Spatial Analysis and Social Attributes, Alexandria, Virginia

by

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Foreword

The Alexandria Archaeology Publications series is composed of papers on various aspects of research conducted under the auspices of Alexandria Archaeology, a division of the Office of Historic Alexandria, City of Alexandria, Virginia. The authors include professional staff members, university students and Alexandria Archaeology volunteers. Editing of the papers has been kept to a minimum. It should be understood that the papers vary in tone and level of technicality, since they were originally directed toward many different audiences.

We are pleased to offer the papers within this series and in so doing are opening our "manuscripts on file" - including professional conference papers, background documentary studies, student course papers, and volunteer research papers - to professionals and public alike.

This paper was originally presented at the First Joint Archaeological Conference in Baltimore, Maryland, January, 1989.

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

This paper arises out of the converging interests of history and urban archaeology in the social dynamics of a nineteenth century American city. The most obvious connection between my specific study of Alexandria on the eve of the Civil War and the much broader and continuing efforts of the Alexandria Archaeology program has been our common interest in spatial analysis. For the urban archaeologist, a generalized notion of population distribution is critical to the location of sites which might shed light on the cultural life of a particular group or sub-community. Knowledge of the longevity of a particular population in a particular space assists the determination of core areas most likely to contain artifacts of archeological interest.

The historian has a parallel interest, although it is directed more to the structural relationships across a city. The point in common is the shared interest of both the archaeologist and the historian in deploying historical records to reveal spatial patterns. Thus the Alexandria Archaeology program and my own historical inquiry have employed a common methodology in the use of tax records as the key source for the location of individuals within the city. The Archaeology program has undertaken the mapping of a sample of the population across a considerable time period; my work has been directed to locating the place of residence of the entire population of the city in a given year, 1859. Records and methodology we have in common.

If there are divergences at a broader theoretical level between the approaches of historians and archaeologists to the study of a city, they most likely relate not to the time span of our studies but to an appreciation of space itself. It is possible to imagine our respective historical and archaeological approaches reversed in terms of time spans; indeed historians are more likely to seek the long view of historical change rather than a time-specific case study. Nevertheless, the historian, whatever the time period, is almost inevitably concerned with relationships among groups over a whole locale. A study of even a specific group would inevitably necessitate some consideration of the pattern of interaction between that group and the larger society. Historians are more likely to be interested in space as a means of understanding the relationships of individuals to larger structures; archaeologists are perhaps more inclined to study the cultural consequences of spatial insularity.

Indeed, among historians, the capacity of spatial analysis to shed light on inter-group relationships within a given area goes far toward explaining the discipline's renewed interest in questions of both space and geography. Residential patterning in urban areas is the key, for many historians, to the whole question of urban segregation and urban social processes.

Of particular importance here is the distinction between the traditional and modern city. Historians have often viewed the former as a walking city, a socially homogeneous entity standing in considerable contrast to the modern city, segregated on racial and socio-economic lines. The argument is that mass transportation systems, commonplace by the late nineteenth century, offered the well-off a new freedom of

residential choice, a range much greater than that available when walking was the primary mode of journeying from residence to work. The result was a city increasingly differentiated, on racial, class and occupational lines.

Technology was not the only influence on the pattern of spatial differentiation. The economic transition of cities from commercial to industrial units underlies the transition from traditional to modern social patterning. Cities became more differentiated socially because they became more diverse economically.

Alexandria on the eve of the Civil War was clearly at a transition stage in its development. One of the South's oldest commercial cities, Alexandria was experiencing what was, for a southern city, a substantial industrial development. By 1860, Alexandria was a mid-ranking industrial city, reporting 96 manufacturing firms employing over 700 men and 150 women. These firms, ranging from railroad manufacturer to a cotton mill, represented a capital investment of over $350,000 and produced an annual output valued at more than $750,000.

The existing historical literature suggests that nineteenth century commercial cities usually found definition in the spread of activity from the wharves outward "in a jumbled spatial array" of merchant and artisan residences. Typically there was little residential segregation or class differentiation within the core of such a city. The poor were present, but remote, confined to the outskirts of the city where they and other "impoverished itinerants" resided. The industrial city, on the other hand, usually demonstrated much greater differentiation, higher levels of class tensions and much more residential segregation. Wealth was increasingly concentrated on the fringes of the city while the lower

classes were now confined, in the modern pattern, in the downtown region. As technology, time and economic change combined to restructure the city, residential homogeneity replaced an earlier heterogeneity. The town became a city of isolated communities.

Some historians and archaeologists alike would disagree with these alternatives, arguing that the capitalist city has always been highly structured in respect of power and opportunity. What has happened across time, in this approach, is simply that the core and periphery have exchanged places as the locus of power. The doughnut has turned inside out as power and influence shifts from the core to the periphery. The basic disagreement between the two models is the level of social differentiation present in a city prior to the onset of major technological and economic change.

These alternative and in some ways conflicting models provide a context for the spatial analysis of Alexandria at mid century. The historian's question concerns the degree to which social heterogeneity characterized residential patterns. Mapping the entire city becomes, for the historian, the most obvious path toward an assessment of intergroup relationships. The extent of residential clumping becomes an index to the city's openness, to its class structure, and to its economic development.

