

Understanding Commercial Space in Small Cities

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INTRODUCTION

Just as the retail sector is critical to the life of any city, so the mapping of the businesses of a city using Geographic Information Systems (GIS) techniques creates new opportunities to visualize the relationship between businesses and the city they served. GIS applied to this aspect of business history opens new avenues for understanding the social, and political, implications of the way in which retail history is associated with urban development. The importance of stores and retail establishments in urban life is unquestioned, though perhaps less studied than one might have thought. As GIS re-invigorates the historical study of cities, this is likely to change. As Jason Gilliland and Mathew Novak have recently noted, stores are not only ‘significant components of the built environment, typically lining and defining the character of a city’s busiest arteries,’ but also provide the ‘vital places in the public realm where people congregate and interact.’¹ The distribution of businesses across a cityscape and the meetings and interactions of the citizenry that they facilitated shed new light on the formation of neighborhoods and the social capital that neighborhood businesses provided. This paper approaches the extent and spatial distribution of urban retail space as part of a wider interest in the development, and political significance, of neighborhood in nineteenth century cities.

This is not the focus of most studies of retailing in America. Prominent in the historiography of commerce in American cities are studies of innovations in retailing

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strategies – from the fabled department store at the turn of the century to the suburban malls of the post war era.² Another large body of literature associated with retailing is concerned with the economics of location and central place theory.³ A richer theme for the purposes of this paper arises from studies of the location of retailing enterprises demonstrating that these are associated with the social character of the city rather than being a function of changes in transportation networks. Michael and Kathy Conzen first advanced this argument thirty years ago in their longitudinal study of retailing in Milwaukee.⁴ Nick Blomley has identified a renewed interest in that theme; in the way space is understood in retail geography. The ‘new retail geography’ explores the cultural and social content of retail location.⁵ This paper follows that theme, using the power of GIS to examine differences in the spatial characteristics of the retail sector of two different types of cities at similar points in time and in economic cycle. The aim of the paper is to advance our understanding of the connection between the spatial distribution of retail establishments in a city and the patterns of urban social – and political – life exhibited by that city.

The paper focuses on the contrasting patterns of commercial locations in two very different cities at the mid-point of the nineteenth century: Alexandria, Virginia, in the late 1850s was a thriving commercial city, much involved in national and international trade (including the trade in human lives): it was a success story in its own terms and ‘its most talented entrepreneurs went into shipping and merchandizing rather than large scale manufacturing.’⁶ Newport, Kentucky, was precisely what Alexandria was not: a burgeoning industrial city heavily committed to iron and steel manufacturing. Both were

river cities, Alexandria on the Potomac opposite Washington D.C. and Newport on the Ohio, opposite Cincinnati. Both were small cities of about 15,000 inhabitants, both were of about the same physical size, and both were, in the mid nineteenth century, at periods of considerable prosperity.⁷ While nineteenth century boosterism colors assessments of economic success, the histories of the two cities that touch on economics support the notion that Alexandria enjoyed considerable prosperity in the 1850s just as did Newport in the 1860s.⁸ Both cities also possessed excellent runs of records, though of different types, that allowed the mapping of their entire business sectors and their entire residential populations, returning businesses to their social contexts. Individual level social and political information on the residents of the two cities facilitates a consideration of the way in which businesses, and especially commercial businesses, can be thought of as not just serving but also helping create neighborhoods.

The political aspect of this paper builds upon new tendencies in political science, led by Alan Zuckerman and Robert Huckfeldt in particular, which stresses the ‘social logic of politics’ and the networks that inform and shape political engagement. Their work, while contemporary in nature, builds upon understandings of politics in vogue before the triumph in the 1950s of the University of Michigan social-psychological approach to voting which considered politics strictly in terms of the attributes of individuals divorced from their social context. Just as GIS is re-invigorating an older approach to urban history, so advocates of this approach remind us of a rich tradition of political history and political science that suggests that, ‘how we think politically, and how we vote, can be influenced by our local context, by the material circumstances that we observe there,

and by the people, organizations, and institutions we interact with.’⁹ While this scholarship, both historical and contemporary, has focused on aggregate information, this study employs individual level political records matched to the individual social, cultural and economic records of the inhabitants of nineteenth century Alexandria and Newport.

Careful comparative work on the two cities created two vast databases bringing together individual level records for every inhabitant of these two cities at mid century from relevant census rolls, city directories, city tax records, and poll books, the individual level records of political participation in *viva voce* states. Past work with these databases has helped define the quite remarkable distinctions between the two cities.¹⁰ This work supports the notion that Alexandria can be defined as a successful antebellum Southern commercial city which exhibited characteristics associated with other mercantile cities while Newport was a flourishing industrial city aligned with other Ohio Valley industrial cities, some small, like neighboring Covington, and some, like neighboring Cincinnati, very large urban places.¹¹ While there is no claim advanced here for Alexandria and Newport as typical of their class, the differences between them, the exploration of which GIS now makes so feasible, may encourage the extension of this comparative small cities framework to a wider range of structured case studies.

Both cities were, at the point that we enter them, in the very early stages of crises that would fundamentally alter the economic strategies that had defined them and which had for so long informed their economic trajectories. The Civil War would bring Alexandria’s commercial life to a standstill and Reconstruction would bring it to its knees, where it

stayed, now another declining Southern city, until the resurgence of Washington, D.C. in the 1940s. The Panic of 1873 ushered in years of economic depression which left Newport with a weakened steel industry. The city began an economic decline that ended in massive urban corruption. Newport became synonymous with the 'sin' of Cincinnati, leading ultimately to the complete take-over of the city by mob interests, a condition that its citizens overcame only in the 1970s.

