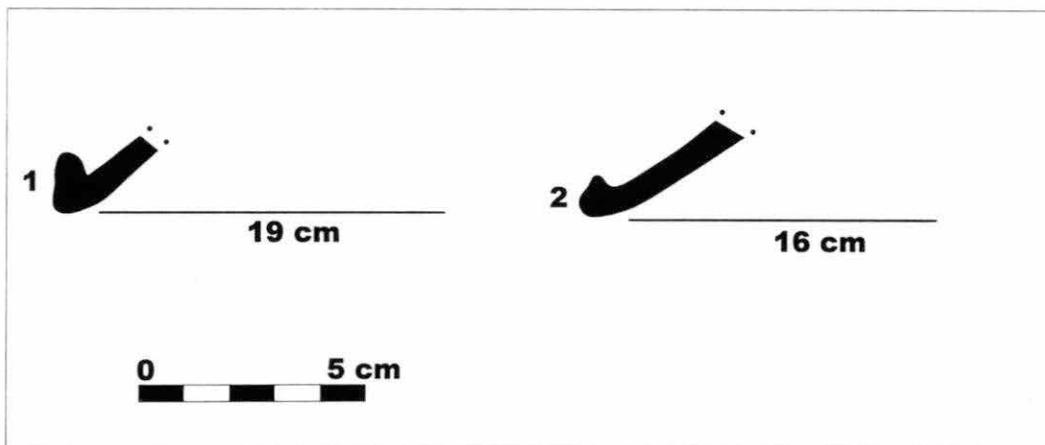


Figure D.45: *État* three, lids

- Lid: *claire*, medium textured fabric, temper less than 2 mm, rosy beige and grey fabric (fig. D.45.2).

ABANDON

The horizon which represents the abandonment of the *Bâtiment Est* at the *Lycée Militaire* dates from the third century A.D. The period is called by its French name, *Abandon*, and includes the final phase of occupation of *Bâtiment Est* as well as the subsequent phase during which the building's rooms accumulated debris from activities in surrounding areas. *Abandon* can be viewed as a partially occupation, and partially post-occupation horizon. These contexts produced 1458 common ware sherds representing 204 vessels.

BOWLS (and *MORTARIUM*)

- Conical bowl with grooved inverted rim: *sombre*, grainy, coarse textured fabric, grey (fig. D.46.1).

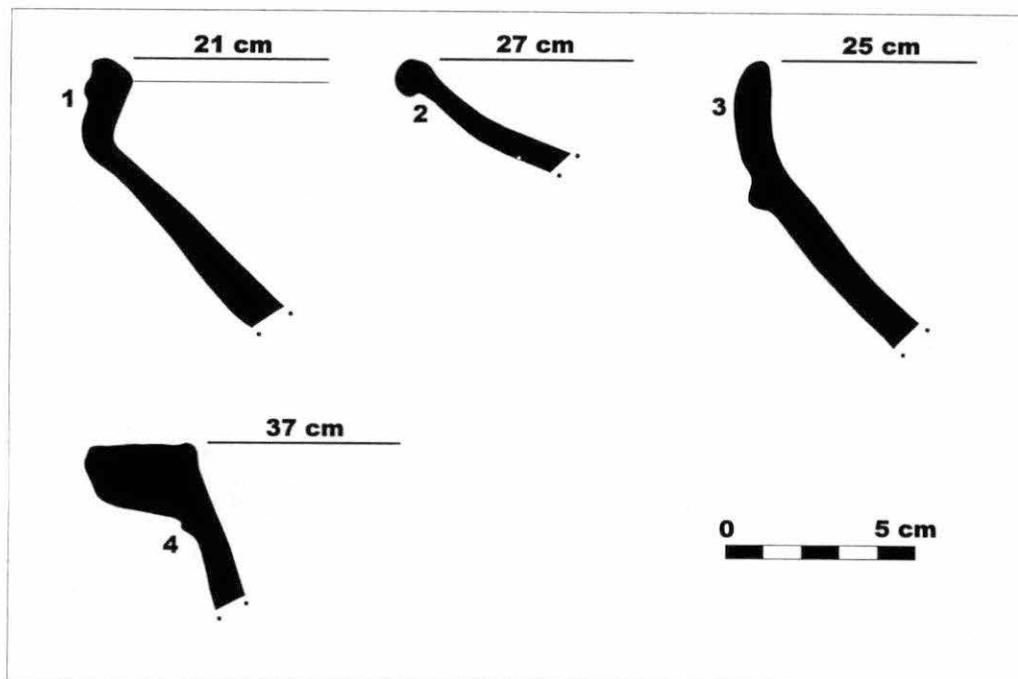


Figure D.46: *Abandon*, bowls and *mortarium*

- Bowl: *claire*, fine textured fabric, beige with red paint or slip on vessel exterior and red mica paint on interior (fig. D.46.2).
- *Mortarium*: *claire*, coarse textured fabric, temper less than 2 mm, mica application (fig. D.46.3). Rim in flared band.
- Bowl: *sombre*, coarse textured fabric, temper 2-5 mm, rough grey fabric with darker reduced surfaces and texture like the *Lycée Militaire* fabrics (fig. D.46.4).

FOOTED COOKING VESSELS

The footed cooking vessels, both low and tall forms, were abundant in *Abandon*. The first group of these presented here consists of those with forked rims, including the pendant square forms.

- Footed cooking vessel: *sombre*, coarse textured fabric, temper less than 2 mm, hard grainy fabric, grey (fig. D.47.1).
- Footed cooking vessel: *sombre*, coarse textured grey fabric, temper 2-5 mm (fig. D.47.2).
- Footed cooking vessel: *sombre*, coarse textured grainy grey fabric, temper 2-5 mm (fig. D.47.3).
- Footed cooking vessel: *sombre*, coarse textured grainy grey fabric, temper less than 2 mm (fig. D.47.4).
- Footed cooking vessel: *sombre*, medium textured fabric, temper 2-5 mm, grey surfaces and immediate sub-surface layer with orange core (fig. D.47.5).
- Footed cooking vessel: *sombre*, medium textured grey and brown fabric, temper 2-5 mm (fig. D.47.6).
- Footed cooking vessel: *sombre*, medium textured grey fabric, temper 2-5 mm (fig. D.47.7).

- Footed cooking vessel: *sombre*, medium textured fabric, temper 2-5 mm, zoned grey colors, and mica application (fig. D.47.8).