There is, however, a broader base for the increased historical interest in spatial patterning. The emphasis here is less on grouping as a measure of social and economic relationships within the city, but on the influence which spatial clumping may exert on the behavior of those within the group. Studies of "neighborhood effect" are not new to either history or political sciences, but there is no doubt that there is a renewal of historical interest in contextual effects. Perhaps this is an unintended consequence of a "return to narrative" and to a historiography dominated

by detailed case studies. Increasingly we ask how context influences behavior.

Adding strength to the historians' interest in mapping individuals is the recognition that other methods for reaching down to individual level behavior, particularly from aggregate data, are increasingly problematic. In particular it has become clear that one of the unfortunate features of the regression procedures so frequently used by historians to bridge the gap between aggregate and individual data is the assumption within the statistical models themselves that context, the environment within which individual action occurs, does not influence outcomes. Regression procedures depend upon a contrary assumption that the external world of neighborhood and community have no influence on individual behavior: an Irishman will behave the same in Boston's Back Bay as he would in Cleveland's Shaker Heights. What is important in regression models are the external characteristics of the individual (class, ethnicity, economic status) not the transitory characteristics of the environment within which he (or she) resides. Historical reality, however, suggests quite different conclusions.

Historians and archaeologists have an opportunity here to work together to discover the real units which structured the lives of individuals in the past. These units may well be cultural and hence familiar to archaeologists, but they may also be social patterns in the form of deference, neighborhood and kinship--arrangements which figure so prominently among the historian's interest in the effects of context on behavior.

Indeed my hope is that these two modes of inquiry will converge in the study of the impact of context on political choice. My interest in

arises from the fact in Alexandria, perhaps uniquely among nineteenth century American cities, there exists a remarkable historical record which reveals the individual political choice of every voter in the city. The poll books, the source of this material, are the written records of viva voce elections--the British form of voice voting practiced in Virginia (and several other states) in the mid nineteenth century. Combining poll books with individual level data is akin to creating a near perfect nineteenth century Gallup poll.

My question, in the end, will relate to the influence of spatial patterning on political choice. The work which Paul Bourke and I have carried out in Oregon makes clear that in nineteenth century rural communities, contextual influences were of considerable importance in structuring the vote. Patrick Joyce, arguing from British data, shows the continuing importance of neighborhood on political choice even into the 1870s. The question is how context related to the nature of political engagement in an American city.

The beginning of contextual analysis is of course mapping. Our two projects employed nearly identical sources and methodologies for determining residential patterns. The key source is the city's comprehensive tax records from the nineteenth century. The common methodology consisted of linking three different forms of taxation returns to recreate for given years the precise pattern of all individual residences in the city. The tax records possess great advantages over the more commonly used city directories for these purposes; the city directory, although easy to use, provide locational information for a highly selective portion of the total population. The individuals most likely to be missed in the city directory are those at the bottom of the socio-economic ladder--the group most important to any understanding of a city's social patterning. The

manuscript census of course is comprehensive but it may miss up to fifteen percent of the population and it provides no locational information. The tax records satisfy both demands.

Unhappily, as is always the case, there is a catch. The key tax record for 1859, the year for which we sought to map the city to coincide with a major state election, was missing. To map the city required the re-creation of the missing record, the 1859 Tax Assessment Book. We had available for this purpose the 1859 Tax Ledger and the 1859 County Personal Property Tax List, as well as the Tax Assessment Books for 1855 and 1862. The missing 1859 Tax Assessment Book would have provided an unambiguous guide to the route the tax assessor took in visiting every residence in the city for that year. Tax records were not easy to work with, as Figure One below, indicates, but with patience and luck it became apparent that we could re-create the 1859 tax assessor's route around the city.

We discovered from comparing the 1855 and 1862 Assessors Books that the Assessor's path around each block in the city was constant from year to year. The pathways were not always straightforward, as Figure Two below indicates. The figure shows the most complex part of the route, along the lines separating the wards. With some effort, we followed that path through the surviving Tax Ledger and Tax List to locate the precise place of residence of the individuals appearing in the 1859 records. The result was a map of all of the property owners in the city in 1859.

In fact the catchment proved somewhat wider than this for the 1859 tax code included a compulsory head tax. This meant that we had locational information on not only property owners, but all adult white

