History of Retailing and Consumption

ISSN: 2373-518X (Print) 2373-5171 (Online) Journal homepage: www.tandfonline.com/journals/rhrc20

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To cite this article: Michael P. Collins (2024) The emergence of a shopping centre hierarchy in South London during the nineteenth century, History of Retailing and Consumption, 10:3, 242-273, DOI: 10.1080/2373518X.2024.2430130

To link to this article: https://doi.org/10.1080/2373518X.2024.2430130

Published online: 12 Mar 2025.

HISTORY OF RETAILING AND CONSUMPTION
2024, VOL. 10, NO. 3, 242–273
https://doi.org/10.1080/2373518X.2024.2430130

Routledge
Taylor & Francis Group

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The emergence of a shopping centre hierarchy in South London during the nineteenth century

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ABSTRACT

This article examines the changing relationship between urban population growth and the size, composition, functions and ranking of shopping centres in South London during the nineteenth century. It addresses some of the methodological issues that arose in previous studies of nineteenth-century retailing in England and Wales. The fifteen largest shopping centres have been ranked using the mean of the respective scores of their eight functional variables. Regression analysis has been used to examine the changing relationship which existed between urban population and the size, composition, and functions of shopping in 1824, 1872 and 1901. This analysis suggests that the hierarchy of shopping centres in South London was a linear continuum rather than a stepped-liked structure. It shed light on significant changes in the number of retail and commercial properties in the shopping centres. Some 68 of these centres are classified as either metropolitan (4) major (16) central area zones (3) and district (45) in the 2021 London Plan.

ARTICLE HISTORY
Received 23 March 2023
Accepted 12 November 2024

KEYWORDS
Urban history and informatics; South London; shopping centres; hierarchy; department stores; co-operatives; regression analysis; data visualisations

Introduction

Research on nineteenth-century retailing in Britain has been constrained by the lack of reliable data on numbers of shops, turnover, retail floorspace[1] and the diversity and unevenness of consumer practices. The earlier studies of nineteenth-century retailing focused mainly on incomes, wages, and standards of living.[2] Several studies have calculated the ratio of population to shops in London during the 18th and 19th centuries[3] using the entries in trade directories that have existed since 1677, and which still facilitate local historical enquiry.[4] Although the quality and coverage of these directories varies, they are still deemed to be more reliable than trade tokens, guild records and probate inventories.[5] Recent studies have examined London's Victorian Street Markets[6], Shopping Arcades,[7] the survival of suburban shopping centres,[8] historic street patterns, provincial department stores,[9] the creation of new, safe, pleasurable and emancipating places in the West End for bourgeois urban women.[10] Researchers have, however,

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been reluctant to identify shopping centre hierarchies in nineteenth-century towns and cities.[11]

A global review of the history of retailing[12] has highlighted the temporal and spatial changes that have taken place, the changing relationship between retailing and consumption, the extent of the retail and consumer revolution, the changing metropolitan environment and the emergence of female bourgeois lifestyle involving frequent shopping trips. Contributors to this same review have argued that: North West European Towns undertook a 'feverish technological journey towards mass production and standardisation of goods' in the nineteenth century;[13] that the establishment of department stores, arcades and shopping malls was a key element of the European retail and urban environment;[14] that the majority of shoppers never visited the lavish department stores and still favoured their local neighbourhood shops for most of their needs.[15]

This present study identifies the hierarchy of shopping centres in South London in 1824, 1872 and 1901. It adapted the methodology used to examine the changing urban hierarchy in England and Wales between 1913 and 1998.[16] Regression analysis is used to examine the changing relationships between resident population (the independent variable) and the size, composition and ranking of shopping centres (the dependent variable) in South London during the nineteenth century. This relationship has underpinned urban models which predict the use that will be made of retail, health and associated transport and telecommunications interactions.[17] A number of studies have confirmed that the growth and composition of shopping centres reflects the changing geographical, social and economic characteristics of their locations and catchment areas.[18]

Importance is attached to the use of diagrams which improve visualisation of the spatial relationships between resident population and retail activity. The innovative mapping approach developed in 2002[19] has been adapted to demonstrate the spatial variations identified by the regression analysis. Further diagrams have been used to illustrate the variations that existed in 1824, 1872 and 1901. The scatter diagrams (Figures 3, 8 and 14) depict the regression line and the relationships between the resident population and the size of the shopping centres. The 3D diagrams (Figures 4, 9 and 15) depict spatial variations in respect of the provision of shops in the shopping centres. The bar charts (Figures 5, 10 and 16) depict both the numbers and sizes of the shopping centres.