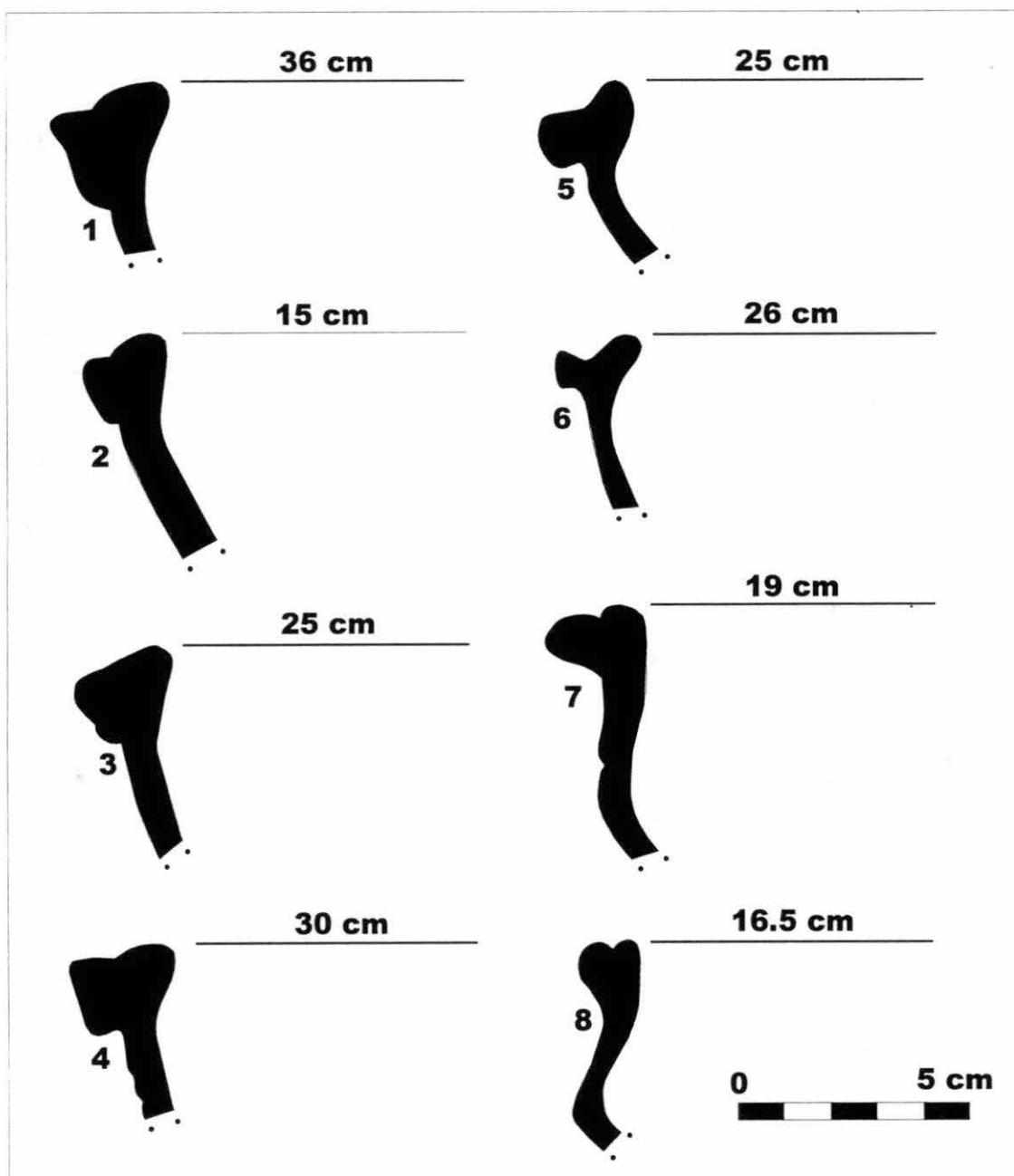


Figure D.47: *Abandon*, footed cooking vessels

The following forms of footed cooking vessels have grooves on the horizontal surfaces of their rims. This creates a crown-shaped, or crenellated rim profile.

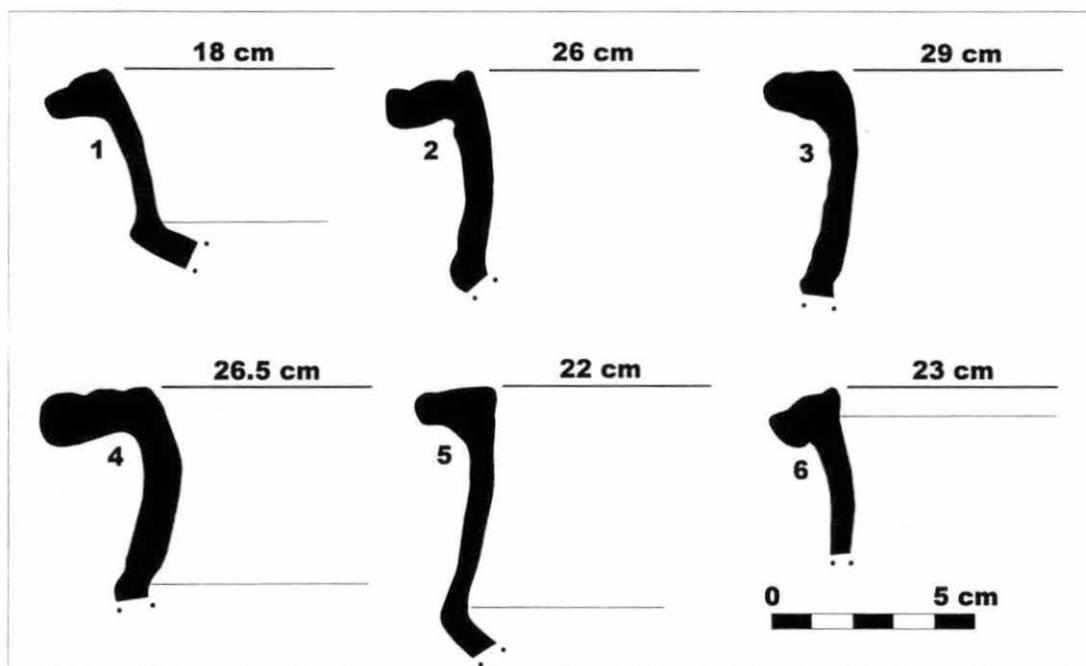


Figure D.48: *Abandon*, footed cooking vessels

- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, smooth grey fabric with mica application (fig. D.48.1).
- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with mica application (fig. D.48.2).
- Footed cooking plate: *sombre*, coarse textured fabric, sand temper 2-5 mm, grey fabric with mica application (fig. D.48.3).
- Footed cooking plate: *claire*, medium textured fabric, temper 2-5 mm, originally oxidized grey fabric with mica application (fig. D.48.4).
- Footed cooking plate: *sombre*, medium textured fabric, rounded sand and possible iron oxide temper 2-5 mm, grey fabric with mica application (fig. D.48.5).

