

Late medieval ceramics from Qsar es-Seghir

Charles L. REDMAN *

Résumé. Les fouilles systématiques faites pendant quatre campagnes à Qsar es-Seghir au Maroc ont fourni une collection importante de céramiques importées et de production locale. Nous pensons que les pièces émaillées à décor viennent d'Espagne, du Portugal, d'Italie, et du Maroc central mais on a pu produire dans la région des céramiques inspirées par d'autres traditions. Le but de ma communication est de décrire les objets inventoriés tout en prêtant une attention particulière aux céramiques à décor.

Located on the Moroccan coast of the Strait of Gibraltar midway between Tangier and Sebta, Qsar es-Seghir was used as a port and a fortress by a variety of overlords between the 12th and the 16th centuries. Four seasons of systematic excavations by an expedition sponsored by the Smithsonian Foreign Currency Program and the State University of New York at Binghamton has yielded an abundant ceramic assemblage of locally produced and imported ceramics. This article is a description of the inventory with special emphasis on the decorated wares.

Historical outline.

Chroniclers refer to a small fort and town at the location of Qsar es-Seghir (al-Qsar al-Saghîr) as early as the eighth century Arab invasion of North Africa and Spain. Subsequently, forces of the Almoravid and succeeding Almohad dynasties of Morocco set off from this fort to stem the *Reconquista* of Christian armies moving southward across the Iberian Peninsula. The early names for Qsar es-Seghir include *Qsar Masmuda*, after a Berber tribe of this coastal region, and *Qsar al-Majaz*, which means castle of the crossing in Arabic. The earliest substantial remains probably date from the rule of Yacoub el Mansour (1184-1199 A.D.), who used this as a military base at least twice. In 1287 A.D. during the reign of Abou Yacoub Youssef (1286-1307 A.D.), second ruler of the Marinid dynasty centered at Fez, a major building program was initiated. We attribute the construction of the now extant city fortifications and major monuments to

this period (Schulman n.d.). During the 14th and 15th centuries, the military importance of Qsar es-Seghir diminished as Muslim power in Spain waned.

In 1458 A.D. after a brief siege, Qsar es-Seghir surrendered to a Portuguese invasionary force led by King Alphonso V. A garrison of troops was stationed there and the fort renamed *Alcacer Ceguer*. It appears from both historical references and archaeological evidence that this settlement never developed successful relations with the Berber and Arab inhabitants of the surrounding countryside and remained isolated. In 1550 A.D., Qsar es-Seghir was abandoned, the region having been ceded to Spain, its fortifications partially destroyed, and the site left unoccupied.

Several periods of occupation can be defined on the basis of correlations between the above historically known events and the archaeological stratigraphy. The Portuguese occupation (1458-1550) is comprised of up to three distinct building levels. The Islamic material (c. 1190-1458) is comprised of between two and four architectural rebuildings. These can be roughly subdivided into upper Islamic (c. 1350-1458) and lower Islamic (c. 1190-1350).

Excavation strategies.

The physical remains of Qsar es-Seghir consist of a series of superimposed stone and brick buildings enclosed by a circular wall roughly 200 meters in diameter. Everywhere Portuguese remains overlay a series of Islamic buildings. Civic buildings from both the Islamic (congregational mosque, hammam, and market) and the Portuguese communities (two churches and a prison) have been discovered. The

* Department of Anthropology, State University of New York, Binghamton, New York.