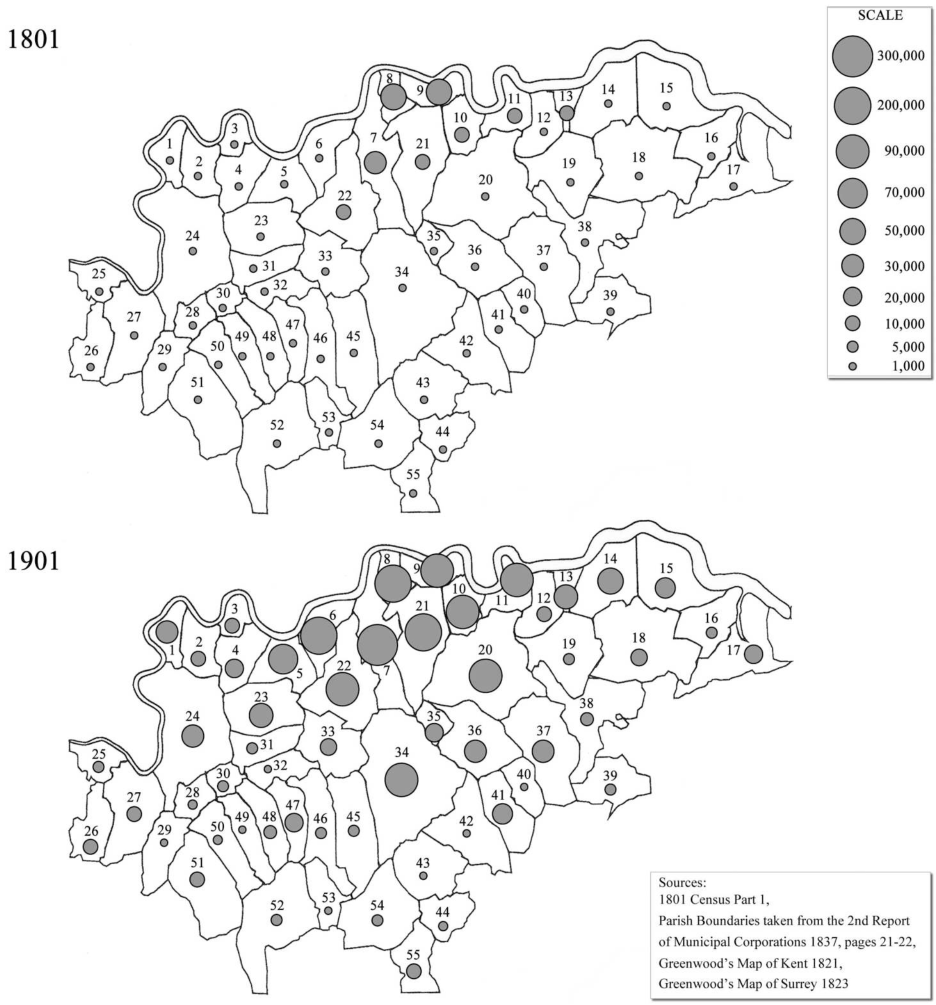
The origins and present role of hierarchies in England