Examining these two quite different cities at the cusp between their past economic successes and the transforming political and economic calamities their futures held provides a view of two fundamentally different nineteenth century urban forms. GIS applied to these two cities provides a comparative snapshot of a southern commercial city at a high point of success and an industrial city in its era of greatest development. This paper explores the differences in the commercial sectors of these two very different places, asks whether those differences appear to be associated with their contrasting economic bases, and explores some of the implications of the differences in the arrangement of the commercial sectors of the two cities for the social and political lives of their residents.

DEVELOPING PARALLEL METHODOLOGIES

The goal of the study of the business sectors of Alexandria and Newport was to capture the widest range of business activity consistent with the comparative study of the two places. This was complicated by the very different sources available from the two cities describing their commercial sectors, the information provided in those records, and the way they defined categories of business activity. The study uses information provided in

the manuscript federal census records, city directories, and city tax rolls to define and then map the cities' business cores.¹² Predictably there is little standardization across these records for a single city much less across two such different cities, complicating the need for a methodology which could yield results that were comparable.

Information differences tended to increase as we moved from federal census data to city directories to local tax records. The tax records, invaluable in many senses, were also the most divergent because they reflected the very different revenue raising strategies – and possibilities – of the two city governments in two different economic systems. They were the most records most sensitive to local difference. The city tax records of commercial Alexandria concentrated on personal property and business licensing; in Newport they focused much more on real property. The Alexandria tax records were invaluable in locating local business, but those in Newport almost useless, a situation happily remedied by that city's comprehensive city directories. It was only when census, city directory and tax information was brought together that a comparable set of information emerged, with each record to some degree compensating for differences and weakness of others.

The tax lists were predictably the most dissimilar and the most difficult to reconcile. As an industrial city with extensive levels of home ownership Newport raised most of its revenue from individual property owners who, along with the large industries, defined the city's tax base. But Alexandria had less than half the extent of home ownership as Newport because much of the undeveloped land in the city was held in family estates – particularly those of commission merchants. The motivation for the large amount of

Alexandria's build-able land remaining in an undeveloped state remains somewhat unclear, but the impact of this 'hoarding' of city land constituted a severe restriction on opportunities for home ownership, and for the city, of raising revenue from a tax on homeownership. With levels of home ownership in Alexandria only half those of industrial Newport, Alexandria's tax base focused much more on personal, as opposed to real, property and, reflecting its commercial orientation, on business transactions, particularly through a licensing tax system. By contrast if Newport possessed a licensing tax system, its records have not survived and its property tax records list only the name of businesses and the value of lots owned by that business.

The city directories of the two cities diverged less than the respective tax records. In Alexandria, we know from Boyd's Directory the name of each business, the owner's name, the type of business, and its address. From the City license tax we know the name and type of business and either the value of sales (if the business sold a good) or the amount of its rent (if it provided a service). Tax information in Alexandria compensated for weaknesses in information from its city directories, the obverse of the relationship between the strength of these two records in Newport.

The city directory information for Alexandria and Newport was similar in that both were included as subsections of the larger city with which they were economically affiliated. Newport was included as a section of the Cincinnati city directory, along with neighboring Covington; Alexandria was included in the Washington, D.C. city directory, as was Georgetown. But there the similarities city directory coverage of the two cities

ended, a reflection of the fact that the Alexandria and Newport directories were published by two of the largest competitors in the city directory business.

The Cincinnati city directory of 1873 (containing Newport) was a product of the C.S. Williams Directory Company which was headquartered in Cincinnati, while the Washington city directory of 1860 (containing Alexandria) was produced by the William Henry Boyd Company with offices in New York, Philadelphia and Washington. (Boyd advertised in 1859 that he had the largest collection of city directories in the world and offered to publish the directory of any city or state. Boyd's clients tended to be from the mid-Atlantic states, though he ventured as far west as Ohio. The Midwest was the domain of C.S. Williams. Once a city had agreed to contract with a particular directory company, that contact tended to be extended so that was a tendency for particular cities to be affiliated with particular city directory companies.

Each company had its own template for a city and they were substantially different. The Williams' model, for example, encouraged advertisements and, perhaps as an alternative, offered to list business in bold type in the alphabetical section. The listing of individuals usually included a person's occupation and sometimes, very helpfully, the employer. But these individual listings also included occupations which could be businesses. 'Grocer' or 'bar-keeper' might indicate either businesses or occupations.

The Boyd model was much simpler, with all businesses listed in a 'Business Directory.' The Boyd model did not provide for advertisements as an alternative to listing in the

Business Directory and did not insert businesses in the individual listings, removing the risk of confusing a business with an occupation.

Even though the census takers of Alexandria and Newport were operating under guidelines from the US Bureau of the Census, the census records most relevant to Alexandria were those of 1860 while the census of greatest interest for the Newport was that of 1870 census. This magnified the differences, but commercial information even in the same census year differed widely on the ground, reflecting the interests, dedication and integrity – and perhaps even the training – of local census takers. Differences in the coverage of commercial establishments in census records of Alexandria and Newport even in the same census year were substantial. Indeed the census records are more useful in gleaning information on the industrial, heavy and light, sectors of these two cities than on their commercial sectors. From the 1860 census of manufacturing, we can learn for businesses producing goods valued at more than \$500, the name of the business, its product, the capital invested in the business, the kind of motive power used, and average number (and sex) of the hands employed, the wages paid (male and female), the value and quantity of the annual product. The 1870 census of manufacturing repeated the questions from ten years before but differentiated employees by age, probed wages more closely, and asked much more detailed question about the product of each manufacturing establishment. Nevertheless, the census records provided information on the output of light industries that helped informed our decision as to whether they should be categorized as retail businesses.