FIGURE 1: THE 1855 TAX ASSESSOR'S BOOK

400 Block of King Street

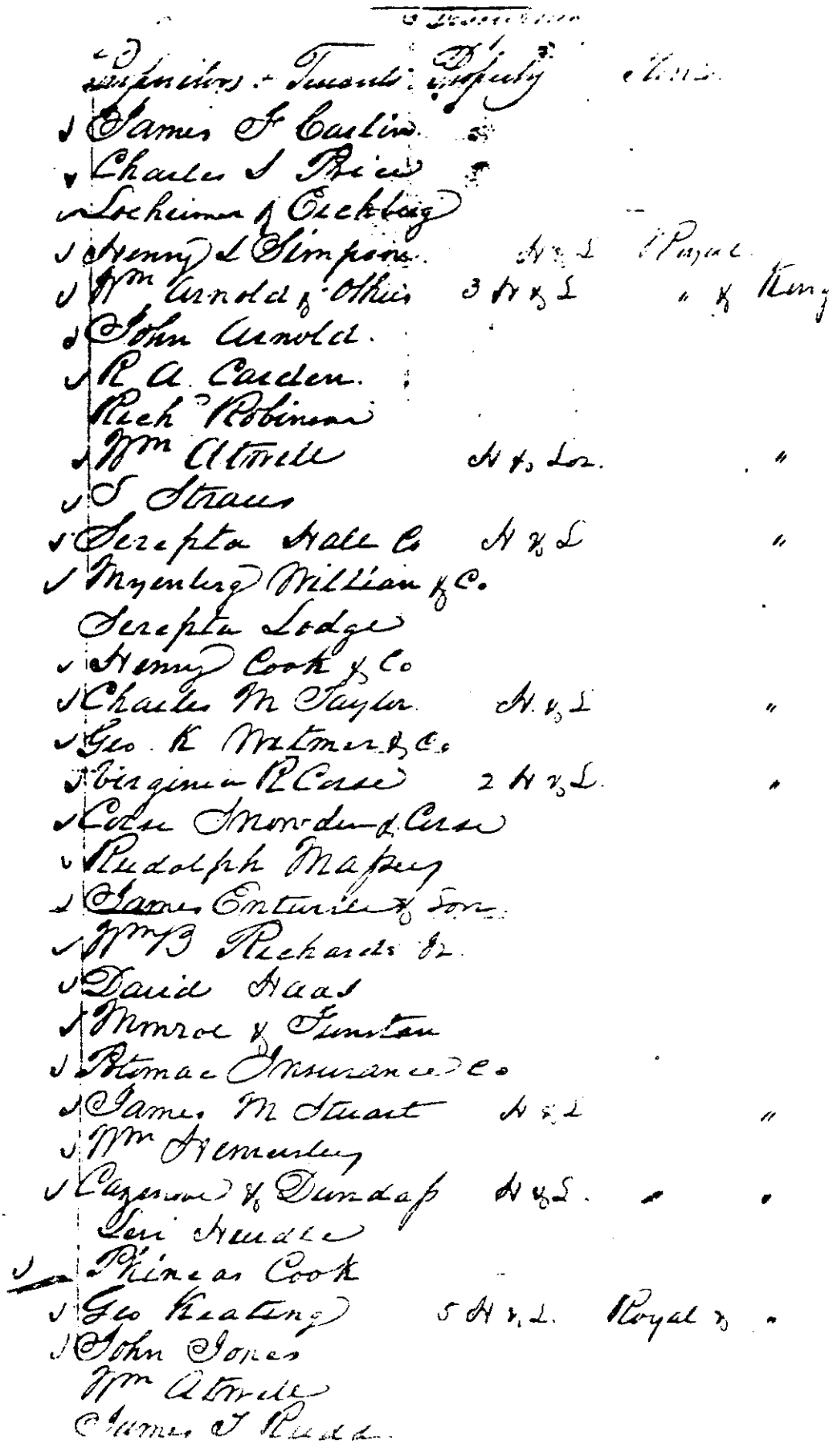
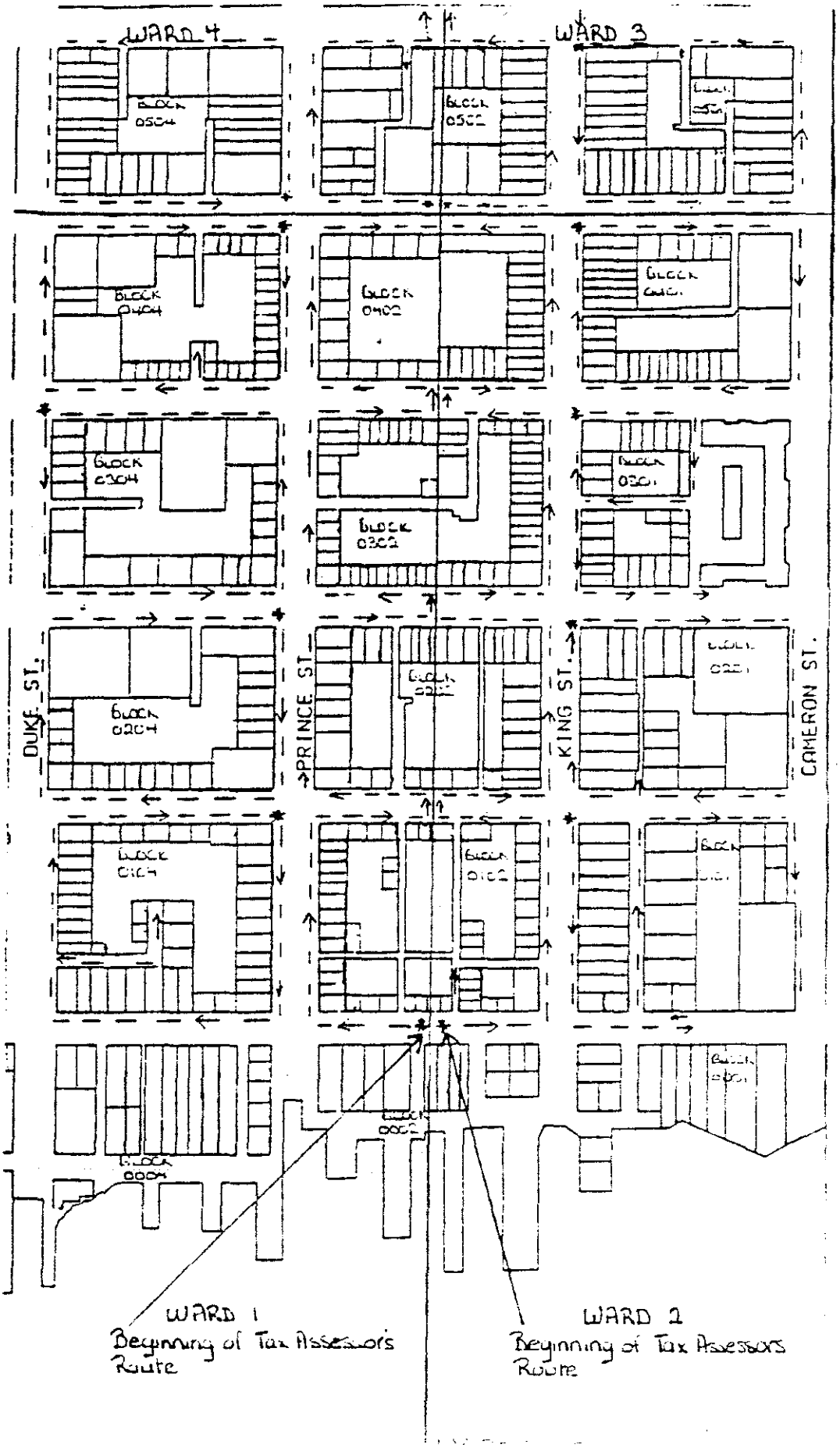