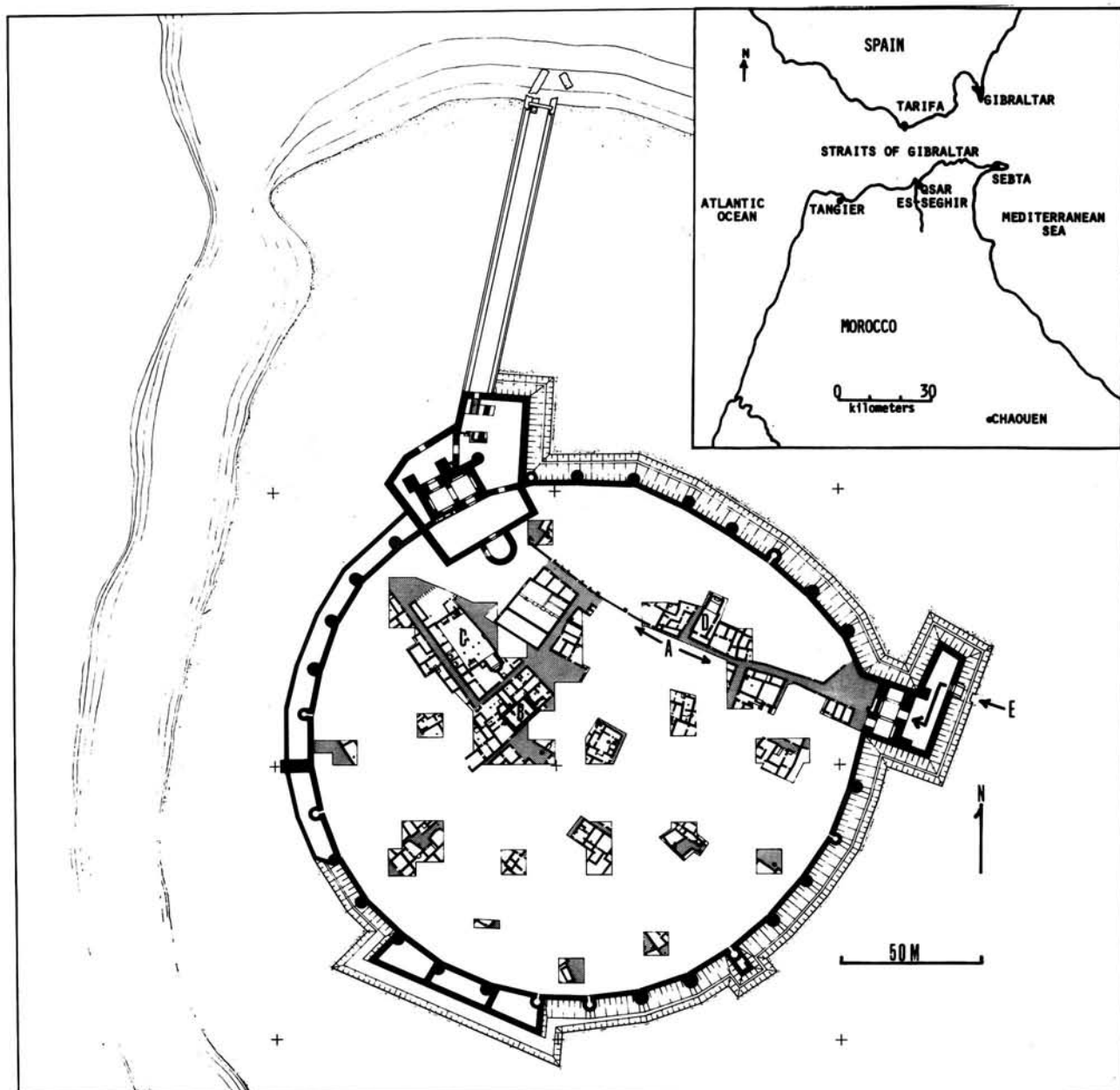


FIG. 1. — Map of the 15th C. fortifications and excavated architecture at Qsar es-Seghir. Solid lines are fortifications and walls actually excavated while hatched areas are inferred fortifications. Shaded areas within the excavations are streets and plazas; special features are indicated with letters: A = main street between two gates; B = reused Islamic hammam; C = main church; D = smaller church; E = entry to city.

excavations have not yet uncovered evidence of large-scale ceramic production within the town's enclosure wall, but we believe some of the plainwares were produced in the region, especially during the Islamic period. We estimate that the population fluctuated between 700 and 1,500 inhabitants.

Approximately 5,000 square meters, or about 18 % of Qsar es-Seghir, has been excavated (see Fig. 1). In addition, eighty small-scale architectural soundings have been made along the fortifications, within the two Islamic gate complexes, and inside the major Portuguese bastions. Two basic excavation strategies have been followed to investigate the town.

1. Nineteen nine by nine meter excavation units were selected on the basis of a stratified unaligned systematic probability sample. This work is designed to provide a representative coverage of the districts, buildings, and artifacts across the site. Seven of these sample units have been excavated to the Portuguese level, seven to the upper Islamic remains, and five of these units have been excavated in their entirety down to sterile soil (c. three meters of deposit). In every unit at least a small sounding has been excavated to sterile soil, providing a widely dispersed selection of stratigraphic columns through the site's deposits.

- Additional excavation areas were chosen on the basis of judgment. Selection was made to clear broad horizontal areas, learn about the major civic structures, uncover the contiguous layout of residential units, and outline the network of streets and plazas.

System of ceramic analysis and general results.

The Qsar es-Seghir ceramics were excavated with careful horizontal and vertical control and are being analysed by a variety of qualitative and computerized quantitative approaches. Although several typological and social organizational studies are now in progress, this article focuses on the description of the inventory and its changing composition.

The analysis of the pottery consisted of three basic stages:

Stage 1.

Qualitative recording of decorated fragments and potentially reconstructable vessels of all types was conducted. Approximately three hundred partial vessels were reassembled and their profiles drawn. The examination of these pieces provided the major data base for creating the diagnostic analytical system (Stage 3). About 5,000 decorated sherds of six basic types (resist, scratched, manganese paint on honey colored, luster, blue on white, and Italian) were individually recorded and classified into subtypes on the basis of designs and variations in techniques.

Stage 2.

All sherds from interpretable archeological contexts were sorted and tallied according to ware type, color of surface finish, and decorated ceramic type. 400,000 sherds from 1,100 excavation proveniences have been classified into twenty categories according to this system.

Stage 3.

Sherds from 300 proveniences judged to represent the variability at the site have been chosen for further detailed analysis. From each provenience only sherds with morphological elements or design motifs are examined. This usually involves about 30 % of the total number, the remainder being undiagnostic body sherds. About 25,000 sherds have been individually coded and computerized. The structure of this system includes recording diverse categories of information. For certain detailed categories of information (such as nature of morphological element) a hierarchical system of recording was employed. The information of vessel form presented in Table 1 (parts C and D) is drawn from this analysis.

Overall figures on the composition of the Qsar es-Seghir ceramic inventory as well as more detailed provenience by provenience information is provided by stage 2 of the ceramic analysis. Plainwares are more common than glazewares throughout the occupation of Qsar es-Seghir (Table 1-A). Matte painted

plainware and handmade ware each comprise about five percent of the Islamic inventory and substantially less of the Portuguese material.

TABLE 1
Summary statistics for ware type,
glaze color, and vessel form.
(all figures are in percentages)

	Portuguese	Upper Islamic	Lower Islamic
A. WARE			
Glaze	44.2	36.9	40.0
Plain	52.9	53.5	49.7
Plainted	1.7	5.2	5.4
Handmade	1.2	4.4	5.0
Total Sherds	124,473	43,566	7,021
B. GLAZE COLOR			
Clear	49.5	76.3	82.3
Gold (honey)	18.3	11.5	8.2
Green	15.8	6.6	5.2
White	13.6	2.8	1.5
Multiple colors	2.5	2.6	2.8
Other colors	0.2	0.2	0.1
Total Sherds	54,454	15,956	2,792
C. GENERAL VESSEL FORM			
Bowl	47.8	51.7	52.1
Jar	37.7	45.8	47.1
Plate	14.5	2.5	0.8
Total Sherds	3,790	5,545	1,298
D. VESSEL FORM			
Incurving bowls	6.3	25.5	31.5
Conical bowls	3.4	12.8	13.2
Tankards	0.0	1.6	0.8
Flasks	0.6	1.8	1.6
Casuelas	0.8	0.6	2.4
Plain beakers	0.2	1.0	0.5
Other basins	11.2	27.8	25.1
Deep bowls	3.2	6.9	10.3
Holemouth jars	2.3	4.5	5.6
Cruets	0.1	0.1	0.3
Squat jars	1.2	0.3	0.3
Relatively straight-sided			
open bowls	3.7	2.6	3.2
Green glaze basins	19.0	3.6	1.6
Carinated bowls	12.3	1.9	0.0
Plates	31.7	7.4	2.9
Round sided open bowls	0.7	0.6	0.0
Mortars	1.4	0.2	0.3
Pitchers	0.7	0.5	0.8
Glazed beakers	1.3	0.2	0.0
Total sherds	1,725	1,852	378