From these three sources emerged sufficiently detailed information to the primary objective of defining and mapping the cities' commercial sector, even though important differences remained in terms of the quality and depth of information available on those establishments. The data differences complicated the search for a methodology that could yield a meaningful comparative analysis of commercial businesses in the two cities. In the end we chose, as the closest approximation to equal treatment of the commercial establishments of the two cities:

Newport

- All businesses listed in the Newport Business Directory of the Williams' Cincinnati Directory for 1873
- All Newport businesses which took out advertisements within the main text of the section headed Williams' Newport Directory for 1873 and not appearing in the Business Directory. A careful check revealed that all businesses appearing in bold print within the residential section of the Newport Directory for 1873 were included in one or another of the above two categories.
- The 39 businesses listed in the Newport 1874 tax list not listed in the above categories.

We did not include as businesses the listings in the residential section of the Newport Directory for 1873 which provided an occupational description which might, or might not, have been their business or their occupation as employee in a business.

Alexandria

- All businesses listed in the Alexandria Business Directory of Boyd's Washington and Georgetown Directory for 1860
- All businesses listed in the Alexandria License Tax for 1859 assigned a rent or sales value and not listed in the above.¹³

In the end this gave us 513 private businesses in Alexandria and 526 in Newport, each in three categories – commercial establishments, light industrial works, and heavy industrial plants.¹⁴

Table 1:
Alexandria and Newport Business Sectors
Number of Firms and Percentage Located

We defined as commercial those 473 private businesses in Alexandria and 497 in Newport that sold a good or service primarily to the public, ranging from agents and auctioneers to undertakers and wheelwrights. The Appendix includes the distribution of these businesses by a standard functional typology; the commercial sector made up 93 and 95 percent respectively of the business sectors in Alexandria and Newport:

Light industrial included factories or shops that produced goods which were likely to be retailed by others. Light industrial included agricultural implement manufacturers, the Alexandria Biscuit Factory, boot and shoe factories, box factories, coopers, breweries and distilleries, furnace builders and brick makers, dyer houses, glue makers, lime plaster and cement mills, small machine shops, marble works, planning and flooring mills, pump and block makers, saw mills, sumac manufacturers, and lime, plaster, and cement mills.

Heavy industries were businesses that manufactured a product requiring remanufacture by others to produce a good which could be sold to the public. Included in this category were the Alexandria Cotton Mill, large machine shops, planing and flooring mills, tanneries, and the two manufacturers that made up the industrial core of Newport – the Gaylord Iron and Pipe Foundry of Newport and the Swift Iron and Steel Rolling Mill. While Alexandria had more enterprises than Newport that were categorized as heavy industry (10 vs 7), the Alexandria operations typically had very few employees and production was low. The Mount Vernon Cotton Mill employed 135 hands, 88 of whom were females. The Jamison foundry employed 35 men and the Orange and Alexandria Railroad workshop 60. In 1870 the Swift Rolling Mill in Newport, on the other hand, employed 398 hands of whom only 7 were females; employment grew to 610 just as the Panic of 1873 turned into a prolonged depression.

We were very successful in mapping these businesses across all three sectors: 480 enterprises in Alexandria and 514 in Newport, a total of 994 of the 1034 private enterprises in the two cities (96 percent). As the whole of the residential populations of Alexandria and Newport had already been mapped, the location of these business enterprises was not arduous. Both the Newport and Alexandria city directories included addresses for all businesses. These were readily matched, in most cases, to the addresses included in the Newport City Plat Map and, in the case of Alexandria, the Sanborn Fire Insurance maps which included faint penciled in street addresses. This held true for the many commercial enterprises of Alexandria and Newport with location rates of 95 percent and 98 percent.¹⁵

BUSINESS PROFILES OF ALEXANDRIA AND NEWPORT

A visitor to Alexandria in 1859 and Newport in 1873 could not but notice four fundamental distinctions between these two places, their shared prosperity as similar sized river cities notwithstanding. The distinctions centered on the composition of their labor forces, their economic bases, their use of riverfronts, and their population distributions, each related to one another and when combined, defining two very different political economies. Alexandria was irrevocably committed to slavery and a race based labor system while Newport was just as committed to a system of European immigrant labor. Alexandria's commitment to commercial transactions was as determined as was Newport's to industrialism. Finally, our visitor could not but notice that although the two cities were of similar populations and similar physical area, much of the physical space in Alexandria – but very little of that of Newport -- was unoccupied and undeveloped.

Superficially the business listings of the two cities in Table 1 look far more similar than dissimilar: roughly the same number of enterprises in all three categories. The industrial and commercial sectors hold the most clues to the fundamental differences in the two cities: there were 22 commission merchants in Alexandria but none in Newport; the four coal agents in Alexandria moved millions of tons of Appalachian coal through the wharves of Alexandria; while two slave agents and a slave 'jail' cast a shadow over the lives of Alexandria's 1000 slaves. Alexandria was the second largest wheat exporter in the state and one of the largest coal exporters in the nation – and one of the largest markets in the nation for the trade in human lives. As we have already seen, the one large manufacturing establishment in Alexandria was the Cotton Mill which produced cloth

from the raw material that slaves had sown, grown, picked and cleaned.¹⁶ In the heavy industrial sector the Gaylord and Swift mills, with hundreds of industrial employees, stand in great contrast to the enfeebled industrial enterprises of Alexandria.

Each city had other distinctive markers of its commercial activities: Boyd's City Directory for Alexandria lists 37 hucksters while the William's Directory for Newport list not a single enterprise under that category. Newport had 17 grocery stores combined with saloons and 53 saloons; Alexandria had none of the first, only two salons, but 19 ordinaries (identified in the City License Tax), where meals could be contracted for by the week or the month. Newport contained no ordinaries. In Alexandria, saloons were combined with restaurants (11), but not grocery stores. Newport had twice as many confectionary stores and bakeries as Alexandria (35 vs 18). When mapped, these and other commercial differences help reveal the contrasting characters of the two cities.