FIGURE 2: TRACING THE TAX ASSESSOR'S ROUTE ALONG THE WARD LINES



males, all females who held property in their own name and all free black males between the ages of 21 and 55. The addition of the manuscript census schedules provided virtually the whole of the "dependent population"--married women and children--whom we attached to the already located tax payers, re-creating the family units as we went. We then linked to this data base the political information from the poll books, adding voters not already accounted for in the basic population file.

Our estimate of Alexandria's residents in 1859 was a composite result of the tax records, the manuscript census and the poll books. The result is a comprehensive population figure for the city: 10,391 whites, 1,497 free blacks and 1,386 slaves. We determined from the mapping procedures outlined above the precise place of residence of 76.8 percent of the white population and 65.9 percent of the free black population. While we know the names of slave owners, the slaves themselves remain regretably invisible in this mapping procedure, unless we assume that all slaves resided with their masters. We have been able to independently locate the place of residence of only a handful of named slaves. Also underrepresented in the city map were female heads of households who did not own property.

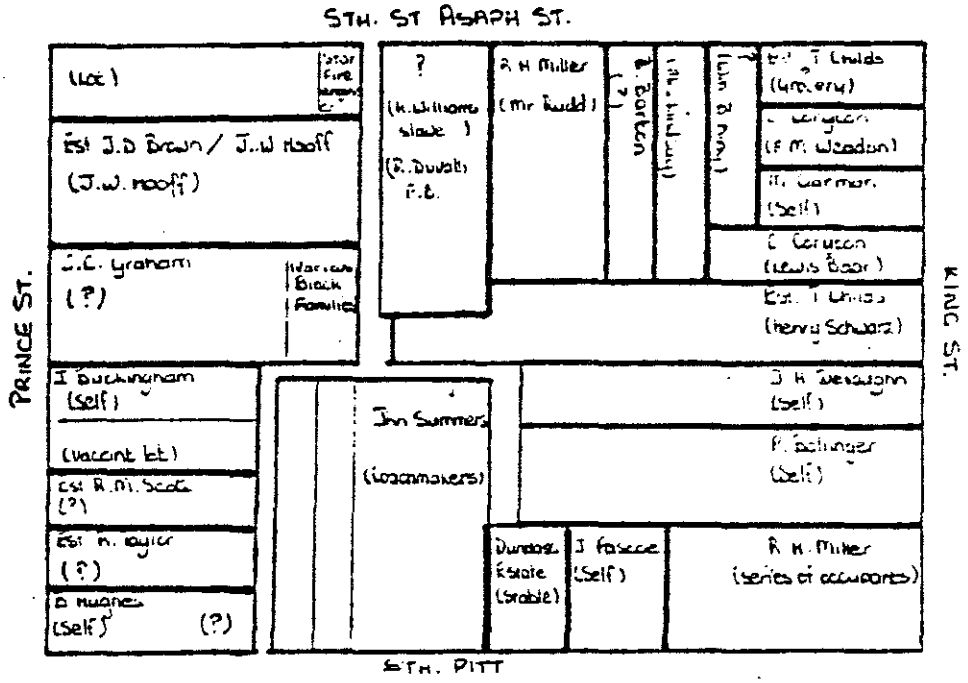
The map in Figure Three then is not complete, but it does show the precise place of residence of just over 75 percent of the city's total population in 1859. We were again fortunate in being able to co-operate with the Alexandria Archaeology program to check the accuracy of our mapping procedures. The check was based on a historical survey of the 500 block of King Street, an area extensively redeveloped in the late 1970s. The Alexandria Archaeological Center was called in at that time to provide a comprehensive social profile of a city block which was about to

disappear as a residential unit. The result was a finely grained study of one of the city's oldest blocks stretching back nearly two centuries. We were able to "freeze" the study of the block's evolution in the year 1859 and compare that house by house survey with our own assignments of individual place of residence. The Archaeological study was much more detailed than ours and was informed not just by tax and census records but by deed and title research. The comparison of the two procedures for determining place of residence around the block is displayed in Figure 4. We concluded, with some relief, that our mapping procedure was capable of yielding up not only comprehensive and detailed maps, but also strikingly accurate assessments of the city's population distribution. Methodologically, then, we were more than satisfied.

