

**STATUS VARIATION IN ANTEBELLUM
ALEXANDRIA: AN ARCHAEOLOGICAL STUDY
OF CERAMIC TABLEWARE**

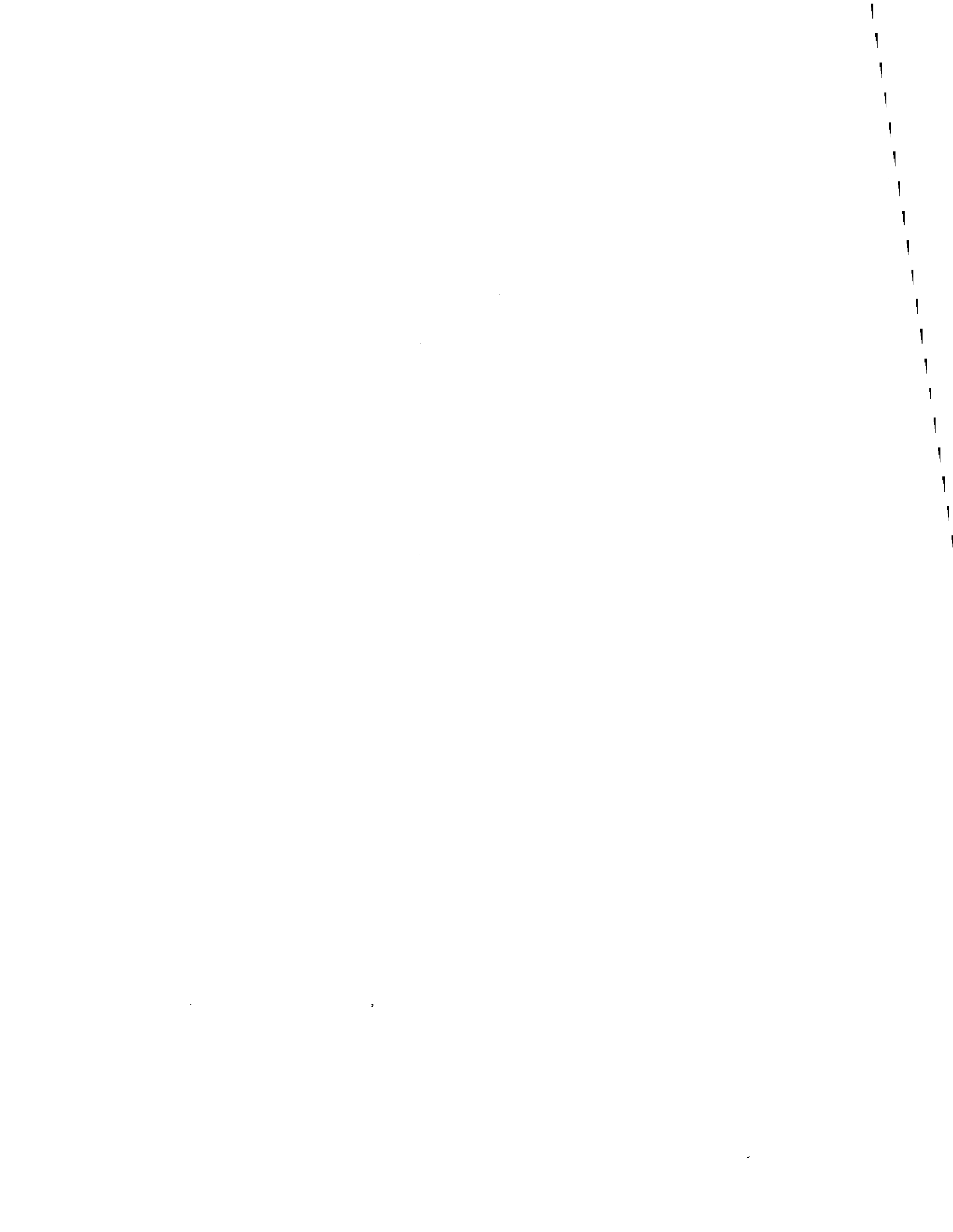
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Foreword

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Pamela J. Cressey, Ph.D.
City Archaeologist
1991

Studies of socioeconomic status using archaeological materials have proliferated in recent years. Although certain material correlates of social group membership have been identified, the patterning in the data has often proved to be fairly subtle.