DISTRIBUTION OF COMMERCIAL ESTABLISHMENTS

Figures 1 and 2 show the location of all of the commercial businesses identified in Table 1 : 448 retail establishments in Alexandria and 488 in Newport. The circled sections show the concentration of those distributions with each core containing 60 percent of the business establishments of that city. Alexandria's retail establishment was overwhelmingly concentrated along the lower end of King Street, the city's main commercial street, and the city's wharves – its economic center. Thirty-five percent of all commercial enterprises in this mercantile city fronted on King Street while the City Market, on the northern end of the 300 block of King held another 57 shops (thirteen percent of the city's total commercial enterprise). No other street came close to

occupying the commercial centrality of King Street. Alexandria's commercial distribution formed a narrow isosceles triangle (axis running along the main commercial street and the base extending perpendicular along the city's wharves from which all trade flowed) in the classic pattern of the mercantile city.

Figures 1 and 2
The Spatial Distribution and Concentration of Retail Businesses in Alexandria and Newport

Industrial Newport was very different with its 488 retail shops scattered along several commercial streets, particularly Monmouth and York Streets.¹⁷ Unlike Alexandria, there were almost no shops at all along Newport's frontage on its two rivers. These were industrial spaces. Photographs and paintings from the era confirm not only the absence of shops but the total absence of the wharves that were the economic heart of Alexandria, a river city in ways that Newport certainly was not. The defining feature of Newport was its factories and, as we shall shortly see, a distinctive pattern of adjacent worker-owner housing.

These Kernel density maps are constructed with a smoothing parameter to identify the boundaries containing approximately 60 percent of groups.¹⁸ The Alexandria core contains 278 of the 459 (61 percent) commercial establishments in the city while the Newport core contains 284 of the 499 (57 percent) city's businesses. The Kernel density maps confirm – and make much more precise -- the impression gained from the GIS visualizations of the commercial sectors of the two cities: Alexandria's commercial sector was much more concentrated, its core containing just 1.99 million square feet, while Newport's core mercantile area covered twice that area: 4.14 million square feet.

EXPLAINING THE DIVERGENCE OF THE TWO COMMERCIAL SECTORS

These are significant differences in two cities of roughly the same population and physical size. The explanation for the differences in the distribution of commercial enterprises goes to the divergence in the political economies of the two cities. As a mercantile city, Alexandria was created as a rentier society, with nearly half the city area held (mostly by the city's commission merchants) as vacant land and a home-ownership rate almost precisely half that of Newport. Newport, by contrast, was designed by its industrial pioneers as a city of worker-owners; thus the sale of vacant land (much of it held by industrialists) followed the industrialization curve with blocks platted into small lots suitable for the means of industrial workers.¹⁹

The concentration of Alexandria's population led to the concentration of its commercial enterprises, a trend no doubt further reinforced by the city's pattern of residential segregation which confined nearly all the large free black population (over 1440 men, women and children) to the south side of the city, near the railway tracks, the tanneries and the city's light industrial sector.²⁰ There certainly were black neighborhoods in Alexandria, and all with place-names that long endured: The Bottoms, The Hill, and Hayti. The free black population of Alexandria was essentially forced into neighborhood groupings rather than its neighborhoods emerging as a natural process and the extent of commercial businesses available to these free black neighborhoods remains unclear. Tax and other records that identify free black occupations show a population mostly engaged in laboring, service industries (cooks, drivers and carters) or skilled craftsmen

(blacksmiths, furnace maker, carpenter, plasterer). There were a handful of free blacks whom the license tax identifies as owners of drays but the tax and city directory identify only two enterprises in the city owned by free blacks – James E. Piper who owned a brick yard and R. D. Beckley who owned an oyster bar. The census identifies Mary Savoy, who lived in Hayti, as a property owner and a grocer but she does not appear on the license tax.

Conversely the dispersal of Newport's army of white industrial workers – mostly German and Irish immigrants—spread across the city and commerce followed them. This is precisely the pattern that the Conzons discovered in industrial Milwaukee, perhaps pointing to a similarity in the design of industrial cities as worker-owner cities.

BUTCHERS, BAKERS AND...THE CREATION OF NEIGHBORHOODS

As an immigrant city, Newport, perhaps not surprisingly, had high numbers of bakeries and confectionaries – twice the number of Alexandria.²¹ Likewise it is not surprising that, as Figures 5 and 6 show, the 35 bakeries and candy shops of Newport were spread quite evenly across the city while the 17 shops in Alexandria were again concentrated around the King Street corridor: 11 in an 8 block area.

Figures 5 and 6 Distribution of Bakeries and Confectionaries in Alexandria and Newport

Even more striking was the concentration of butcher shops in Alexandria. As Figure 7 shows, 18 of the 22 meat shops in Alexandria were located in the City Market, on the northern side (Cameron Street) of the 300 block of King Street. Here in a half block Market Square compound were 57 shops, including, in addition to 82 percent of the city's

butchers, all of the city's 37 hucksters. Almost all of Alexandria's residents were compelled to come to this central location to buy meat, lending a distinctive market atmosphere to this mercantile city. By contrast Newport's butcher shops (Figure 8) were spread across the city with no concentration at all and no huckster base in its commercial area, despite the fact that it also had a market area, evidently temporary in nature and lacking the permanent structures of the Alexandria equivalent. Where Alexandria's citizens came together at the City Market, those of Newport shopped in a great variety of butcher shops spread across the city where they were almost certain to meet their neighbors.