- Footed cooking plate: *sombre*, medium textured fabric, temper less than 2 mm, tan-grey fabric with mica application (fig. D.48.6).

The next group of footed cooking vessels is characterized by a thinner vessel wall and an everted rim which is either curved (fig. D.49.2), or horizontal, either with or without grooves or a central channel.

- Footed cooking vessel: *claire*, fine textured fabric, temper less than 2 mm, red-orange paint and mica application on smooth beige fabric (fig. D.49.1).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, hard grey (fig. D.49.2).

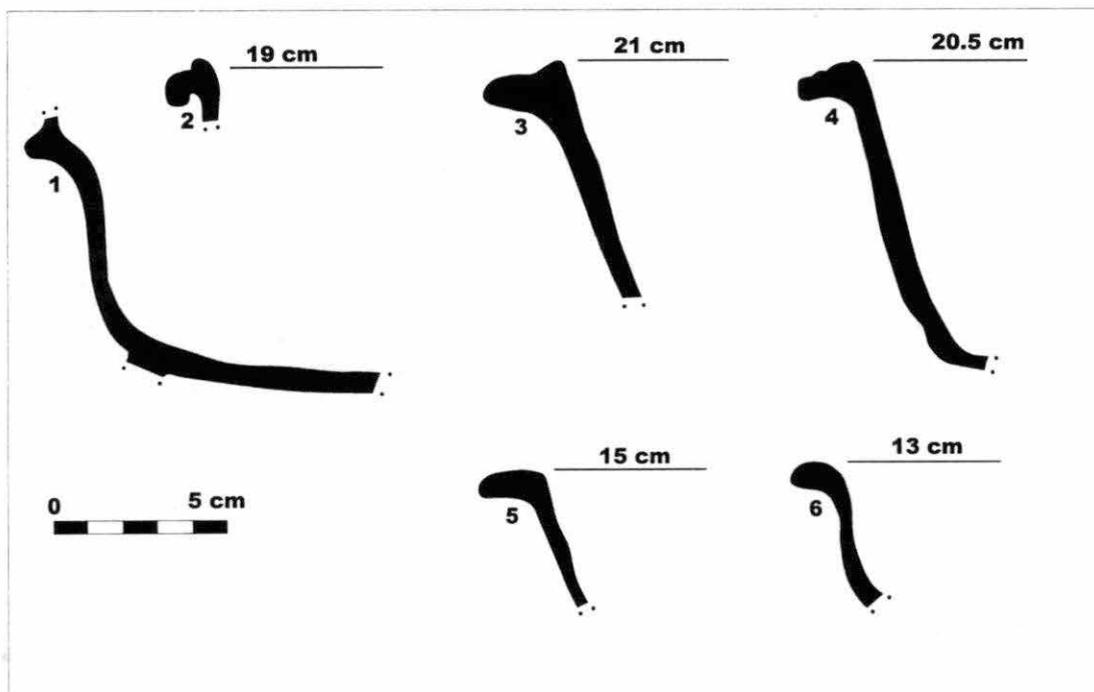


Figure D.49: *Abandon*, footed cooking vessels

- Footed cooking vessel: *claire*, fine textured fabric, temper 2-5 mm, mica application and red-orange paint on beige and rosy beige fabric (fig. D.49.3).
- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, sooted orange fabric with mica application (fig. D.49.4).
- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, orange-brown fabric with mica application, sooting, and cooking residue (fig. D.49.5).
- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, sooted pale orange fabric with mica application (fig. D.49.6).

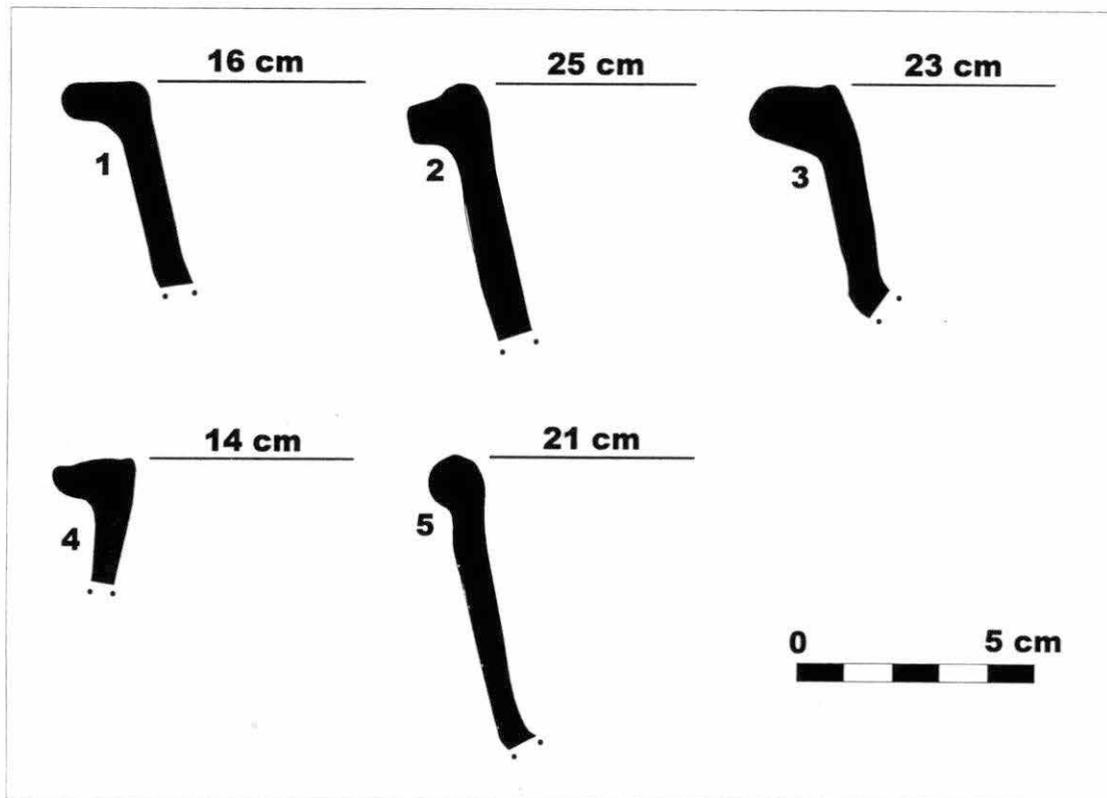


Figure D.50: *Abandon*, footed cooking vessels

Although it is often difficult to determine from a rim sherd including only a portion of the vessel body, some of the following footed cooking vessels can be divided between shallow cooking plates (fig. 50.1, 3) and deeper forms, or *marmites* (fig. D.50.4). these vessels have everted rims (with

the exception of fig. D.51.5 which has a simple straight body profile ending in a small ball rim), some with grooves, and one in a modified pendant square style (fig. D.50.2).