Clear glaze is the dominant glaze color during the Islamic period with modest numbers of honey and green vessels (Table 1-B). During the Portuguese period there is a greater emphasis on other glaze colors, although clear glaze is still the largest category. Green, honey, and white glaze increase significantly through time and hence are good chronological indices. This change in percentages of glazeware colors during the later occupation is

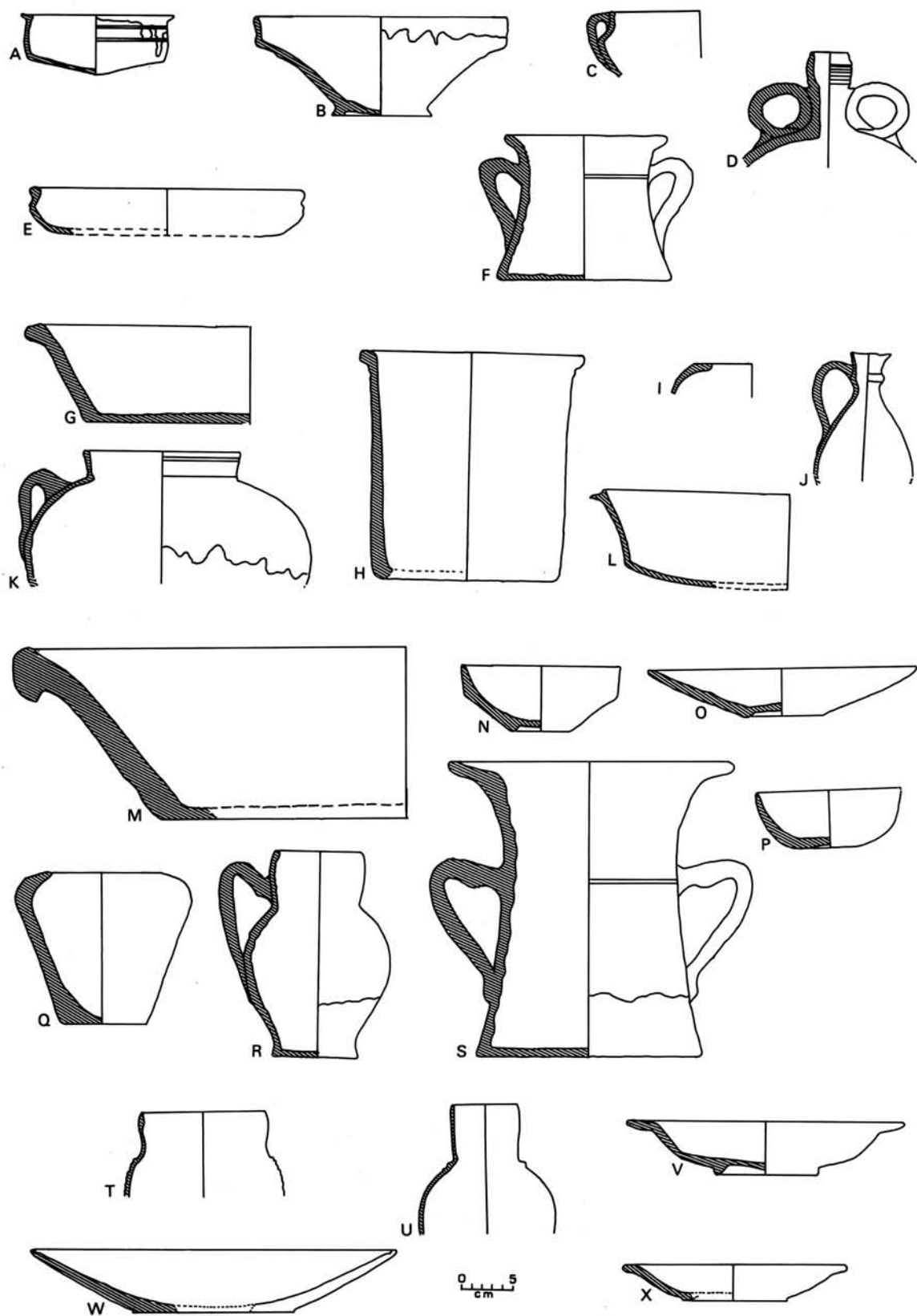


FIG. 2. — Major vessel form categories: A-F are primarily from Islamic period; G-L are found in both Islamic and Portuguese deposits; M-S are primarily from Portuguese period; T-V are other forms of decorated Islamic pottery; W & X are other forms of decorated Portuguese period pottery.

related to the importation of many ceramic vessels such as plates, basins, and carinated bowls. Vessels with more than one glaze color (multiple) occur in small numbers throughout the occupation of the site. These usually are green and white or brown and gold.

Ceramic types are defined on the basis of recurrent vessel forms that are often associated with specific wares or glaze colors. Nineteen vessel form categories from both Portuguese and Islamic deposits are outlined below, in Table 1-D, and in Fig. 2. Ten additional types were defined during the 1978 season, but quantitative figures for them are not yet available.

Due to the nature of the material the defined forms do not evenly represent all of the sherds. Most of the types are in glazeware which only comprises about 40 % of the total shers. Jars are under-represented in the defined types due to the relative difficulty in reconstructing their profiles from small sherds and the extreme variability in their shapes.

The summary of vessel form types presented in Table 1-D is based on the diagnostic analysis of over 4,000 Portuguese sherds, 4,000 sherds from Upper Islamic, and 1,000 sherds from Lower Islamic. Over half of the analyzed sherds could be identified only as either indeterminant bowls or jars or they fit into fifteen more general types. Profiles of examples of each of the nineteen categories described here are shown in Figure 2.

Primarily Islamic vessel forms.

INCURVING BOWLS usually have a double rim (used with a lid), a flat or concave bottom, and clear glaze (Fig. 2-A).

CONICAL BOWLS are characterized by a ring base, straight sloping sides, and a vertical rim (Fig. 2-B). They are completely glazed on the interior and partial or complete on the exterior. In historic times similar vessels were used for serving couscous.

TANKARDS are shallow plainware vessels with vertical handles that are intermediate in form between a jar and an open bowl (Fig. 2-C).

FLASKS have narrow, short necks with flaring rims and globular bodies (Fig. 2-D).