This paper concerns the results of research into the material correlates of socioeconomic class membership utilizing three ceramic assemblages from Alexandria, Virginia. These results are part of a dissertation (Shephard 1985) involving both identification of class membership and study of changing social structure through analysis of artifactual data. In the interest of brevity, the theoretical framework developed in this study is not presented here, but is fully discussed in the dissertation. It should be noted that three hypotheses, which will be considered shortly, are presented which associate material culture with socioeconomic class.

The three ceramic assemblages used in testing the hypotheses were recovered from features originally constructed as wells and then converted to use as privies and trash receptacles. Each assemblage was recovered from undisturbed contexts which could be broken into component groups corresponding to pre-industrial and early industrial periods in Alexandria's history.

Two of the assemblages represent a combined total of twenty-five middle class Euro-American households as determined through documentary records. A third assemblage represents a series of four lower socioeconomic free Black households. The date range of the deposition of these artifacts is c. 1810-1860. Identifi-

cation of the class membership of the households is made by consideration of four variables: occupational ranking, property tax assessment ranking, condition of tenure (owner or renter), and ethnic background (Euro-American or Afro-American). The combination of the particular values for any household determines the ranking of the household within Alexandria's socioeconomic hierarchy at the time.

The variables evaluated in this study are quantity, quality, and variety of the ceramic assemblage. It is hypothesized that the quantity, quality, and variety of possessions are greater for households of higher status as compared to those of lower status. Formally stated, these variables constitute three hypotheses, each of which is paired with a null hypothesis asserting that there is no significant difference between the assemblages of different classes.

Quantity is measured by totaling the number of vessels per cubic meter of soil matrix. A figure is calculated for total number of vessels, total refined vessels, and total unrefined vessels. The figures are derived from minimal number of vessel counts for each feature.

Quality is defined in this study as the value of an item expressed in monetary terms. The ceramic categories of analysis used to measure this variable are: the relative proportions of porcelain, transfer-printed ware, and ironstone (all of which are expected to increase in quantity with increasing status) plus the proportions of undecorated and minimally decorated wares, which are expected to decrease with increasing status. In addition,

quality is measured by the relative proportions of matching vessels within total transfer-printed ware, porcelain, and ironstone (the incidence of matched vessels is predicted to increase with increasing status). A final measure of quality is made through calculation of Miller Ceramic Index values (Miller 1980) for the assemblages, the assumption here being that the values should increase with increasing status.

The third variable, variety, refers to the number of items within an assemblage which have differing, and usually specialized, functions. Measurement of this variable is made through two types of analysis: first, functional ceramic categories are compared; and second, calculations are made to compare number of different vessel forms to total number of vessels. It is proposed that with increasing status there is a larger proportion of both storage ware and tea and coffee ware within the total ceramic assemblage, more serving and transfer-printed flatware within total tableware, and a higher ratio of forms to total number of vessels. In addition, with increasing status there should be a decrease in the proportion of tableware to storage ware within total ceramics, as well as fewer individual serving bowls, banded bowls, and edged flatware within the tableware assemblage.

These predictions derive from a model concerning the material correlates of class stratification based upon research into consumer behavior (see Shephard 1985, Chapter III). General patterns of consumption which are related to socioeconomic class membership are delineated and from these the variables: quantity, quality, and variety are deduced. The hypotheses which were

stated earlier, propose the relationship between these variables and socioeconomic status.

Derivation of the archaeologically testable implications from the hypotheses is made possible with the addition of results from archaeological and historical studies which deal with historic-period ceramics as status indicators (e.g. Miller and Stone 1970; South 1972; Otto 1975; Herman et al. 1975; Gill 1976; Baker 1980; Miller 1980; Cressey et al. 1982; Deagan 1983). The ceramic analysis categories just presented are employed in this study as a result of a review of this research.

Evaluation of the three variables used in this study involves forty-eight individual tests, each comparing two sets of data. Significant difference is determined through application of the chi-square statistic at the .05 level of significance. The results are as follows.