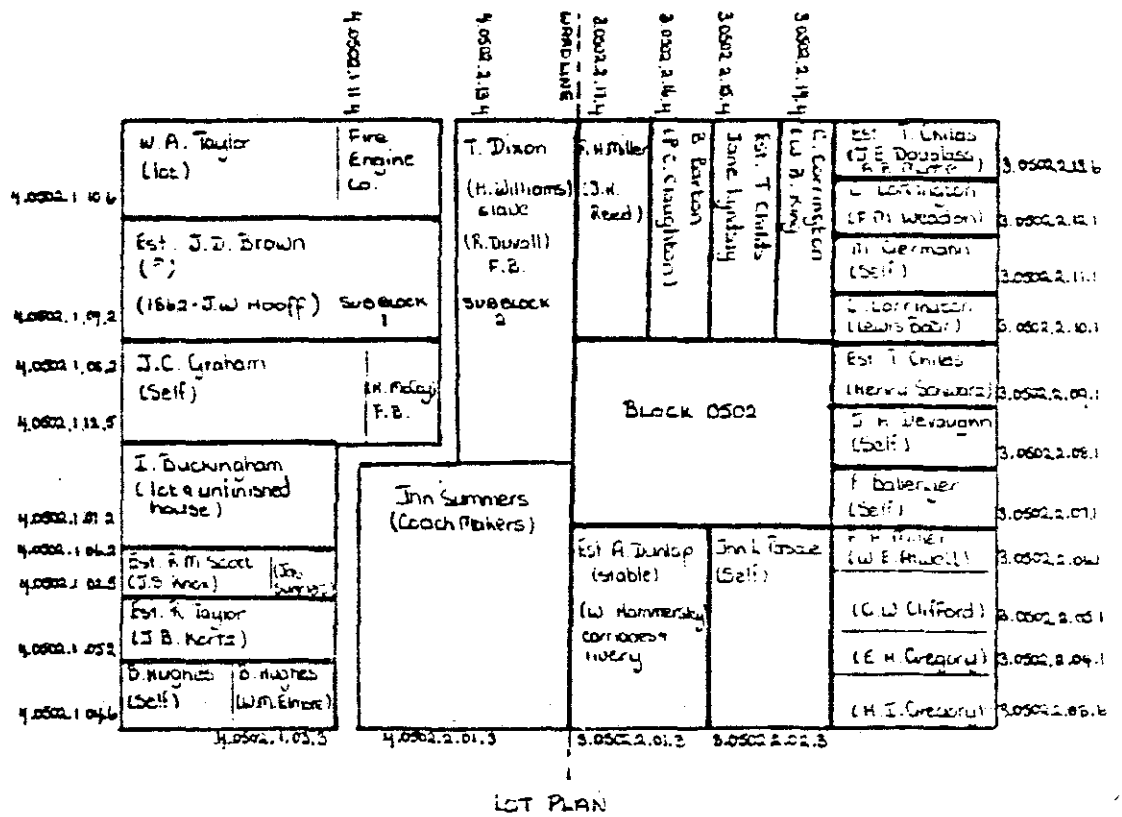
It is too early to be definitive as to the relationship between our findings and the general theories of urban change with which we began. What we can say, from even a preliminary analysis of the data, is that Alexandria was not a city without residential structure and yet was hardly so structured to fit within the notion of a "core-periphery" model in which wealth and authority overlapped in a defined section of the city. Alexandria was a city more complex than either available explanation, a city less differentiated than the core-periphery model and yet more structured than the historian's homogeneous walking city would suggest. Consider just four maps as an indication of this.

Those employed in commerce (Figure 5) were still concentrated in 1859 near the wharves and along King Street, the city's main commercial artery. Professionals (Figure 6) lived slightly away from the Potomac, centered as much on Washington Avenue as King Street. Yet there were blocks of substantial overlap and the most concentrated professional and

FIGURE 4: COMPARISON OF RESIDENTIAL PLAN OF THE 500 BLOCK OF KING STREET, 1859-1860



LOT PLAN, ALEXANDRIA ARCHAEOLOGICAL RESEARCH CENTRE



LOT PLAN

BOURKE AND DEBATS ELECTORAL HISTORY

Listed on each lot is the owner and in parenthesis the tenants in 1854
The complete locational code for each individual lot is also listed

commercial blocks were only one street apart. Tradesmen tended to live yet again further afield, some residing well above Washington and others not far from the wharves. But this meant that along the wharves in particular, some of the city's most prominent merchants were living in neighborhoods and blocks defined by quite ordinary tradesmen. The unskilled laborers (Figure 8) of Alexandria in fact lived much closer to the core of the city than many of the tradesmen. The proximity of laborer and professional suggests a real but mild form of residential segregation.