- Footed cooking vessel: *claire*, medium textured fabric, iron oxide and abundant sand temper 2-5 mm, pale orange-brown fabric with mica application on rim only, sooted (fig. D.50.1).
- Footed cooking vessel: *sombre*, medium textured grainy fabric, temper less than 2 mm, grey (fig. 50.2).
- Footed cooking vessel: *claire*, coarse textured fabric, temper less than 2 mm, zoned rosy beige fabric with grey core, soot (fig. D.50.3).
- Footed cooking vessel: *sombre*, medium textured fabric, temper less than 2 mm, hard grey fabric (fig. D.50.4).
- Footed cooking vessel: *claire*, medium textured fabric, temper less than 2 mm, pale orange with gold mica application, texture like *Lycée Militaire*-produced fabrics (fig. D.50.5). A very similar form with a rim diameter of 15 cm also occurs in *Abandon* contexts. This vessel has four grooves on the exterior side.

JARS

The jars from *Abandon* include several small jar or goblet forms seen in previous *états* and also rim forms which may belong to *marmites* rather than jars. The grooved-rim small jar or goblet was seen in *état* three use contexts and reappears here (fig. D.51.1). Small Besançon jars (fig. D.51.2) are also a continuation of an earlier form. Fig. D.51.3 represents a triangular rim form made by rolling the rim toward the exterior. Fig. D.51.4 is a trough-neck jar, Fig. D.51.5 has a grooved external facet, and Fig. D.51.6 is an unusual jar or *marmite* form.

- Small jar or goblet: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker reduced surfaces (fig. D.51.1).

- Small Besançon jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker reduced surfaces (fig. D.51.2).
- Jar: *sombre*, fine textured fabric, temper less than 2 mm, thin walled grey vessel (fig. D.51.3).
- Jar: *claire*, medium textured fabric, temper less than 2 mm, pale orange fabric with grey surfaces (fig. D.51.4).
- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey (fig. D.51.5).
- Jar (or *marmite*): *claire*, medium textured fabric, temper 2-5 mm, rosy beige and pale orange fabric with red-orange micaceous paint (fig. D.51.6).

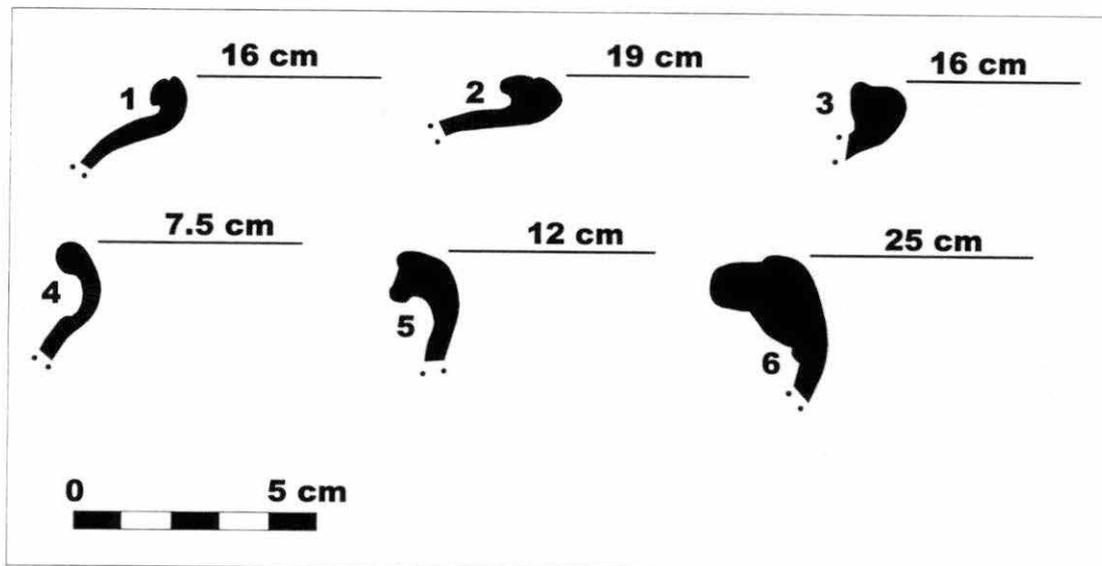


Figure D.51: *Abandon*, jars

Abandon contexts produced a number of *Besançon* type jars which presumably represent residual elements in these deposits.

- Jar: *claire*, coarse textured fabric, temper 2-5 mm, beige and grey bumpy fabric, decorated with undulating line incised on shoulder (fig. D.52.1).

- Jar: *claire*, coarse textured fabric, temper 2-5 mm, hand built pale orange an brown fabric, soot (fig. D.52.2).
- Jar: *claire*, coarse textured fabric, temper less than 2 mm, zoned beige fabric, soot (fig. D.52.3).
- Jar: *claire*, coarse textured fabric, temper less than 2 mm, zoned beige and grey fabric (fig. D.52.4).
- Jar: *claire*, coarse textured fabric, temper 2-5 mm, possibly hand built, orange-brown and grey fabric, soot (fig. D.52.5).