Table 1. Outcome of Hypothesis Testing

Hypothesis Number	Total No. of Tests	Results of Testing	Outcome
1 (quantity)	6	1+ 2x 3*	Ho retained
2 (quality)	24	20+ 4x 0*	Ho rejected
3 (variety)	18	1+ 12x 5*	Ho retained
1 - 3	48	22+ 18x 8*	Ho retained

KEY: + = significant difference as hypothesized
 x = no significant difference
 * = significant difference but opposite to prediction

The overall outcome here is that the null hypothesis is retained in 18 tests, the proposed hypothesis is supported in 22 cases, and a significant result is obtained which is opposite to the

proposed hypothesis in 8 tests. This outcome suggests that the three hypotheses are supported and that the null hypotheses are rejected. Closer examination of the results shows that Hypothesis 2, concerning the quality of vessels is strongly supported while Hypotheses 1 and 3 (quantity and variety respectively) are clearly rejected and their null hypotheses retained. The conclusion then is that the variable, "quality," is the only proposed material correlate of class membership which is supported by the data in this study. It is equally important to examine these results at the finer level, that is to consider which measures of quantity, quality, and variety appear to be strong or weak material correlates of class membership.

First, let's look at quantity. In this study, quantity of vessels does not correspond to class membership in the manner predicted, as illustrated here.

Table 2. Quantity of Vessels, Features 5, 6, and 7

Feature/Class	Vessels/Cu. M. of Matrix		Grand Total
	Refined	Coarse	
Ft. 5 Lower	92	30	122
Ft. 6 Middle	39	15	54
Ft. 7 Middle	79	44	123

When the total number of vessels are compared the lower class assemblage is nearly twice the size of one of the assemblages of the middle class and almost exactly equal the other. The refined ware total representing the lower class households is greater than that of either of the other assemblages, while the coarse ware total for Feature 5 is twice that of Feature 6, but less than the total for the remaining feature.

The explanation for this outcome is problematical at present. A recently completed Alexandria study which utilizes ceramics recovered in backyard excavations (Cressey et al. 1984) indicates that poor people deposited a greater quantity of artifacts in their yards than did middle class residents. It could be that the middle and upper classes had alternate means of refuse disposal not available to the lower class.

In the area of quality, most tests produce the results predicted. The ceramic assemblages of the middle class do contain significantly more transfer-printed ware, ironstone, matched porcelain, matched transfer-printed ware, and less undecorated ware than the Feature 5 assemblages (see Tables 3 and 4). The value of the ceramics associated with the middle class, as calculated using the Miller Pricing Index (Miller 1980), is significantly higher than the vessels from the lower socioeconomic households (see Table 5). The only "quality" category which evidences no significant difference between the three assemblages is minimally decorated wares. Calculations of the amounts of porcelain and matched ironstone vessels produced mixed results allowing no clear conclusions to be drawn (see Tables 3 and 4).

Only one of the 18 individual tests relating to "variety" within the ceramic assemblages show a correlation with class differences as predicted. This is the comparison of the proportions of transfer-printed flatware in Features 7 and 5 (see Table 7). The Feature 6 and 5 comparison, however, does not show a significant difference when the chi-square statistic is applied and so the value of this category as a status indicator remains

inconclusive.

There are also no significant differences among the assemblages in proportions of tableware, tea and coffeeware, serving flatware, serving bowls, banded bowls, or edged flatware (see Tables 6 and 7). The prediction that assemblages of the middle class should have larger proportions of storage ware and less tableware than those of the lower class is not supported. The result in fact is opposite to expectations. The same outcome is observed for the prediction that the middle class should have a larger ratio of vessel forms to total number of vessels as compared to the lower class. The lower class have an equal or greater ratio of forms to total vessels as compared to the middle class. This can be explained by the fact that both middle class proveniences have far more vessels than the lower (Feature 7:629; Feature 6:506; Feature 5:148) thus skewing the calculations. The assemblage of the lower class does lack fourteen of the vessel forms found in the assemblages of the middle class. These are specialized forms such as tea caddy, sugar bowl, creamer, gravy boat, milk pan and ewer. So while the statistical calculations do not turn out as predicted, specialized forms are present in greater numbers in the assemblages of higher status households as expected.