CASUELAS are a plainware shallow tray with ledge handles. They are sometimes handmade (Fig. 2-E).

PLAINWARE BEAKERS have flat bases, concave profiles, everted rims, and two vertical strap handles. They are usually smaller than their glaze counterparts (Fig. 2-F).

Islamic and Portuguese vessel forms.

OTHER BASINS are large, flat bottomed vessels with thick walls and a rolled out rim. They are in plainware or a partial glaze of clear or honey colored (Fig. 2-G).

DEEP BOWLS have nearly vertical straight sides, a flat bottom, and usually are found in glazeware

(Fig. 2-H). The plainware examples are often incised or matte painted.

HOLEMOUTH JARS are globular vessels with a narrow opening and no neck (Fig. 2-J). They are primarily in plainware.

CRUETS are small globular vessels with a narrow neck, a pouring spout at the rim, and a single handle opposite the spout (Fig. 2-L). They are usually glazed with decorated examples being found in the Islamic deposits.

SQUAT JARS are broad shouldered and globular in shape with a short vertical neck and sometimes with vertical handles (Fig. 2-K). They are completely glazed on the interior and partially glazed on the exterior.

RELATIVELY STRAIGHT-SIDED OPEN BOWLS are made in redware with a double rim (used with a lid), flat bottom, and a clear glaze (Fig. 2-I).

Primarily Portuguese period vessel forms.

GREEN GLAZE BASINS are large, flat bottomed vessels with thick walls, a rolled out rim, and green glaze covering the entire interior surface (Fig. 2-N).

CARINATED BOWLS are small, standardized serving pieces with a hemispherical interior and carinated exterior. The bases are concave, inset or raised on a ring (Fig. 2-O). Almost all these bowls are glazed and some are decorated with blue painting on a white background.

STANDARD PLATES are uniform in production with concave, inset bases, normal rims, and a ridge marking the depressed central area of the upper surface (Fig. 2-M). All plates are glazed with the most frequent color being white.

ROUND-SIDED OPEN BOWLS are hemispherical in shape and glazed, often in lusterware. They have concave, inset bases and sometimes have horizontal ledge handles (Fig. 2-P).

MORTARS are inverted conical vessels in plainware that resemble modern flowerpots and often a hole worn through their base (Fig. 2-Q).

PITCHERS have a partial honey-gold glazed exterior, completely glazed interior, high vertical necks, and a single vertical handle opposite a small spout on the rim (Fig. 2-R).

GLAZED BEAKERS have flat bases, concave profiles, everted rims, and two vertical strap handles (Fig. 2-S). They are completely glazed on the interior and partially glazed on their exterior.

Several overall conclusions about common vessels can be inferred from the preliminary results of the diagnostic coding (Table 1-C and 1-D). The basic subdivision of vessel forms into bowls, jars, and plates demonstrates a consistency over time in the proportion of bowls and a rapid growth in the use of plates with a concomitant decrease in the number of jars. We hypothesize that this is related to changes in the style of eating and commercial activity. The large number of plates present in the Portuguese occupation reflects their use of individual

serving vessels for meals as contrasted with the traditional Muslim habit of communal serving pieces.

Four forms predominate in the Islamic inventory; incurving bowls, conical bowls, other basins, and deep bowls. The first two were probably food serving vessels and the second two more likely were used for food preparation or other utilitarian tasks. These forms, plus relatively straight-sided open bowls, continued or even increased in use during the Portuguese occupation. Standardized serving and mixing vessels are introduced with the Portuguese conquest of Qsar es-Seghir, such as standard plates, carinated cups, and gree glazed basins. Other forms such as basins and beakers have distinct Portuguese forms, but were adopted from parallel forms in the Islamic levels, in both cases smaller and more often in Plainware.

Computerization of the ceramic ware tallies and diagnostic information is designed to enable efficient data handling and specialized interpretive analyses. Basic data handling includes listing of information, combining data from various proveniences for more concise listings, combining data according to selected variables such as period or locus type, or performing two-way tabulations of interesting variables such as glaze color by vessel form. Analysis has proceeded in a stepwise fashion, first examining specific ratios such as proportion of glaze colors, then certain cross-tabulations such as vessel form and surface color are investigated, and finally a series of multivariate cluster analyses are performed using vessel forms as the primary input data.

Description of the decorated ceramics.

There is a diversity of decorated ceramics in both the Islamic and Portuguese deposits of Qsar es-Seghir, although they are not numerically predominant. While the elaborate glazeware pieces we believe came from Spain, Italy, or central Morocco, other traditions such as incised ware, matte painted plainware, and scratchware may have been produced locally.

Decorated plainware.

Tactile decorations occur on more than 1 % of the sherds in the entire collection. Incisions, grooves, stamps, and applique are the methods used to form the relief. Nine basic types of tactile decorated sherds have been identified.

1. Undulating bands of incisions or grooves bounded by straight bands or grooves, usually on deep bowls or relatively straight-sided open bowls.
2. Discontinuous, intersecting undulating bands of incisions bounded by straight bands (Fig. 3-A).
3. Zig-Zag band of incisions bounded by straight bands, usually on deep bowls.
4. Horizontal bands or lines of incisions on slender jars.
5. Series of short parallel grooves forming a geometric pattern (Fig. 3-B).

6. Applique ridge with impressed ticks (Fig. 3-C).
7. Incised lines and punctations in a burnished redware with inset stones (Fig. 3-D).
8. A band of a single row of stamp impression usually concentric to the vessel shape (Fig. 3-E).
9. A two-dimensional field of similar stamp impressions; often several different fields on the same vessel (Fig. 3-F).

Matte painted plainware is the most common form of decorated ware in both the Islamic (5 % of all sherds and Portuguese inventories (1.7 % of all sherds). Examples of this method characteristically occur on slender jars, deep bowls, and basins. The designs themselves are usually freeform lines, straight or curved and sometimes combined with dots or ticks.

1. Black paint (Fig. 3-G).
2. Red paint.
3. Cream paint (Fig. 3-C).
4. Black and red paint.

Matte painted scratchware is similar to that found at both Andalusian and Moroccan Islamic sites. The basic form for these vessels is a broad mouth jar with a globular or slender body that is usually corrugated (Fig. 2-T). Panels of black matte paint are scratched to reveal cream, buff, or rose colored ware below. The designs themselves are in reserve, that is the area that is left unpainted. These vessels were primarily found in the lower Islamic deposits, although a few sherds were recovered in upper levels. Hence, we would date them to the 13th or early 14th century.