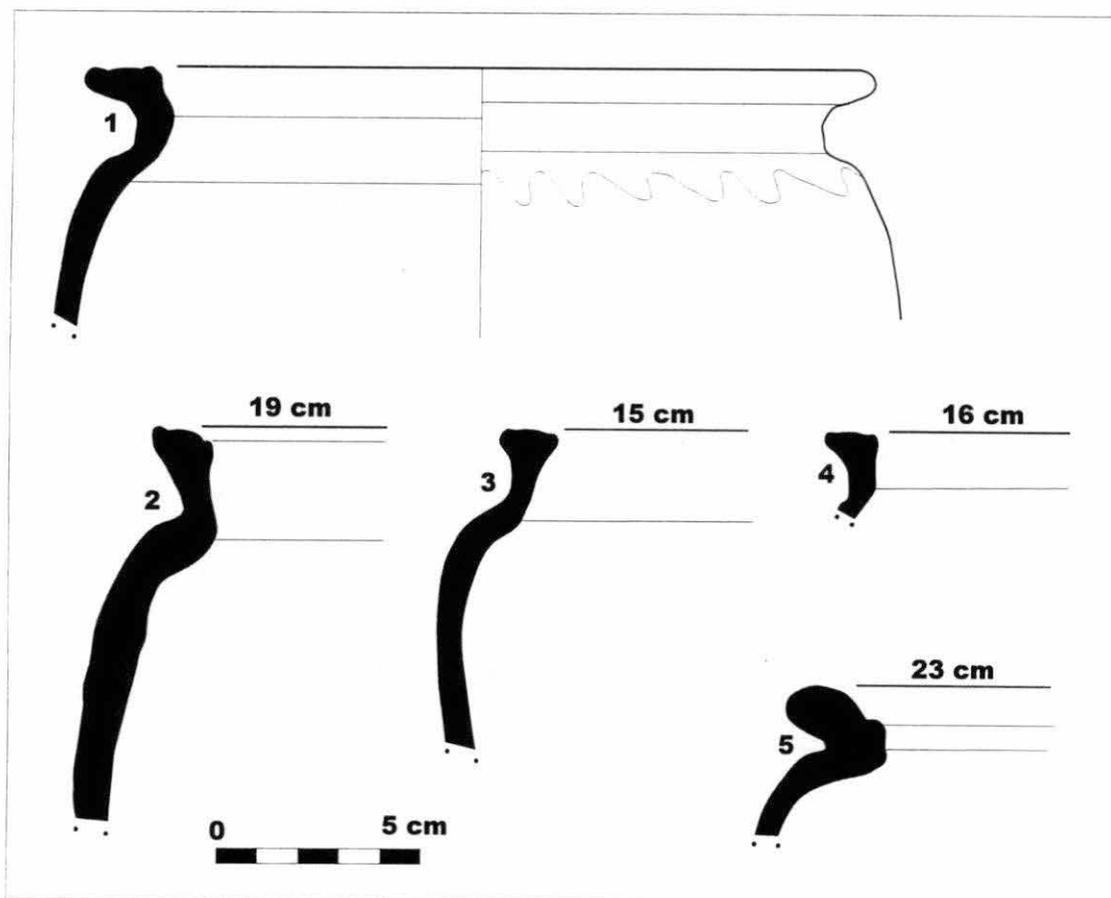


Figure D.52: *Abandon*, jars

The following jars include almond shaped rims (fig. D.53.1-3), one of these with a grooved neck (fig. D.53.3), rims *en bourrelet* (fig. D.53.7) and *en gouttière* (fig. D.53.4-5), and a rim form commonly associated with *précoce* contexts and Besançon forms (fig. D.53.6).

- Jar: *claire*, medium textured fabric, temper less than 2 mm, orange with mica application (fig. D.53.1).
- Jar: *sombre*, coarse textured fabric, temper less than 2 mm, hard dense grey fabric (fig. D.53.2).
- Jar: *sombre*, coarse textured fabric, temper less than 2 mm, grey fabric with characteristically *Lycée Militaire* fabric (fig. D.53.3).

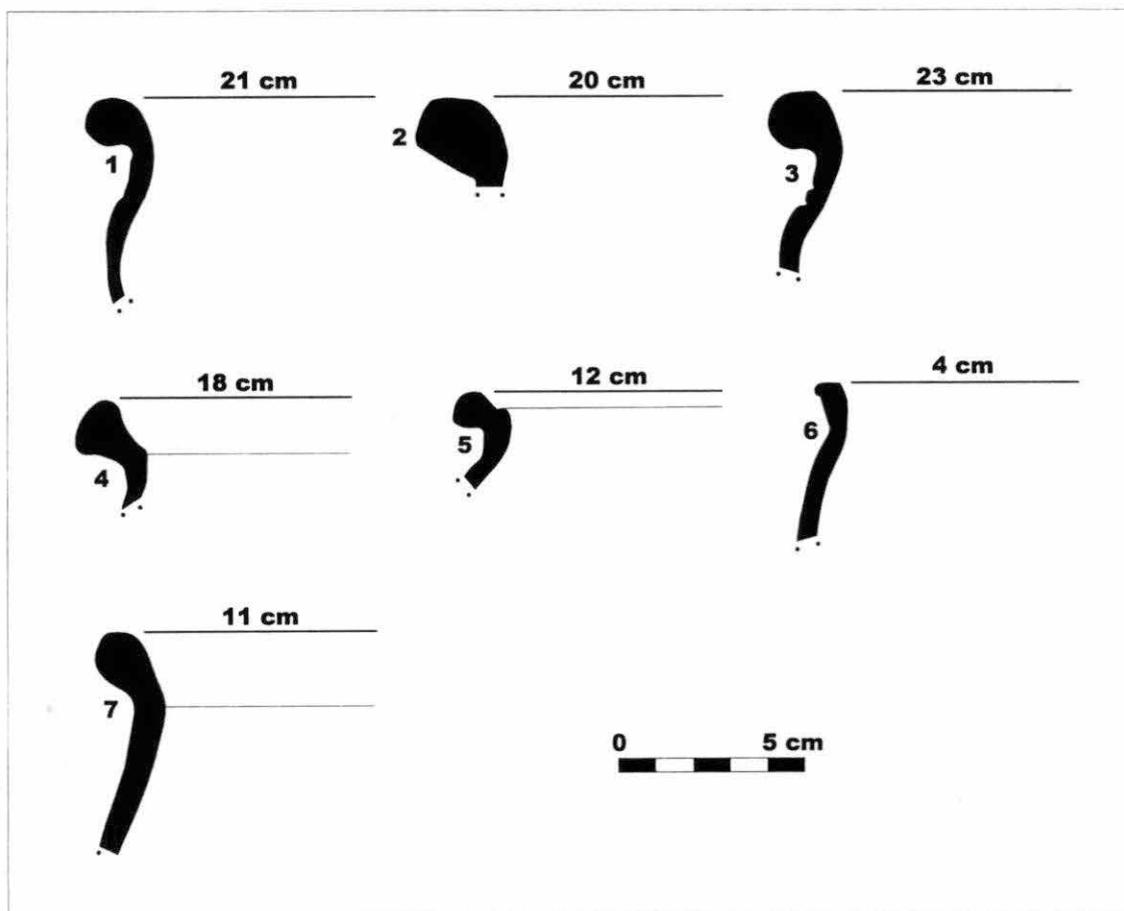


Figure D.53: *Abandon*, jars

- Jar: *claire*, medium textured fabric, temper 2-5 mm, beige with red-brown paint (fig. D.53.4).
- Jar: *claire*, medium textured fabric, temper less than 2 mm, rosy beige fabric with pale red-orange paint and iron clouding on surface (fig. D.53.5).
- Jar: *claire*, fine textured fabric, temper very fine or invisible to the naked eye, pale orange with beige paint on exterior surface (fig. D.53.6).