Figures 7 and 8
Distribution of Butcher Shops in Alexandria and Newport

Grocery stores that only sold food (as opposed to selling food and drink) were a sub-category in the largest single grouping of businesses in the two cities category of sellers of goods. The grocery-only stores of Alexandria were again concentrated with 23 of the 75 (31 percent) on King Street. Newport's 63 grocery-only stores were more dispersed, although with significant numbers on three parallel streets: Monmouth (12, 19 percent), Saratoga (9, 14 percent) and York (7 or 11%).

But in Newport 17 grocery stores – the unacknowledged antecedents to their trendy twenty-first century descendants – combined selling food to be prepared at home with the selling of alcohol by the glass or bottle and the serving of prepared food. A harder test of the dispersion/concentration dichotomy comes if we combine all categories of establishments that might have been associated with prepared food and drink: grocery

stores combined with saloons, ordinaries, saloons and restaurants. Meeting neighbors in this type of establishments were central to the creation of a sense of shared culture and community.

These nineteenth century institutions constituted the ‘coffee house culture’ that fostered the social fabric of communities; it is hardly surprising that modern advocates of social capital, like Robert Putnam, consider the recreation of such institutional arrangements essential to the revitalization of American democratic culture. His challenge to urban planners, developers and community organizers is:

to ensure that by 2010 Americans will spend less time traveling and more time connection with our neighbors than we do today, that we will live in more integrated and pedestrian-friendly areas, and that the design of our communities and the availability of public space that will encourage more casual socializing with friends and neighbors.²²

This was of course exactly the patterning of Newport. No doubt such establishments and patterns existed in mercantile Alexandria as well, but they were more centrally located and far less attached to spatially defined neighborhoods. The visualization capacities of GIS help us understand nineteenth century patterns of interaction more clearly in industrial Newport where different assumptions about homeownership led to a dispersal of population and social patterns took on a spatial dimension.

Figures 9 and 10 below bring together the business establishments in Alexandria and Newport where residents could have gathered to eat and drink. Included are all groceries that were combined with saloons (but excluding those that sold only groceries) as well as establishments that were listed as saloons, restaurants and ‘ordinaries’ -- where meals

might be contracted by the week or month. Ordinaries were common (19 in 1859) in Alexandria where home ownership was low and unknown in Newport where home ownership rates were high.²³

Figures 9 and 10
Distribution of Eating and Drinking Establishments in Alexandria and Newport:
Bars, Saloons, Ordinaries, and Restaurants

Figure 9 displays the 34 eating and drinking establishments of Alexandria. While King Street was not the center of such establishments, the largest cluster of places to eat and drink was at the foot of King adjacent to the city's economic focus – its wharves. One third of all eating and drinking establishments in the city were within a block of the intersection of King and the wharves, no doubt serving both residents and sailors. A second concentration developed around the City Market, one block from King, with another 10 places to eat and drink.²⁴

The pattern in Newport (Figure 10) was dramatically different. Here there were no concentrations at all: the city's 76 eating and drinking establishments were spread across the whole area of the city, mirroring the distribution of the city's population. Unlike the centralized pattern in Alexandria, Newport developed neighborhood spaces that encouraged, 'more casual socializing with friends and neighbors.'²⁵

FOOD AND FASHION

We can gain some sense of these potential patterns of interaction if we use GIS to compare the distribution of the two largest sectors of the commercial establishments of Alexandria and Newport – those devoted to food (whether prepared and eaten on the premises or as groceries to be prepared at home) and those devoted to fashion. There

were in Alexandria 153 establishments that sold food in one form or another (32 percent of all private commercial establishments in the city) and 195 in Newport (39 percent of all commercial enterprises). The other main category of shop we might call ‘fashion’ in that they sold items of clothing and personal goods. There were 76 such establishments in Alexandria (16 percent of all commercial establishments) and 96 in Newport (19 percent of all commercial establishments). Together these two sectors made up 48 percent and 58 percent respectively of the commercial activities of Alexandria and Newport.

Once again the difference between the mercantile and the industrial cities used in this project is captured not in the number of establishments but in their distribution, as Figures 11 and 12 indicate. Mathew Novak and Jason Gilliland have recently developed the interesting notion from their work on nineteenth century London, Ontario that while establishments purveying food were logically distributed for convenience across the city face, those selling items we might term fashion were concentrated in the main shopping streets in order to facilitate comparison shopping.

Figures 11 and 12
Distribution of Retail Fashion in Alexandria and Newport

If we follow this suggest look at the distribution of businesses selling what we might think of as ‘fashion’ – largely speaking apparel – in Alexandria and Newport, we can see that there was indeed a degree of concentration in both cities.²⁶ As Figure 11 shows, in Alexandria, fashion was tightly bound to a few blocks of King Street and the core of that activity was concentrated in six street faces. Figure 12 shows that the distribution of fashion shops in Newport was much again much wider, taking in the whole central area of the city and extending well beyond Monmouth and York Streets. Indeed, residents of

industrial Newport could find apparel shops in their neighborhoods as well as in the central shopping district of the city.

In both cities stores selling food were more dispersed than those selling fashion, but as Figures 13 and 14 indicate, this central aspect of commercial – and personal – life in Newport was more dispersed than in Alexandria.²⁷ In Alexandria, the selling of food was concentrated in the City Market, among the wharves, and along King Street. While GIS visualization hints at a degree of neighborhood-based food stores, in Alexandria, the map of the core containing the sixty percent most clustered food shops is in the shape of an ellipse centered on, again, King Street and the City Market. Indeed the geographic center of food provisioning in Alexandria was the City Market. Further work will determine whether the degree of decentralization of food stores in Alexandria reflected establishments serving the highly clustered free black population of the city. Except for the possibility of a separated set of shops catering to the city's large free black population, the retail trade of Alexandria, certainly as compared to Newport, distinctly centralized.