1. Panels of scratched designs on low necks of jars, bodies sometimes with linear matte painting (Figs. 2-I, 3-H, and 3-I).
2. Panels of scratched designs on high necks of jars, bodies may have scratched designs (Fig. 3-J, 3-K).
3. Panels or areas of scratched designs on jar bodies.

Matte and glaze painted pieces derive from all Islamic levels. The glaze occurs in lines or bands with matte painted outlines. Globular jars and cylindrical beakers are the primary forms. Several pieces combine these decorations with panels of scratched designs.

1. Black lines outlining glaze bands or dots on cylindrical jar (Fig. 3-L).
2. Matte outlines to glaze designs on body of globular jar (Figs. 2-U, 3-M, 3-N).
3. Panels of scratched designs in addition to glaze and matte painting (Fig. 3-O).

Decorated Glazewares.

Several major traditions of decorated glazeware, originally practiced by Islamic craftsmen, were adopted by Christian ceramicists of the Western Mediterranean. Numerous examples of products



FIG. 3. — Decorated ceramics I: A-F are plainware tactile; G is painted plainware; H-K are matte painted scratchware; L-O are matte and glaze painted; P-W are glazeware tactile.

from both Islamic and Christian workshops have been found at Qsar es-Seghir. There is no direct evidence that these wares were produced at Qsar es-Seghir, itself.

Tactile decoration occurred as diverse forms in both the Islamic and Portuguese deposits. Incised and grooved designs existed, but were relatively rare. Stamps, in single rows or fields, were used on both bowls and jars. Molds with intricate designs were used to create bands of relief on Islamic jars, well collars, and architectural elements. Representational leaves, frogs, and even human faces were applied to ceramics found in the Portuguese deposits.

1. Band with single row of stamps, usually arranged concentrically around the bottom of an open bowl (Fig. 3-P).
2. Fields of shallow relief from stamping or molding, organized into bands on coarse sloping shouldered jars (Figs. 3-Q, 3-R, 3-S).
3. Deep relief from molding or cutting on jars or architectural panels.
4. Fields of geometric patterns formed by incisions or grooves.
5. Well "collars" (Fig. 3-U, 3-V) or architectural fittings (Fig. 3-T) with stamping or molded designs.
6. Applique molded into representational forms on jars (Fig. 3-A is of German manufacture; Fig. 4-B).
7. Single incised lines under glaze forming freeform designs (Fig. 3-W).
8. Applique ridge with impressed ticks.

Resist glazeware (cuerda seca) is found in both Islamic and Portuguese deposits, but on different types is a plate with freeform designs in several colors covering its entire upper surface (Fig. 4-C). Fragments of 22 plates varying from 21 to 27 cm. in diameter have been found. It is hypothesized that these vessels were imported from Seville. A common Islamic form that is found throughout the site's deposits, is a cylindrical shaped deep bowl made of thick coarseware and covered with geometric resist glaze designs on their exterior (Fig. 4-D). The vessels appear to have been heavily used with significant wear showing on their flat rims and bases. About one fourth of the 32 vessels were from Islamic levels, the remainder being found in the Portuguese period deposits. Other Islamic pieces, more finely executed in several colors, had freeform and representational motifs on conical bowls, globular jars, and recessed plates. Among the finest pieces of pottery in our entire collection is a recessed plate found in the lower Islamic deposits (Fig. 2-V, 4-F). Although the piece is not well preserved, its design can be discerned. Around the raised rim are stamped medallions and floral motifs, and the central design is an elegant strutting bird.

1. Standard plates with overall freeform design (Fig. 4-C).
2. Flaring based jars with broad vertical bands of glaze.

3. Deep bowls of coarse ware with geometric designs on exterior (Fig. 2-H, 4-D).
4. Globular jars with floral designs and freeform motifs (Fig. 4-E).
5. Conical bowls with freeform or floral designs (Fig. 4-G).
6. Recessed plates with representational design (bird plate) (Fig. 4-F).

Manganese painted, honey colored vessels are common in both the Islamic and Portuguese periods. The designs consist of straight and curved lines in large freeform motifs. The background glaze color of Portuguese period vessels tends to be brownish or gold with wide, poorly executed brown or black lines. Islamic background color is more clear or light honey color with narrower, more delicately painted, black lines. Altogether 2700 sherds using this technique were recorded, with thirty-six design elements being defined (Wondriska n. d.).

1. Standard plates with linear designs around rim and at center (Fig. 4-H).
2. Standard plates with overall design (Fig. 4-J).
3. Conical bowls with pinwheel design (Fig. 4-I).
4. Conical bowls with bordered floral design or geometric design (Fig. 4-K, 4-L).
5. Conical bowls with pairs of lines running down from the rim.
6. Basins with pairs of lines on sides and complex design on base (Fig. 5-A).
7. Jars or incurving bowls with a band of design.
8. Conical plates with pinwheel or overall designs on round sided open bowls, plates, conical bowls,

Lusterware vessels with copper colored metallic paint and some with additional blue lines are among the most intricately decorated ceramics found at Qsar es-Seghir and are primarily from the Portuguese deposits (although probably manufactured in Valencia). A thick, round-sided open bowl averaging 15 cm. in diameter with or without scalloped ledge handles is the most common form (Fig. 2-P). The designs on luster pieces are varied, including rows of spoked wheels, freeform solids, cross-hatching, spirals, geometric lines, or a stylized flower outlined in blue. Preservation varies, but generally the pieces are fragmentary, worn, and the paint has faded. Altogether 250 sherds were examined (Wondriska n. d.). Of these, only about ten sherds were identified as being of Islamic manufacture, and originating in Malaga.

1. Band of complex, "surrealistic" designs bordered by bands of intricate "safety-pin" motifs, usually on round sided open bowls, plates, conical bowls, or recessed plates (Fig. 5-C).
2. Round sided open bowls with other motifs (Fig. 5-D, 5-E, 5-F).
3. Plates with repeating bands or sectors of motifs (Fig. 5-G, 5-H).
4. Other bowl forms.
5. Jars with overall fields of design or panels of geometric motifs (Fig. 5-I).