The remaining jars from *Abandon* contexts that are depicted here have horizontal everted rims, one with a pointed tip (fig. D.54.3).

- Jar: *sombre*, coarse textured fabric, temper less than 2 mm, grey (fig. D.54.1).
- Jar: *claire*, medium textured fabric, temper less than 2 mm, orange fabric with mica application and soot (fig. D.54.2).

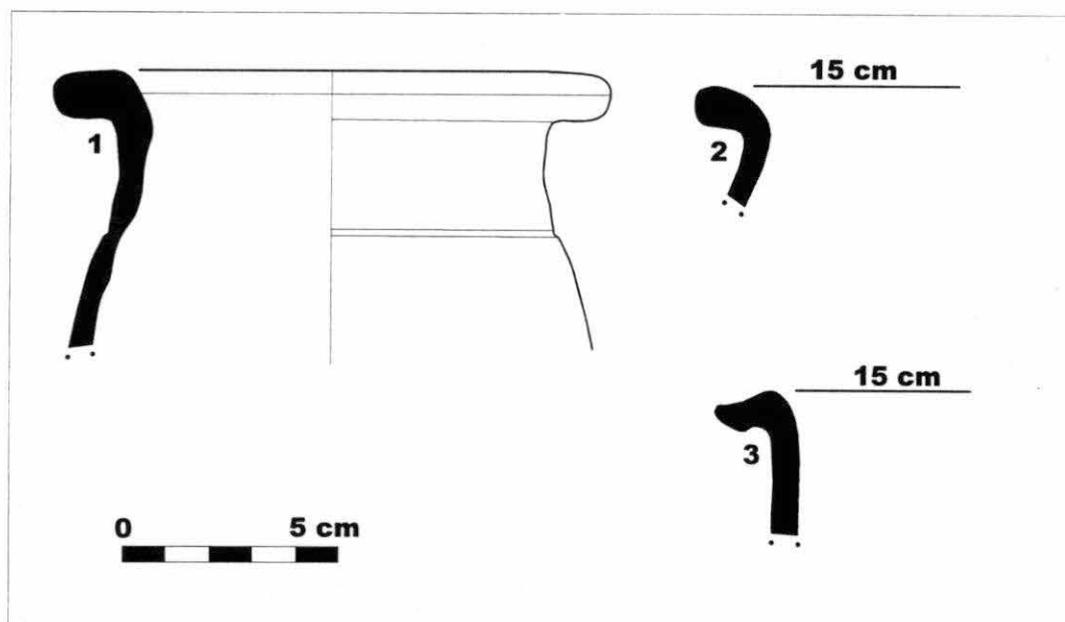


Figure D.54: *Abandon*, jars

- Jar: *sombre*, medium textured fabric, temper less than 2 mm, grey fabric with darker grey reduced surfaces (fig. D.54.3).

STORAGE JARS

The two storage jars illustrated here are of Celtic tradition rather than Mediterranean. One shows an unusual slanted rim in place of the usual horizontal one.

- Storage jar: *claire*, coarse textured fabric, sand and iron oxide temper (with low concentration of iron oxide) less than 2 mm, rosy beige with iron clouding (fig. D.55.1).
- Storage jar: *claire*, coarse textured fabric, temper 2-5 mm, high fired orange and overfired grey fabric (fig. D.55.2).

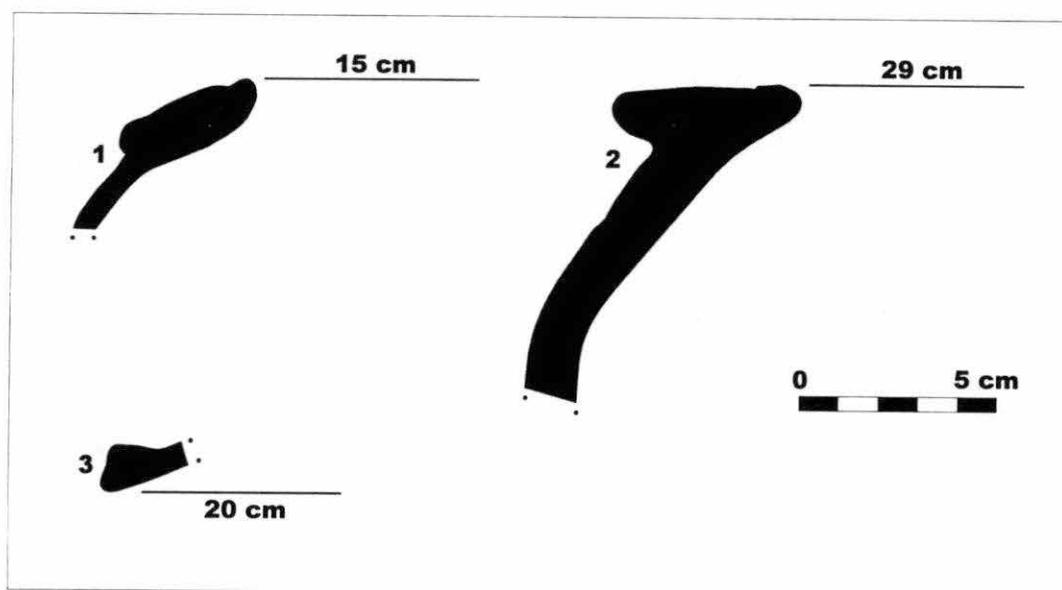


Figure D.55: *Abandon*, storage jars and lid

LIDS

The single lid from *Abandon* contexts has a groove on the exterior facet of the rim.

- Lid: *sombre*, medium textured fabric, temper less than 2 mm, zoned grey fabric with smooth surfaces (fig. D.55.3).

Works Cited

ANCIENT SOURCES

Carter, J.M., ed.

1991 *Julius Caesar: The Civil War, Books I & II*. Aris & Phillips, Warminster, UK.

Edwards, John

1984 *The Roman Cookery of Apicius*. Hartley & Marks, Inc., Publishers, Point Roberts, WA.