Even within the more limited confines of a block face, we note the same pattern of uncertain differentiation. The pattern, common to all southern cities, was that race divided residence much more than did occupation or status. Consider the four sides of the Coleman block, a working class area bound by Wilkes and Wolfe Streets, Fairfax and Royal. One hundred and twenty-one people lived on the block in 1859, of whom 74 were over the age of 18. Just over half of the population was black or mulatto, but remarkably concentrated. The essential divide was the line of back fences dividing the block into east and west halves. Every one of the 43 residents along the east side of the block, facing Fairfax Street, were white while 50 of the 52 residents on the west face, along Royal Street, were black or mulatto.

As the more detailed Alexandria Archaeology studies have indicated, this section of Royal Street was part of the area known as Hayti, one of the two predominately free black neighborhoods in the city. The residents of the north and south faces, as well as the corner lots, were white with some black presence, but the essential divide, a racial divide, was the line of back fences.

FIGURE 5:

RESIDENTIAL PATTERN OF THOSE EMPLOYED IN COMMERCE

FIGURE 6:

RESIDENTIAL PATTERN OF THOSE EMPLOYED IN PROFESSIONS

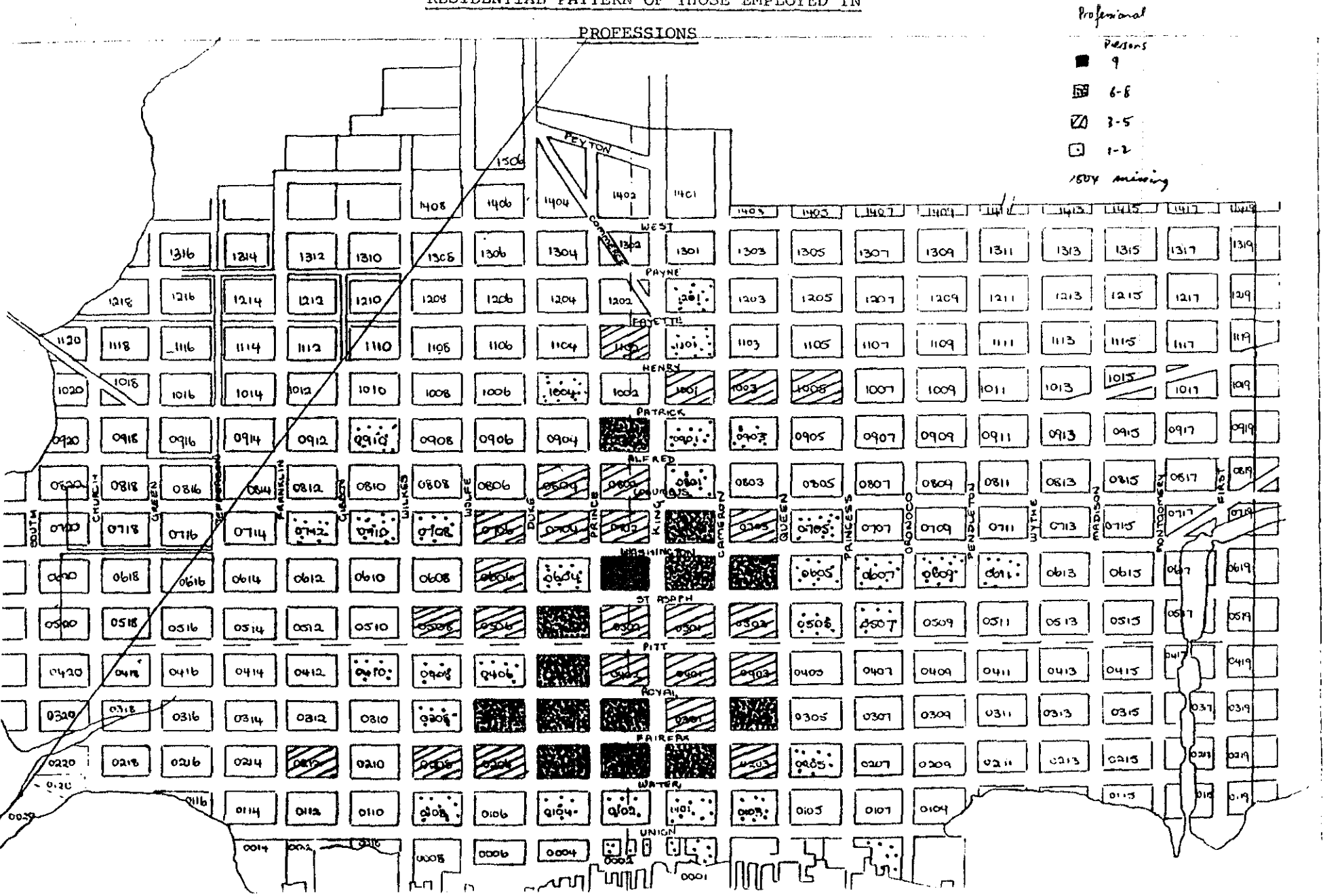


FIGURE 7:

RESIDENTIAL PATTERN OF THOSE EMPLOYED IN TRADES

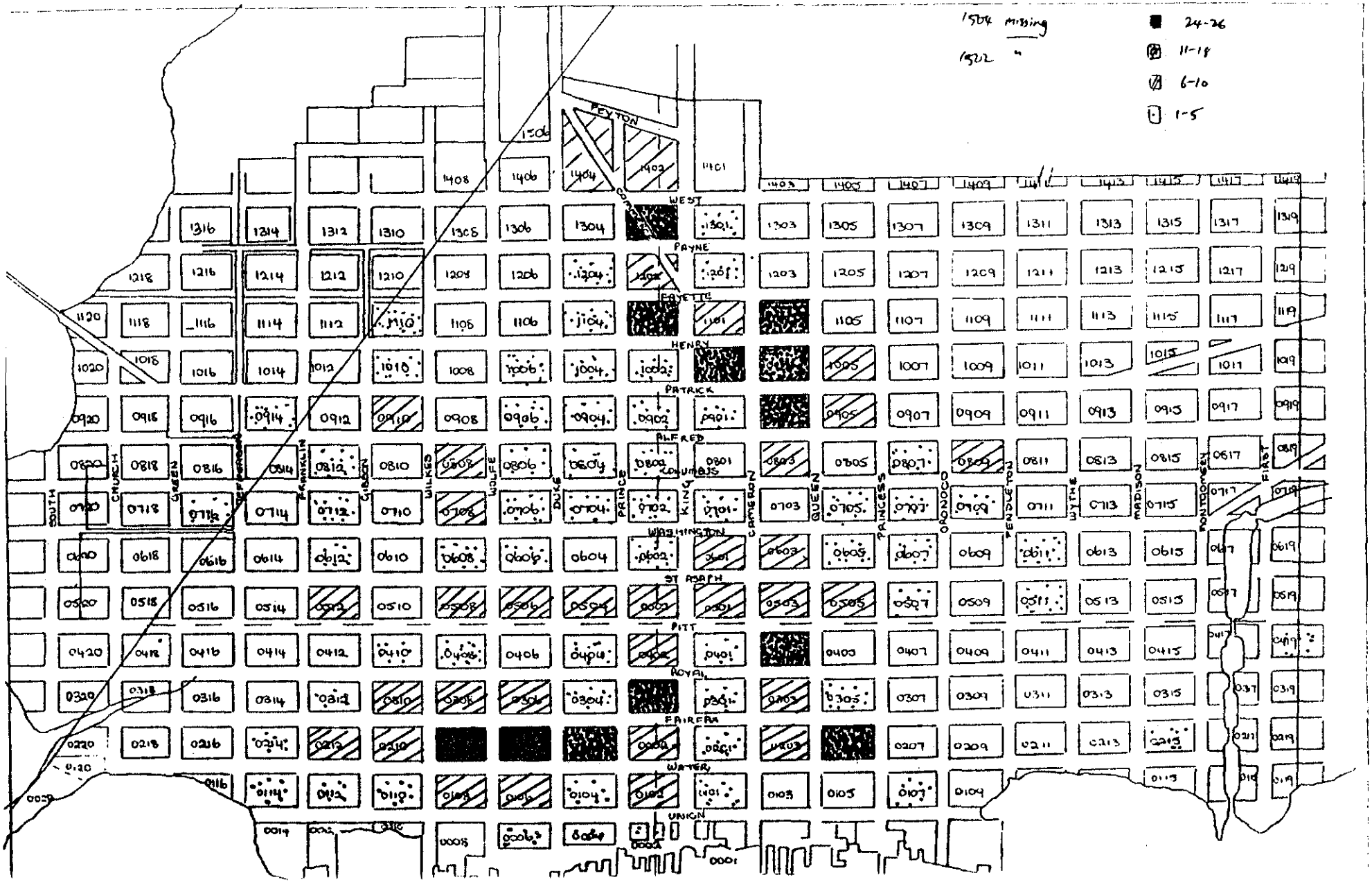
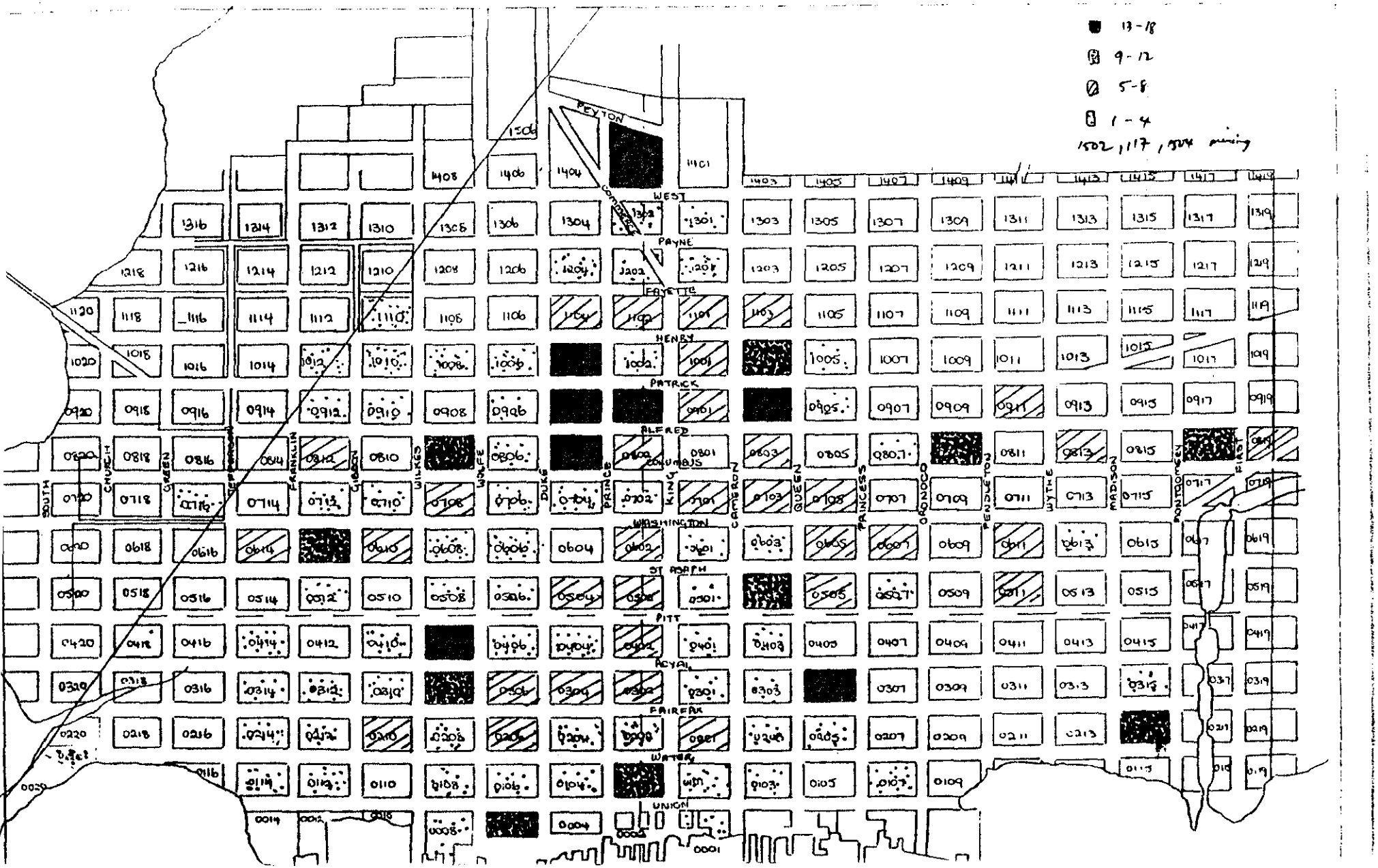