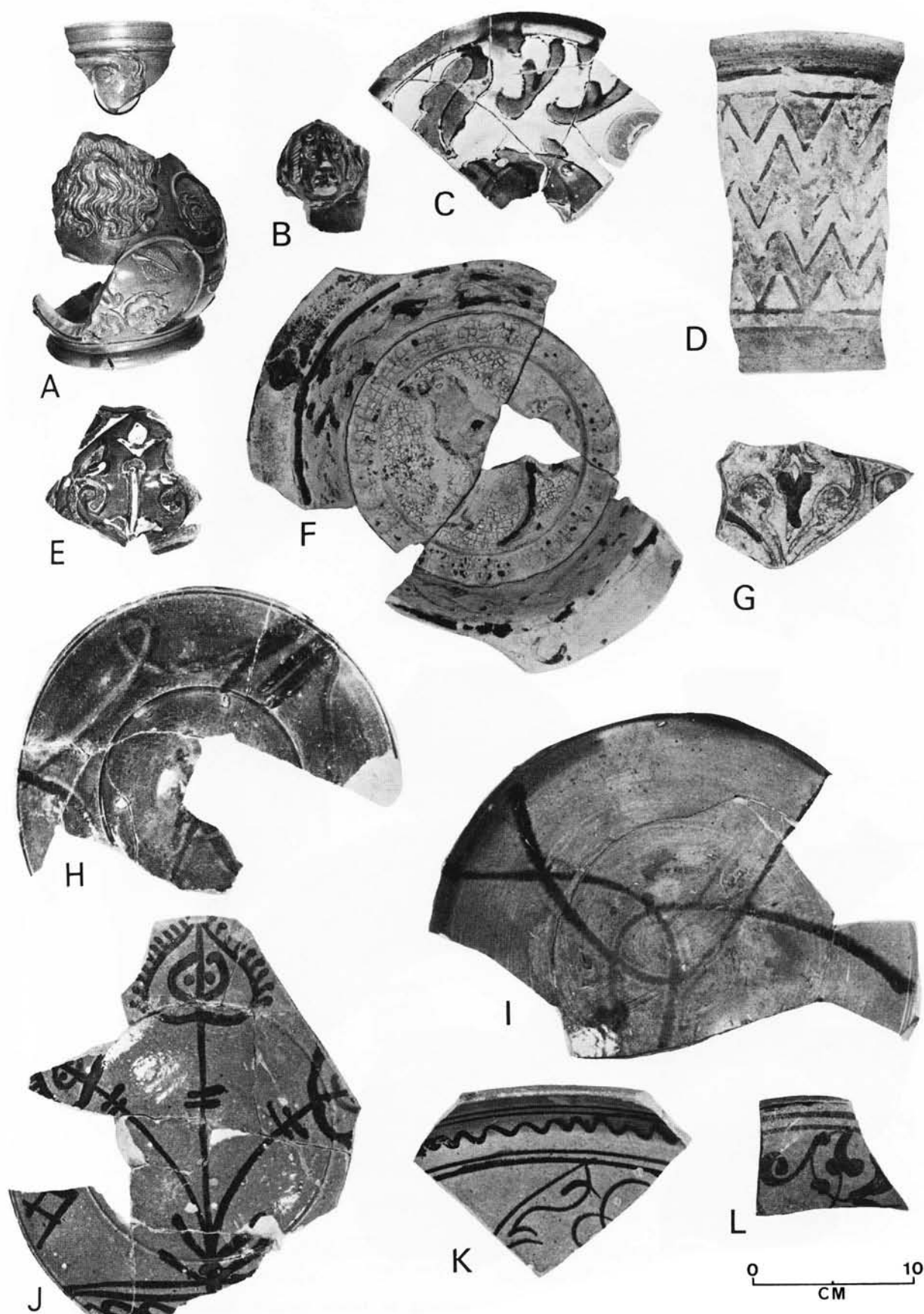


FIG. 4. — Decorated ceramics II: A-B are glazed tactile; C-G are resistware; H-L are manganese painting on honey colored glaze.