Julius Caesar

1994 *Seven Commentaries on the Gallic War, with an Eighth Commentary by Aulus Hirtius*, Carolyn Hammond, transl. Oxford University Press, Oxford.

Vehling, Joseph Dommers ed. and transl.

1977 *Apicius: Cookery and Dining in Imperial Rome*. Dover Publications, Inc., New York.

MODERN SOURCES

Adan-Bayewitz, David

1993 *Common Pottery in Roman Galilee*. Bar-Ilan University Press, Jerusalem.

Alfonso, Guy

forthcoming IN *Un Quartier Antique d'artisanat métallurgique à Autun (Saône-et-Loire): Le Site du Lycée Militaire*. P. Chardron-Picault and M. Pernot, eds. Documents d'Archéologie Française.

Annechino, M.

1977 "Suppellettile Fittile da Cucina di Pompei" in *L'Instrumentum Domesticum di Ercolano e Pompei nella prima età Imperiale*. L'Erma di Bretschneider, Rome.

Barral, Philippe

1995 "La Vaisselle Céramique aux II^{ème}. et I^{er} s. av. n. è. dans l'Est de la Bourgogne" in *Boire et Manger en Bourgogne. Usages et fonctions du mobilier archéologique, du Néolithique au Moyen-Age*. M. Joly and L. Marchand, eds. Cahiers Archéologiques de Bourgogne, No. 5. Service Régional de l'Archéologie de Bourgogne, Association de Rencontres et d'Informations Archéologiques, Dijon.

Barral, Philippe and Thierry Luginbühl

1994 "Présentation du Système de Description et de Gestion de la Céramique du Mont-Beuvray" in *S.F.E.C.A.G., Actes du Congrès de Millau* (pp. 205-212).

- Bats, Michel
 1988 *Vaisselle et Alimentation à Olbia de Provence (v. 350 – 50 av. J.-C.): Modèles Culturels et Catégories Céramiques*. Revue Archéologique de Narbonnaise, Supplément 18.
- Beard, Mary and Michael Crawford
 1985 *Rome in the Late Republic*. Cornell University Press, Ithaca, NY.
- Blagg, Thomas and Martin Millett
 1990 *The Early Roman Empire in the West*. Oxbow Books, Oxford.
- Bon, Sara E. and Alicia L. Wise
 1996 "Roman and Native Interaction: Evidence from Southern Burgundy" in P. Dawson, ed. *Debating Complexity*. University of Calgary, Calgary.
- Boone, James L. III
 1987 "Defining and Measuring Midden Catchment" *American Antiquity* (52) 2:336-345.
- Cerulli Irelli, G.
 1977 "Officina di Lucerne Fittili a Pompeii" in *L'Instrumentum Domesticum di Ercolano e Pompei nella prima età Imperiale*. L'Erma di Bretschneider, Rome.
- Chardon-Picault, Pascale
 1996 "Autun-Augustodunum: Bilan des dernières Découvertes" in R. Bedon, ed. *Les Villes de la Gaule Lyonnaise*. Université de Limoges, Caesarodunum Tome XXX, Limoges.
- Chardon-Picault, Pascale and Franck Ducreux
 1993 "Un Quartier Artisanal avec Atelier de Bronziers à Autun: Premier Diagnostic" *Revue Archéologique de l'Est et du Centre-Est*, Tome 44, Fasc. 1 (pp. 199-209).
- Coulon, Gérard
 1985 *Les Gallo-Romains: Au Carrefour de deux Civilisations*. Armand Colin, Paris.
- Creuzenet, Fabienne
 1996 "La Production de Céramiques à Autun" in *S.F.E.C.A.G., Actes du Congrès de Dijon* (pp. 25-39).
- forthcoming IN *Un Quartier Antique d'artisanat métallurgique à Autun (Saône-et-Loire): Le Site du Lycée Militaire*. P. Chardon-Picault and M. Pernot, eds. Documents d'Archéologie Française.
- Crumley, Carole L.
 1974 *Celtic Social Structure: The Generation of Archaeologically Testable Hypotheses from Literary Evidence*. Museum of Anthropology, University of Michigan, Anthropological Papers, No. 54. The University of Michigan, Ann Arbor, MI.
- 1987 "Celtic Settlement before the Conquest: The Dialectics of Landscape and Power" in C. L. Crumley and W. H. Marquardt, eds. *Regional Dynamics: Burgundian Landscapes in Historical Perspective*. Academic Press, San Diego.

- Crumley, Carole L. and William H. Marquardt, eds.
 1987 "Regional Dynamics in Burgundy" in C. L. Crumley and W. H. Marquardt, eds. *Regional Dynamics: Burgundian Landscapes in Historical Perspective*. Academic Press, San Diego.
- Dietler, Michael David
 1990 *Exchange, Consumption, and Colonial Interaction in the Rhône Basin of France: A Study of the Early Iron Age Political Economy*. Doctoral Dissertation, University of California at Berkeley.
- Duhamel, Pascal
 1978/9 "Morphologie et Évolution des four Céramiques en Europe Occidentale –Protohistoire, Monde Celtique, et Gaule Romaine" *Acta Praehistorica et Archaeologica*, (9) 10: 49-76
- Dyson, Stephen L.
 1985 *The Creation of the Roman Frontier*. Princeton University Press, Princeton, NJ.
- Ferdière, A. and M. Ferdière
 1972 "Introduction A L'Étude d'Un Type Céramique: Les Urnes A Bord Mouluré Gallo-Romaine Précoces" *Revue Archéologique de l'Est et du Centre Est*. 23:77-88.
- Gabba, Emilio
 1976 *Republican Rome, the Army and the Allies* (P.J. Cuff, transl.). University of California Press, Berkeley.
- Geokit
 1995 *Étude Pétrographique de Céramiques de la Région d'Autun*. Technical report by Geokit, Centre des Sciences de la Terre, 6 Boulevard Gabriel, 21000 Dijon, France.
- Goudineau, Christian
 1990 *César et la Gaule*. Editions Errance, Paris.
- Guilbert, Graeme, ed.
 1981 *Hill-Fort Studies: Essays for A.H.A. Hogg*. Leicester University Press, Leicester, UK.
- Guilbert, Graeme
 1981 "Hill-Fort Functions and Populations: A Sceptical Viewpoint" in G. Guilbert, ed. *Hill-Fort Studies: Essays for A.H.A. Hogg*. Leicester University Press, Leicester, UK.
- Haselgrove, Colin
 1990 "The Romanisation of Belgic Gaul: Some Archaeological Perspectives" in T. Blagg and M. Millett, eds. *The Early Roman Empire in the West*. Oxbow Books, Oxford.
- 1996 "Roman Impact on Rural Settlement and Society in Southern Picardy" in N. Roymans, ed. *From the Sword to the Plough*. Amsterdam Archaeological Studies I, Amsterdam University Press, Amsterdam.
- Joly, Martine
 1990 "La Céramique Commune" in *Bourbon-Lancy (Saône-et-Loire): Un atelier de figurines en Terre Cuite Gallo-Romaines (les Fouilles du Breuil: 1985-1986)*. Documents d'Archéologie Française, No. 25, Paris.