Figures 13 and 14 Distribution of Food Businesses in Alexandria and Newport

In Newport (Figure 14) the effort to isolate the cores containing the most closely clustered 60 percent of stores identifies several non-continuous neighborhood clusters. Several of these highly localized groups of food stores were located near the large industrial plants on the Ohio and the Licking Rivers. Once again we can see the influence of the extended range, both socially and geographically, of owner-occupied housing in industrial Newport. The industrial city used in this analysis was, like industrial

Milwaukee, a city of neighborhoods. The Conzens' hypothesis that, 'non-central shopping districts did develop an increased variety of shop types as neighborhoods matured' appears to speak to the industrial Newport but not commercial Alexandria.²⁸

Figures 15 and 16
Combined Distribution of Businesses Providing Food and Fashion in Alexandria and Newport

Thus it is not surprising that when we combine food and fashion shops in Alexandria and Newport (Figures 15 and 16) we see the concentration in Alexandria of *both* the food and fashion sectors of the retail world along King Street, particularly in the lower end of King in the adjacent City Market and the wharf areas. The area covered by the core of the fashion and food sectors of Newport was approximately three times that of Alexandria and extended far from the central streets of Monmouth and York into the neighborhoods and communities which defined so much of the this industrial city. While there was some concentration of both shops along Monmouth and York Streets, the overwhelming pattern of shops purveying both food and fashion was their decentralized distribution.

Neighborhood does indeed seem to be a very powerful force in shaping the provision of shopping opportunities in industrial Newport, but was far less so in Alexandria, at least amongst the white population.

POLITICAL PREFERENCES IN ALEXANDRIA AND NEWPORT

The interesting question is whether this pattern of difference was in other aspects of urban life in and in particular whether it appeared associated with differential political behavior. It is possible to explore this possibility in Alexandria and Newport using a unique political record which survives for both cities, namely their poll books – the

written account of elections held while these states operated under the British system of oral or *viva voce* election law.

Virginia's experience with oral voting came to a compulsory end with Radical Republican Reconstruction; Kentucky, a slave state, but allied to the Union, escaped Reconstruction altogether and continued the British pattern of oral voting for at least some elections until 1893 when it adopted the Australian secret ballot form, becoming the only example of a political entity that moved directly from oral to secret voting laws.²⁹ *Viva voce* election law required citizens to cast their votes orally and required election officials to record the name of each voter and the political choices that he enunciated. These official records of elections are an underappreciated source, revealing for whole communities not only who voted but the candidates that every voter chose in each contest. Of course the survival of these records has been haphazard but we have for Alexandria the complete general election of 1859, the last state election in Virginia before the Civil War, and for Newport the 1874 municipal election, a contest for local office held in the midst of the first year of the great depression that had begun with the financial panic of the previous year. Both cities voted in trying circumstance. The intensification of the slavery issue threatened Alexandria's fundamental social and labor system. The Panic of 1873 had given way in March 1874 to the most profound economic dislocation any of Newport's citizens had experienced, a grave situation heightened by the increasingly violent, and desperate, strike against the city's largest employer, the Swift Iron and Steel Rolling Mill.

The poll books allow a complete reconstruction of these two elections. When the content of the poll books – name of voter and candidates supported -- is linked to all the other individual information in the database for these two cities, we have available a unique opportunity to study past elections at a level of detail and accuracy unavailable to modern political science. The GIS component of the data allows us to examine the spatial dimension of these important elections in these two cities, and particularly the relationship between the distribution of the retail sectors of Alexandria and Newport and the voting patterns of their citizens.

Figures 17 and 18 present the broad political patterns in the two cities. In Alexandria, Democrats and supporters of the Opposition Party in this highly contested election were decidedly intermixed. The Democratic core vote consisted of two large coherent areas of the city, a small ellipse north of Washington and a large amoeba shaped below Washington Avenue with King Street as its central axis. Opposition strength covered a smaller total area (4.1 million square feet as opposed to 5.2 million square feet for the Democrats) and was more fragmentary, perhaps anticipating the failure of the effort to create a viable alternative to the threatened dominance of state politics by Democratic Party increasingly committed to a militant defense of Southern Rights. Opposition strength was spread over one large and seven smaller areas of predominate support and overlapped extensively with the Democratic core, especially its central components. The only areas of concentrated Opposition strength outside the Democratic core consisted of two two-block areas – (one on King north of Washington Avenue and one south of the Wilkes Street train tracks between Water and Fairfax)—and a handful of very highly

localized pockets, often containing only a half dozen voters at some distance from the Democrat core areas. But in the main, voters in Alexandria, as in so many other aspects of their lives in this compacted mercantile city, lived ‘cheek by jowl’ with their political opponents. A jumbled diversity was the rule. As a result, the overlap of the cores of the two parties amounted to nearly half (45 percent) of the area of the two cores combined.

Figures 17 and 18
Distribution of Political Preferences in Alexandria and Newport

The situation in industrial Newport, in the midst of its agony of industrial turmoil and economic depression, was very different. The core areas of support for the two parties were more equal (5.8 million square feet for the Democrats and 5.6 million square feet for the Republicans), the core areas of party strength overlapped a great deal less (19 percent), and there were very considerable areas of the city in which were committed to one party or the other. The Democrats again enjoyed two large areas of support – one smaller area east of Monmouth Street and the other a vast area taking in the whole of the mill district running along the Licking River. The Republicans were more fractured than their Democratic opponents, but not so much as the Opposition Party in Alexandria. Newport. The Republicans dominated an 18 square block area on the southern side of the city, with an axis on Tibbatts Street and extending westward from Central Avenue for nine city blocks, as well as four smaller areas nearer the Ohio. While concentrated support for the Republican Party was evident in the Monmouth Street Democratic core, the Mill District was very distinctively a Democratic core area. Interestingly, those few areas of Republican strength in the Mill district align rather closely with neighborhood food provision.