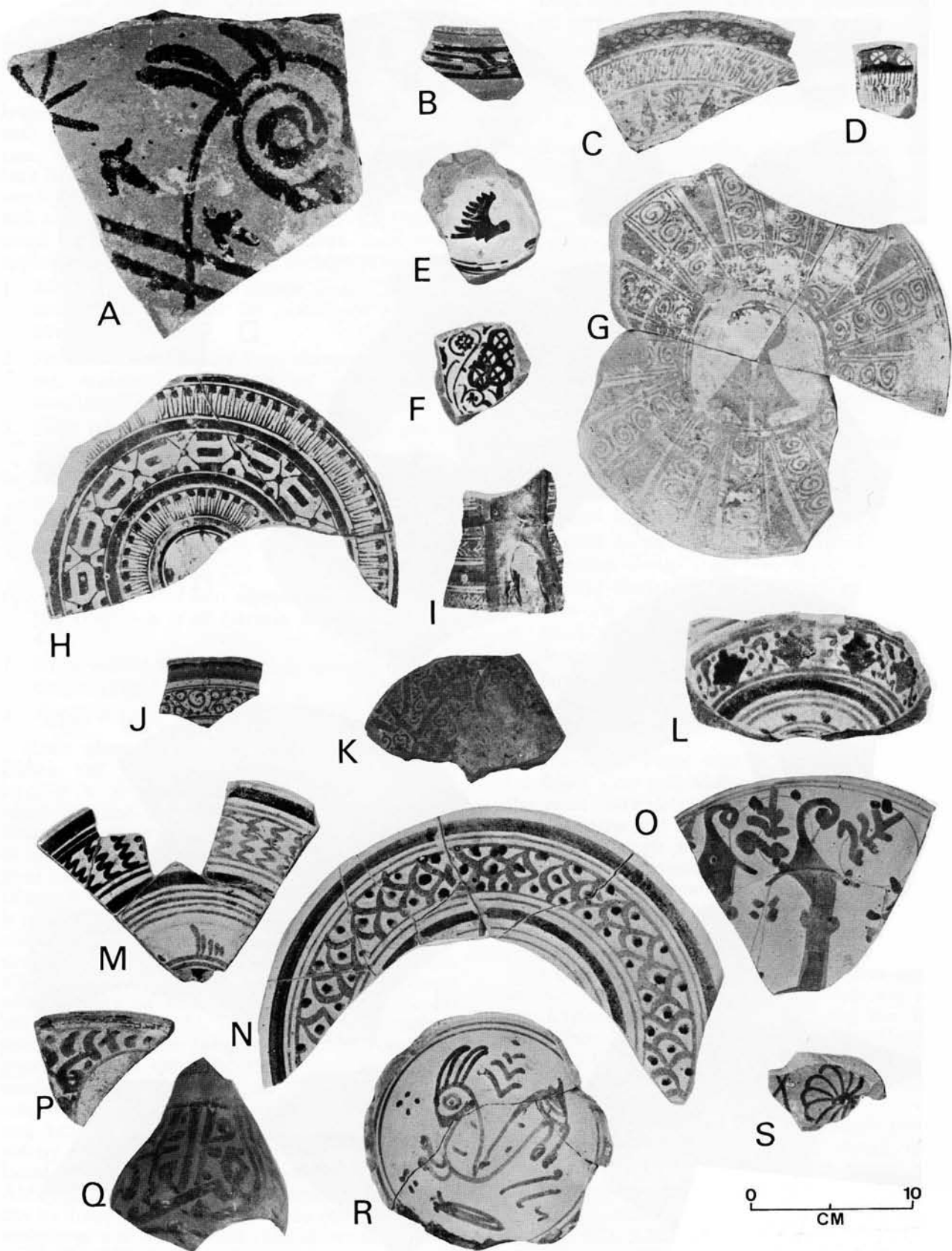


FIG. 5. — Decorated ceramics: III: A-B are manganese painting on honey colored glaze; C-I are Portuguese period lusterware from Valencia; J-K are Islamic period lusterware from Malaga; L-O are Portuguese period blue on white; P-Q are Islamic period blue on white; R is Portuguese period blue on white; S is black painting on an aqua-green background.

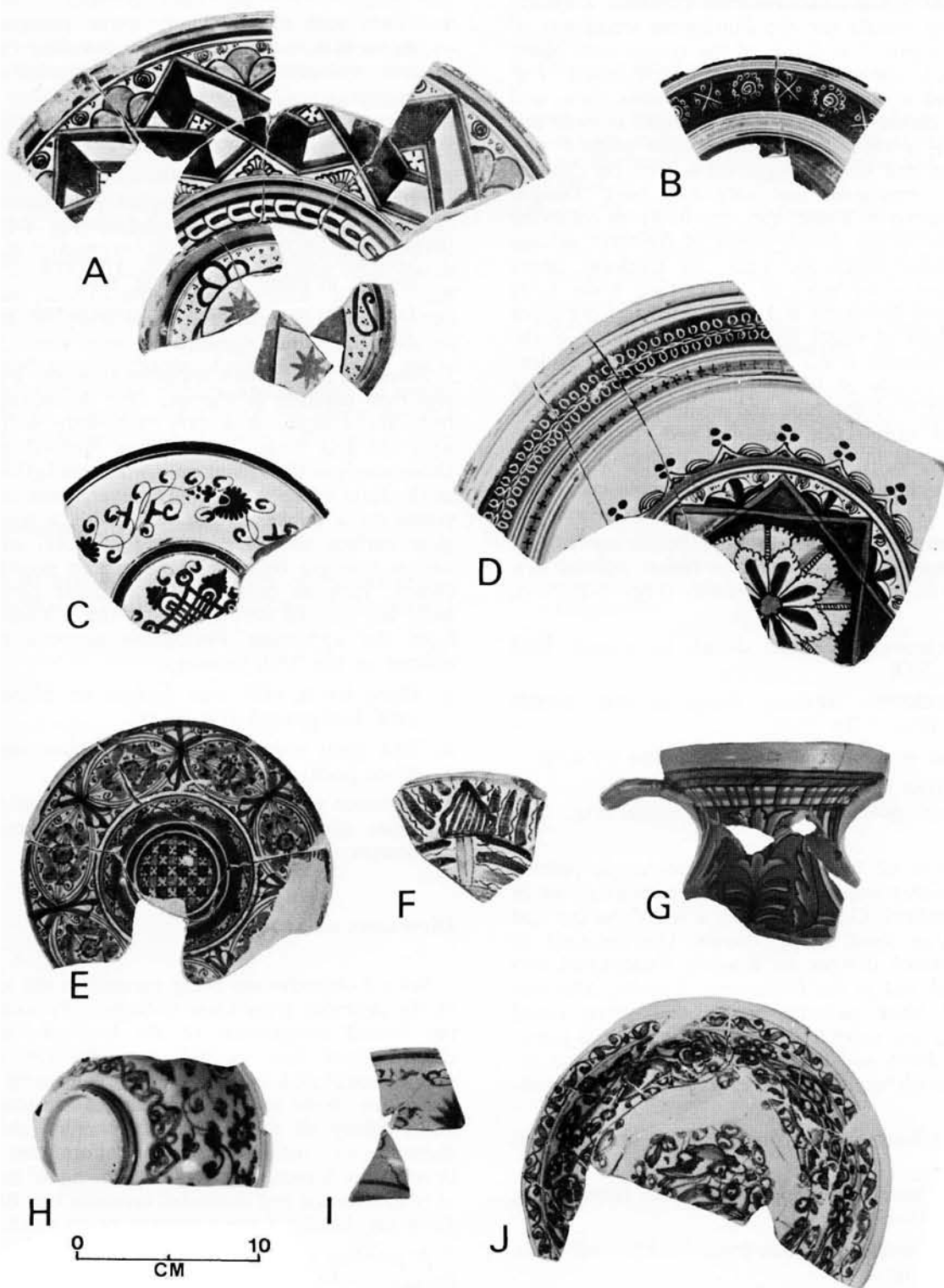


FIG. 6. — Decorated ceramics IV: A-G are vessels imported from Italy; H-I are oriental porcelains; J is an Italian made imitation Porcelain.