- 1992 *Recherches sur la Céramique Commune Gallo-Romaines dans l'Est de la Bourgogne*.
 Doctoral Dissertation, Université de Bourgogne, Dijon.
- 1994a "Boire et Manger en Bourgogne Gallo-Romaine" La Vaisselle au Haut-Empire" in *Boire et Manger en bourgogne. Usages et fonctions du mobilier archéologique, du Néolithique au Moyen-Age*. M. Joly and L. Marchand, eds. *Cahiers Archéologiques de Bourgogne, No. 5*.
 Service Régional de l'Archéologie de Bourgogne, Association de Rencontres et d'Informations Archéologiques, Dijon.
- 1994b "Céramiques du Haut-Empire en Bourgogne" in *La Céramique du Haut-Empire en Gaule Belgique et dans les Régions Voisines: Faciès Régionaux et Courants Commerciaux*. M. Tuffreau-Libre and A. Jacques, eds. *Nord-Ouest Archéologie, No. 6*.
- 1994c "L'Atelier de Potiers Gallo-Romain de Domecy-sur-Cure (Yonne)" in *S.F.E.C.A.G., Actes du Congrès de Millau* (pp. 213-223).
- 1995 "Céramiques du 1er Siècle Trouvées à Sens (Yonne)" in *S.F.E.C.A.G., Actes du Congrès de Rouen* (pp. 263-276).
- 1996a "Terra Nigra, Terra Rubra, Céramiques à Vernis Rouge Pompéien, Peintes, et Communes: Répertoire, Chronologie et Faciès Régionaux en Bourgogne Romaine" in *S.F.E.C.A.G., Actes du Congrès de Rouen* (pp. 111-137).
- 1996 b (ed.) *Histoire du Pot: Les Potiers Gallo-Romains en Bourgogne*. Exhibition Catalogue from the Musée Archéologique de la ville de Dijon: Dijon.
- Mansuelli, Guido Aldo
 1991 "The Celts and Ancient Europe" in S. Moscati et al. *The Celts* Bompiani, Milano.
- Metzler, Jeannot, Martin Millet, Nico Roymans, and Jan Slofstra, eds.
 1995 *Integration in the Early Roman West: The Role of Culture and Ideology*. Dossiers d'Archéologie du Musée National d'Histoire et d'Art IV: Luxembourg.
- Millett, Martin
 1979 "An Approach to the Functional Interpretation of Pottery" IN *Pottery and the Archaeologist*.
 Institute of Archaeology Occasional Publication No. 4: London.
- Musée des Beaux-Arts et d'Archéologie, Besançon
 1992 *Les Fouilles du Parking de la Mairie à Besançon*, Exhibition Catalogue, Musée des Beaux-Arts et d'Archéologie, Besançon.
- Okun, Marcia L.
 1989 *The Early Roman Frontier in the Upper Rhine Area: Assimilation and Acculturation on a Roman Frontier*. BAR International Series 547, Oxford.
- Pasquet, Anne
 1996 *Les Mortiers en Céramique Commune de Bourgogne: Production et Diffusion*. Mémoire de D.E.A., Université de Bourgogne, Dijon.

- 1996 "Les Mortiers en Céramique Commune de Bourgogne" in *S.F.E.C.A.G., Actes du Congrès de Dijon* (pp. 99-109).
- Peacock, D.P.S.
1982 *Pottery in the Roman World*. Longman: London.
- Perrugot, Didier
1996 "Le Productions Céramiques de l'Atelier Gallo-Romain de Sens (Yonne)" in *S.F.E.C.A.G., Actes du Congrès de Dijon* (pp. 63-72)?.
- Picon, Maurice
1973 *Introduction à l'étude technique des Céramiques Sigillées de Lezoux* (No. 2). Centre de Recherches sur les Techniques Gréco-Romaines, Dijon.
- Rebourg, Alain
1993a *Carte Archéologique de la Gaule: Autun 71/1*. Académie des Inscriptions et Belles-Lettres, Ministère de la Culture, Paris.
1993b *Carte Archéologique de la Gaule: Autun 71/2*. Académie des Inscriptions et Belles-Lettres, Ministère de la Culture, Paris.
- Roymans, Nico
1997 "The Sword or the Plough. Regional Dynamics in the Romanisation of Belgic Gaul and the Rhineland Area" in N. Roymans, ed. *From the Sword to the Plough*. Amsterdam Archaeological Studies I, Amsterdam University Press, Amsterdam.
- Sénéchal, Robert
1975 *Céramique Commune d'Alésia: Les Cruches* (No. 5). Centre de Recherches sur les techniques Gréco-Romaines, Dijon.
- Shennan, Stephen
1997 *Quantifying Archaeology*. Edinburgh University Press, Edinburgh.
- Sinnigen, William G. and Arthur E.R. Boak
1977 *A History of Rome to A.D. 565* (6th Edition). Macmillan Publishing Co., Inc., New York.
- Tuffreau-Libre, Marie
1992 *La Céramique en Gaule Romaine*. Editions Errance, Paris.
- Vanderhoeven, Alain
1996 "The Earliest Urbanisation in Northern Gaul: Some Implications of Recent Research in Tongres" in N. Roymans, ed. *From the Sword to the Plough*. Amsterdam Archaeological Studies I, Amsterdam University Press, Amsterdam.
- Wells, Peter S.
1980 *Culture Contact and Culture Change: Early Iron Age Central Europe and the Mediterranean World*. Cambridge University Press, Cambridge.
1990 "Iron Age Temperate Europe: Some Current Research Issues" *Journal of World Prehistory*, Vol. 4, No. 4. (pp. 437-476).

Woolf, Greg

1998 "The Formation of Roman Provincial Cultures" in J. Metzler, M. Millett, N. Roymans, and J. Slofstra, eds. *Integration in the Early Roman West*. Dossiers d'Archéologie du Musée National d'Histoire et d'Art IV, Luxembourg.