This suggests that the patterning of a city's retail sectors was indeed related to the patterning of its politics. In Newport, where neighborhood was more distinctive, areas took on more politically distinctive colorations: where neighborhood was more distinctive politics was also more neighborhood-specific. In Alexandria, where spatially defined neighborhoods were rare (amongst the white population), political differentiation was much more finely calibrated and seldom if ever extended to clear neighborhood political markers. Newport was a more politically differentiated city than Alexandria, a circumstance reflected in – and no doubt reinforced by – the much greater diffusion of the city's retail sector.

CONCLUSIONS

The differences chronicled here between the commercial spaces of Alexandria and Newport are consistent with patterns others have noted in the study of individual cities, which happen to be mercantile in orientation or industrial. Michael and Kathleen Conzen's work on Milwaukee comes to mind in respect of Newport as does Michael Katz's work on Hamilton, Ontario in respect of Alexandria. The congruence between the differences found in this study of Alexandria and Newport and these older single-city projects suggests the potential for the application of a comparative approach to study of small cities to sharpened the analytic focus of urban history.

Alexandria's commercial space was highly confined to a compacted retail sector along its single main street – King Street – connecting, both physically and symbolically, its vital wharf areas to the hinterlands from which its commerce flowed. Industrial Newport presented a very different commercial space – much larger and much more spatially

differentiated. Unlike Alexandria, where nearly half of the space within the corporation boundaries remained unoccupied and undeveloped, Newport was designed as a worker-owner society, rather than a renter society. Land held by those pioneers was expeditiously brought to market, developed, and incorporated by the city; whereas in Alexandria the commission merchants who defined and designed that city sought to hold land from the market, perhaps planning for speculative gains or the development of more rental accommodation. Owner-occupier housing in Newport allowed the population to spread, neighborhoods to develop, and encouraged businesses, especially those related to eating and drinking and food and fashion, to establish themselves amongst their clients. Eating and drinking places provided neighborhood gathering places, re-enforcing the locale and place. Exactly as in industrial Milwaukee, this spatial differentiation long preceded the development of urban transportation systems. Ultimately this contributed, in Newport, to a politics that was much more differentiated, much more reflective of space and neighborhood, than was the case in Alexandria where political neighborhoods did not develop and politics lacked spatial and neighborhood dimensions. The result was a system of status politics in Alexandria and spatial politics in Newport.

This paper has suggested that the development of a comparative approach to the mapping of the commercial space of carefully selected cities, in this case of a mercantile and an industrial city, can help reveal more fundamental forces structuring the social life of cities. Commercial space thus becomes a tell-tale, to use a sailing simile: an indicator of much more powerful, if less visible, forces. The commercial space of Newport resembles ever so much the patterns long ago identified by Kathleen Conzen in industrial

Milwaukee while Alexandria reflects the patterns Michael Katz long ago identified in mercantile Hamilton, Ontario and Jason Gilliland is uncovering in nearby London. Developing the social, economic, political and spatial analysis of Alexandria and Newport in parallel helps identify the underlying reasons for these similarities: one pattern speaks to a mercantile world and the other to an industrializing world. Using GIS to map out, and understand, the patterning of commercial space of small cities in a comparative context helps organize past research findings while defining the conceptual context within which will develop new agendas for a new era of systematic studies of small cities.

TABLES

Table 1:
Alexandria and Newport Business Sectors: Number of Firms and Percentage Located

Type of Business	Numbers		Percent Located	
	Alexandria	Newport	Alexandria	Newport
Commercial	473	497	95	98
Light Industrial	26	21	85	86
Heavy Industrial	10	7	100	100
Total	509	525*	94	98

* Five businesses listed in the Newport Tax Records could not be further identified.

Table 2:
Commercial Sectors: Alexandria and Newport

Sector	Category	Alexandria	Newport
Services	Agents, Brokers, Auctioneers	19	16
	Doctors, Dentists	11	18
	Lawyers, Attorneys	9	24
	Boarding Houses, Hotels	14	11

	Barbers, Cuppers, Leachers, Hairdressers	2	12
	Banks, Bankers	3	1
	Photographers	3	1
	Livery Stables	4	3
	Engineers	0	2
	Undertakers	1	5
	Subtotal	66	93
Trades	Carpenters, Cabinet Makers	9	16
	Painters, Paper Hangers	10	6
	Blacksmiths	8	7
	Gas Fitter, Steam Fitter, Plumber	2	2
	Wheelwrights	2	0
	Subtotal	31	31
Food	Restaurants, Saloons, Ordinaries, Bars, Wine Sales	35	58
	Grocery	74	80*
	Meat	22	18
	Bakeries, Confectioners	17	35
	Fruit	2	2
	Oysters, Tea	3	2
	Subtotal	153	195
Goods	Tailors, Dressmaking, Millinery, Notions, Embroidery	32	46
	Shoes and Boots	27	33
	Merchants, Commission Merchants	22	0
	Dry Goods, Fancy Goods, China	17	16
	Drug Store, Druggist	9	8
	Tobacconist, Cigar Maker	8	16
	Jewelry	5	2
	Music, Books, Stationary, Printing	9	7
	Harness, Saddles	3	1
	Guns	3	0
	Soap and Candles	2	0
	Subtotal	137	129
Households	Hardware, Tinware, Stoves	11	9
	Furniture	5	5
	Lumber, Building Supplies	5	6
	Bricks, Stone	5	6
	Carriages, Wagons	4	5
	Coal, Wood	5	5
	Subtotal	35	36
Other	Hucksters	37	0
	Various	14	13

Subtotal		51	13
Total		473	497

* Includes 17 businesses listed as ‘grocery-saloon.’