6. Islamic pieces with freeform floral or overall geometric designs (Fig. 5-J, 5-K).

Blue on white Majolica ware provided a variety of serving vessels for the Portuguese occupants of Qsar es-Seghir. Two-thirds of the vessels were plates (Fig. 2-O), almost one-third carinated bowls (Fig. 2-N), and a small number were basins, jars, and recessed plates. The ware itself is cream colored and the paste is smooth. One-third were painted with both blue and black designs on a white background while the remainder had only blue lines. Designs were made up of concentric lines or bands following the shape of the vessel, bands of freeform designs within these concentric lines, or freeform linear motifs that cover most of the surface. Over 1200 sherds were examined and categorized into six types on the basis of vessel form and composition of the design (Sinopoli n.d.). Only six pieces were identified as clearly of Islamic manufacture. Otherwise we expect a lot of the blue and white to be from the 15th and early 16th centuries and to have been manufactured in southern Spain, perhaps Seville.

1. Plates or carinated bowls with simple concentric lines.
2. Polychrome; concentric lines bordering a band of complex designs such as floral, stylized writing, steps, or geometric motifs (Figs. 5-L, 5-M, 5-N).
3. Polychrome; freehand design in overall field (Fig. 5-O).
4. Monochrome; freehand design in blue, overall field (Fig. 5-R).
5. Basins with lines at rim and design on base.
6. Jars with panels of complex designs, writing, geometric, or floral motifs (Fig. 5-P, 5-Q).

Examples of several other *monochrome painted Islamic wares* were found at Qsar es-Seghir, but in small numbers. Green lines on a white background occurred on small conical bowls. One example of black painted designs on a white background was uncovered, but in the Portuguese deposits. Also one piece of black painting on an aqua-green vessel (Fig. 5-S) was recovered which was similar to pieces found at Sebta and Belyounesch, nearby to Qsar es-Seghir, implying this ware may be of local manufacture.

1. Green lines on white background, small conical bowls.
2. Black lines and designs on white background; open bowl.
3. Black designs on aqua-green background; open bowl (Fig. 5-S).

Several forms of pottery with detailed painting and a smooth overall surface were imported to Qsar es-Seghir from Italy. This *Italian ware* is found exclusively in Portuguese deposits and appears to date from the second half of that occupation (the first half of the 16th century). Plates and recessed dishes are the primary forms, although a few jars have been found. Colors commonly include a deep

blue, dark red, green, and yellow, always on a white background. Most of the vessels found are similar to ones produced at Montelopo in Italy.

1. Plates with complex polychrome geometric designs; blue is dominant color, but deep red, yellow, and green are common (Fig. 2-W, 6-A).
2. Plates with band of blue near rim with simple complex design near the plate's center (Fig. 6-B, 6-D). (Fig. 2-X, 6-C).
4. Concave plates with complex polychrome geometric motifs over entire surface (Fig. 6-E).
5. Concave plates with less carefully executed designs in pastel colors (Fig. 6-F).
6. Jars with monochrome or polychrome painting (Fig. 6-G).

Porcelain pieces were imported from the Far East and then imitated in Europe. One distinctive piece from the Orient on a very thin ware is painted with red and cream color flying birds (Fig. 6-I). Other sherds in blue paint on a white background are in the form of open bowls. However, there are also pieces on a thicker cream ware with a blue-white glaze surface and blue painting in floral and bird designs that are believed to have been produced in Genoa, Italy as imitations of Oriental porcelains. Both the original porcelains and the imitations are from the uppermost Portuguese deposits (second quarter of the 16th century).

1. Open bowls with blue designs on bluish-white hard background (Fig. 6-H).
2. Red paint over white porcelain (also cream or green paint) (Fig. 6-I).
3. Imitation porcelain, cream ware with hard bluish-white glaze surface and blue floral and bird designs (Fig. 6-J).

Directions of analysis.

Several objectives are being pursued in the analysis of the ceramics from Qsar es-Seghir. By examining the overall composition of the inventory and its changes over time as well as differences among various excavated buildings, we are learning about the nature of the ancient communities and their activities. Many of the decorated ceramics are clear chronological indicators. Major efforts are being devoted to formulating and improving a typology of both common and decorated ceramics (see Redman 1978 for details of the approach being used).

A problem we encountered that is of general significance for medieval archeologists, is the nature of deposition in an urban site. At Qsar es-Seghir the occupations are dense and built directly, one on top of another. Ceramics and other artifacts are infrequently found in the context where they were made or used. Purposeful dumping, architectural renovation, and other activities displaced the material. Simple distributional approaches adopted from prehistoric studies are not appropriate for an ana-

lysis of the distribution of materials at a complex medieval community. Although these difficulties must be considered, they are not a reason for abandoning interpretative distributional studies. Careful examination and elimination of mixed deposits, quantitative evaluation of assemblage composition, variations in shed size, and amalgamation of proveniences according to individual living units are all subjects of experimentation.

Using the adjusted data, members of our expedition are involved in studies on the identification of building types, areas of the site, and its overall organization in each period (Rubertone 1978; Boone 1978; Redman 1978). These studies are using ceramics as the basic data to differentiate wealthy houses from those of the poor, residential from military or commercial, and even to delineate different types of residential neighborhoods. Progress is being made on these interpretive studies and should be considered as the primary objective of our efforts devoted to the systematic classification of the ceramic inventory.

Acknowledgments.

I would like to thank members of the Archeological Service and Ministry of Culture of the govern-

ment of Morocco for their continuous support and to thank the hardworking staff members of the Qsar es-Seghir Project who made this study possible.

References cited.

- BOONE J. (1978). — Distribution of military artifacts at Qsar es-Seghir. Paper delivered at the Society for Historical Archeology Meetings, San Antonio, Texas.
- REDMAN Ch. (1978). — Multivariate artifact analysis: a basis for multidimensional interpretations. in *Social Archeology* ed. by C. Redman *et al.*, Academic Press, New York, pp. 159-192.
- RUBERTONE P. (1978). — Social organization in an Islamic town. PhD. dissertation, Department of Anthropology. State University of New York, Binghamton, NY.
- SCHULMAN J. (n.d.). — History of Qsar es-Seghir. manuscript on file, State University of New York, Binghamton.
- SINOPOLI C. (n.d.). — The blue on white Majolica of Qsar es-Seghir. manuscript on file, State University of New York, Binghamton.
- WONDRISKA A. (n.d.). — Lusterware and manganese painting on honey colored wares at Qsar es-Seghir. manuscript on file, State University of New York, Binghamton.