FIGURE 8:

RESIDENTIAL PATTERN OF THOSE EMPLOYED IN

UNSKILLED OCCUPATIONS



There was much less division along occupational lines. The white males on Fairfax spanned virtually the entire occupational range, from unskilled workers (2), semi-skilled (1), skilled workers (variously a bricklayer, a machinist, a carpenter, a moulder, and a ship carpenter), a tailor proprietor, a master bootmaker, and the town's elected wood measurer. Race, not occupation, defined residence in the Coleman block.

Without race as a divide, the 500 block of King Street was even more heterogeneous. Clearly a part of the city's main commercial thoroughfare, the block was also home to 129 residents, mainly (60 percent) adult, and overwhelmingly white. There were only two non-whites living on the block in 1859 and both were listed as mulatto. The largest number of the employed people were skilled craftsmen, ranging from tinsmiths to master carpenters. The second largest group, and all of the women listed as working on the block, were in unskilled occupations: both mulattoes were females employed as domestics. The block exhibited a wide range of residential types including independent proprietors, merchants, and a few professionals. William Taylor, an extremely wealthy lawyer, lived on the southwest corner of the block.

Any given street face in the 500 block represented all of the heterogeneity we usually associate with the model of the nineteenth century walking city. Along heavily travelled King Street, commercial operations dominated, with many owners living on their premises with their families. The residents on King Street included a turner, a bootmaker, a shoe store owner, two dry goods merchants, a baker, a locksmith and the owner of a grocery store. On the east side of the block were Sumers Coach works, Dunlaps' stable and a predictable range of semi-skilled and unskilled laborers. On the west side of the block, at the corner of St.

Asaph and Prince was the Taylor home; further down the street were a fire station, an express agent, a widow without resources, and a city tax collector. Again constrained heterogeneity was the dominant theme.

At both the aggregate and block level we can detect a faint pattern of social differentiation: some areas clearly had very different characteristics than others. Yet in a town this size and at this stage of industrial development, the differentiation was far from the notion of a powerful core surrounded by a dependent periphery. Analysis of individual blocks, even two so different as the Coleman block and the 500 block of King Street, suggest this constrained heterogeneity as the overarching theme.

Political diversity was no less the norm. The Coleman block was basically a Whig political unit with the surprising entry of Graham Deevers, listed as a free black, also voting for that party. Only two Democrats, Hanson Day and Michael Cogan, stood against the tide. The 500 block of King Street, on the other hand, was much more divided with the wealthy William Taylor leading the Whig cause but many of the small merchants voting Democratic.

It is far too early to deduce the basis of political engagement in Alexandria on the eve of the Civil War. There is already every indication, however, that in Alexandria as in rural Oregon the structures which bound people together were subtle rather than categoric. Just as Alexandria "fits" neither the model of the undifferentiated walking city nor the polarized core-periphery model, so it is unlikely that systemic forces such as "class," occupation or ethnicity will "explain" political participation and partisanship. There is every indication that politics will be rooted in contextual variables, in the web of interrationships which bound together individuals along lines which might be labeled

kinship, deference and obligation. And here is the most fruitful area for historians and archaeologists to combine--in the discovery of the social and cultural web which bound together the citizens of one of the South's more distinctive cities.