NOTES

¹ J. Gilliland and M. Novak, Trading Places: A historical geography of retailing in London, Canada, *Social Science History*, in press, p. 1.

² M. J. Hardwick, *Mall Maker: Victor Gruen: Architect of an American Dream*, Philadelphia, 2003.

³ J.E. Vance, Emerging Patterns of Commercial Structure in American Cities

⁴ M. Conzen and K. Conzen, Geographical Structure in Nineteenth Century Urban Retailing: Milwaukee, 1836-1890, *Journal of Historical Geography*, 5 (1979) 45-66.

⁵ N. Blomley, Retailing, Geography of, in R. J. Johnston, D. Gregory, G. Pratt, M. Watts (Eds), *The Dictionary of Human Geography*, Oxford, 2000, 714.

⁶ J. D. Macoll (Ed), *Alexandria: A Towne in Transition, 1800-1900*, Alexandria, 1977, 27.

⁷ In terms of physical size, the corporate boundaries of Alexandria contained about 2879994.24 square metres of space while those of Newport contained about 3530315.52 square metres.

⁸ See H. W. Hurst, *Alexandria on the Potomac: The Portrait of an Antebellum Community*, Latham, Maryland, 1991, xiii-xiv; Macoll (Ed), *Alexandria: A Towne in Transition*, 30; T. L. Purvis (Ed), *Newport, Kentucky: A Bicentennial History Newport*, Newport, Kentucky, 1996, 82-5, 109-110.

⁹ R. J. Johnston and C. J. Pattie, Putting Voters in Their Places: Local context and voting in England and Wales, 1997, in A. S. Zuckerman (Ed), *The Social Logic of Politics: Personal Network as Contexts for Political Behavior*, Philadelphia, 2005, 185.

¹⁰ See D. A. DeBats and M. Lethbridge, GIS and the City: Nineteenth century residential patterns, *Historical Geography*, 33 (2005) 79-80.

¹¹ By 1870, Newport was Kentucky’s largest center for iron manufacturing, ranked 22nd in the US, and was the 15th largest supplier of finished iron outside of Pennsylvania. See Purvis, *Newport*, 85

¹² See D. A. DeBats, A Tale of Two Cities: The utility of tax records in mapping and understanding the nineteenth century American city, *Historical Methods*, 41 (2008) 17-38 for the detailed mapping strategies employed.

¹³ This protocol guarded against including a business which had not begun to trade or had ceased to trade.

¹⁴ Excluded from this study are public services such as flour inspectors and justices of the peace, institutions such as schools and school teachers, who provided a service rather than a good and might have been publicly or privately employed.

¹⁵ The only serious mapping difficulty arose in respect of the 39 businesses for Newport which appeared in the tax list but not in the city directory; we were able to find a location for 26 of those businesses (67 percent). We were able to locate all but three of the 498 businesses listed in the Newport 1873 City Directory, a finding rate of 99 percent.

¹⁶ As far as can be determined, the labor force in the Alexandria Cotton Mill excluded both free blacks and slaves. The Cotton Mill was regarded as the largest and most important industry in Alexandria, rivaled in 1860 by Smoot's tannery and Fowle's fertilizer works. See G.T. Sharrer, Commerce and Industry, in Macoll (Ed), *Alexandria, A Towne in Transition*, 29-30.

¹⁷ Monmouth had 116 shops (24 percent) and York 109 (22 percent), while Columbia and Saratoga each had 31 shops while Jefferson had 21, Isabella and Central had 19, and Madison 15. The fourteen blocks of shops along Monmouth and York held just under half of all commercial stores in the city.

¹⁸ See DeBats and Lethbridge, pp. 84-98. The existence of a 'core population' does not imply exclusivity; core populations are approximate designations of the percentage of a total population contained within the boundaries. The profile of the designated core is dependent on the percentage of the total population to be included and the smoothing parameter selected.

¹⁹ See D. A. DeBats, Using GIS and Individual Level Data for Whole Communities: A path toward the reconciliation of political social research, *Social Science Computing Review*, (2009) 313-30, esp. 326.

²⁰ A third of Alexandria's free blacks lived within two blocks of the Wilkes Street railroad tracks.

²¹ Germans in both cities dominated the baking and confectionary trade Even in Alexandria with its relatively small German population, 10 of the city's 30 bakers whose place of birth can be determined were of German birth as were all but one of the 18 confectioners. In Newport, the German born made up 23 of the 29 bakers and 5 of 13 confectioners whose place of birth can be determined.

²² R. D. Putnam, *Bowling Alone: The Collapse and Revival of American Community*, New York, 2000, 407-8.

²³ It is possible that some of Newport's many saloons -- 53 as opposed to just 2 in Alexandria -- also provided meal contracts.

²⁴ We can deal only with the eating and drinking establishments which appear in the records; anecdotal accounts, especially in Alexandria, mention many 'oyster bars' run by free blacks but the tax and census records list only two. See Hurst, *Alexandria on the Potomac*, 37.

²⁵ Putnam, *Bowling Alone*, 407-8.

²⁶ Fashion includes stores proving boots and shoes, dressmaking, dry goods, embroidery, 'fancy goods,' millinery, tailor services, notions, watches and jewelry.

²⁷ Food shops included bakeries, butchers, butter dealers, confectionaries, fruit and vegetable sellers, groceries, groceries, groceries combined with saloons or boarding houses or liquor dealers, ordinaries, oyster dealers, saloons, tea dealers, and wine merchants.

²⁸ Conzen and Conzen, *Geographic Structure in Nineteenth-Century Urban Retailing*, 60.

²⁹ See P. F. Bourke and D. A. DeBats, Identifiable Voting in Nineteenth Century America: Toward a comparison of Britain and the United States before the secret ballot, *Perspectives in American History*, 11 (1977-1978) 259-288.