**Table 3. Ceramic Type
Categories Within Total Vessel Count,
Features 5, 6, and 7**

<u>Feature/Class</u>	Porc.		T.P.		Ceramic Type				Min.D.		Total
	#	%	#	%	Iron	Un.D.	#	%	#	%	
Ft. 5 Lower	10	7	22	15	0	0	36	24	21	14	89
Ft. 6 Middle	91	18	151	30	5	1	65	13	60	12	372
Ft. 7 Middle	59	9	222	35	9	1	96	15	62	10	448

**Table 4. Matching Ceramic Vessel Summary
Feature 5, 6, and 7**

<u>Feature/Class</u>	% of Matching Within Type			
	T.P.	Porc.	Iron.	Other
Ft. 5 Lower	18	0	0	6
Ft. 6 Middle	46	35	0	6
Ft. 7 Middle	38	49	56	6

**Table 5. Miller Price Index Summary
Features 5, 6, and 7**

<u>Feature/Class</u>	Plates	<i>Vessel Form</i>		Avg. Index
		Cups & Saucers	Bowls	
Ft. 5 Lower	1.93	2.43	1.29	2.16
Ft. 6 Middle	2.42	2.81	1.64	2.48
Ft. 7 Middle	2.24	2.80	1.96	2.37

**Table 6. Table, Storage, and Tea & Coffee Wares
Features 5, 6 and 7**

<u>Feature/Class</u>	ID. Vessel Count	<i>Ceramic Category</i>				Tea & Coffee	
		Tableware		Storage		#	%
		#	%	#	%		
Ft. 5 Lower	148	59	40	29	20	36	24
Ft. 6 Middle	506	215	43	12	3	122	24
Ft. 7 Middle	629	257	41	13	2	112	18

**Table 7. Serving Flatware and Bowls, Transfer Printed Flatware,
Banded Bowls, and Edged Flatware Within Total Tableware,
Features 5, 6 and 7**

<u>Feature/Class</u>	Total Table.	<i>Ceramic Category</i>									
		Serv. Flatware		Serv. Bowls		T.P. Flatware		Banded Bowls		Edged Flatware	
		#	%	#	%	#	%	#	%	#	%
Ft. 5 Lower	59	35	59	17	29	6	10	0	0	7	12
Ft. 6 Middle	215	139	65	45	21	50	23	0	0	39	18
Ft. 7 Middle	257	136	53	72	28	70	27	5	2	37	14

The conclusion reached in this investigation is that the analytical categories which relate to the quality of ceramic assemblages are the strongest material correlates of socioeconomic status of those ceramic categories tested. Middle class Alexandrians seem to have supplied their homes with the more expensive ceramic varieties such as porcelain, transfer-printed wares, and ironstone, along with matched sets of porcelain and transfer printed ware which included many specialized vessel forms. These same ceramic varieties were much less well represented in lower socioeconomic households.

Beyond the identification of certain ceramic categories as possible material correlates of socioeconomic status, this study raises certain concerns which apply to the archaeological investigation of social structure.

The fact that the quantity of vessels per meter of soil matrix is higher for the feature associated with the lower class as compared to those of the middle class suggests that further study is needed in certain areas. Information on waste disposal methods, privy maintenance, and City refuse regulations would aid in assessing differences which might be obtained in different neighborhoods. The urban nature of the test situation itself raises the question of the influence this environment, as opposed to a rural setting, has on the material evidence of social ranking. The availability of goods in the urban situation may have a homogenizing effect on household material assemblages.

Another variable not dealt with in this study but of utmost

importance is ethnicity and its role in influencing both social ranking and composition of the household material assemblage. Although one assemblage used here is associated with four free Black families, evaluation is made on the basis of socioeconomic standing and does not focus on ethnic differences.

Finally, of major concern is the question of the ultimate value of stratification studies in archaeology. Can a consistent correlation be discerned between socioeconomic status and patterning in material culture? If so, how can this discovery be applied to better understanding culture process? These are the questions which continued research can answer, but only if the strengths of individual studies can be melded together and the interest in answering the questions maintained.

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