The West End of London was top of the urban and retail hierarchies[20] and already established, in the early nineteenth century, as the country's centre for innovative forms of retailing such as arcades, department stores, multiple shops and co-operative stores.[21] In 1851 the Census of Great Britain cited two general 'laws' which appeared to explain the 'equitable distribution' of population and towns. A hierarchy, based on rank size, location, function and administrative status, consisted of the London Metropolis, county towns and assizes, watering places, sea ports, and three classes of manufacturing towns.[22] It also included an 'experimental' series of shading maps which depicted population density and hexagon diagrams to demonstrate the law of equitable distribution.[23] It was not until the early 1920s when researchers incorporated the models and techniques from other disciplines, that studies of urban structure were strengthened. When Burgess, for example, transcribed human ecological theory to the study of urban structure.[24] The conceptual model developed by Christaller[25] and modified by Losch[26] provided explanations for the apparent regularity in the distribution of settlements. Various methods and indices have been used to identify and rank the urban, service and shopping centre hierarchies in Greater London, England and Wales, and Great Britain. Banks, large shopping multiples, cinemas, theatres, schools, hospitals and weekly local newspapers have been used by Smailes,[27] Smailes and Reynolds[28] and Carruthers,[29] Collins[30] and Smith, R.D.P.[31] who used the 1961 Census of Distribution. Alternative approaches were adopted by Smith, H.[32] who used per capita income, population density and growth; Davies[33] used localisation coefficients to measure centrality; Thorpe[34] used the Census of Distribution data; Schiller and Jarratt[35] used specialist services, Reynolds and Schiller[36] used a combination of functional and natural breaks in the rank size distribution of multiple store branches in over 800 towns, and Hall[37] adapted the methodology used by Smailes and Smith. The concept of a hierarchy is embodied in the UK planning system. Local authorities in England, for example, were advised in 1988[38] that the concept of a hierarchy was the most suitable basis for the exercise of development control. In 2018 they were required to 'define a network and hierarchy of town centres and promote their long-term vitality and viability'.[39] The Greater London Authority defined a town centre network based upon town centre capacity, health checks and their future roles in relation to those of other centres within and outside Greater London.[40] This methodology has been criticised for its failure to recognize the emergence of a more complex retail spatial system,[41] and highlights the need for further information in respect of the size and composition of the shopping centres, the socio-economic status of the population they serve, and the interaction of nationwide exogenous, and local endogenous, variables.[42]

The South London study area

In order to shed further light on the origins of the shopping centre hierarchies examined in later studies and the London Plan 2021, the South London study area encompasses the 55 parishes located in the geographical area between the River Thames and the boundary of the Metropolitan Green Belt. These parishes continued to be the focus of local life until they were gradually absorbed into the encroaching South London suburbs.[43] During the nineteenth century this area witnessed the rapid growth of urban population[44] (see Figure 1) and retail activity, the improvement of national road communications, and the establishment of railway, omnibus and tramway networks. These improved communications influenced the subsequent development of the suburbs and some railway stations became the nucleus of emerging shopping centres.[45] But it was not until the 1860s that cheaper train fares for artisans and labourers were first introduced,[46] and 1870 that similar provision was made for tram services.[47] The following analysis will shed further light on the development of retailing in South London during the nineteenth century, bearing in mind that while the local topographical studies provided an interesting perspective on the impact of this urban growth they rarely commented on the retail growth that was also taking place.[48]

To overcome the difficulties that have arisen when attempting to identify shopping centre hierarchies in nineteenth-century towns,[49] regression analysis has been used to establish the degrees of statistical correlation that then existed between resident



Key for Figures 1, 6, and 12

1. Kew & Richmond	14. Plumstead	28. Tolworth	42. Addington
2. Mortlake	15. Erith	29. Hook & Chessington	43. Selsdon & Sanderstead
3. Barnes	16. Crayford	30. Malden	44. Warlingham
4. Putney	17. Dartford	31. Merton	45. Beddington & Wallington
5. Wandsworth	18. East Wickham & Bexley	32. Mordon	46. Carshalton
6. Battersea	19. Eltham	33. Mitcham	47. Sutton
7. Lambeth	20. Lewisham & Lee	34. Croydon	48. Cheam
8. Southwark	21. Camberwell	35. Penge	49. Cuddington
9. Bermondsey	22. Clapham, Streatham & Tooting Graveney	36. Beckenham	50. Ewell
10. Deptford	23. Wimbledon	37. Bromley	51. Epsom
11. Greenwich	24. Kingston Upon Thames & Petersham	38. Chislehurst, Footscray & Mottingham	52. Banstead
12. Charlton & Kidbrooke	25. Molesey	39. Orpington	53. Woodmansterne
13. Woolwich	26. Esher	40. Hayes	54. Coulsdon
14. Plumstead	27. Thames & Long Ditton	41. West Wickham	55. Caterham

Figure 1. South London distribution of population 1801–1901.

population (the independent variable) and the provision of shops and services (the dependent variable) in 1824, 1872 and 1901.[50] The shop and business premises data was abstracted from Pigot's 1823/4 directory,[51] which was renowned for its accuracy and consistency[52] and Kelley's 1872 and 1901 Post Office Suburban Directories.[53] Whilst concerns have been expressed about the reliability of these directories several researchers have concluded that the use of other fragmentary sources, such as probate inventories, trade tokens and guild records failed to match the poorest directories.[54]

The following assumptions were made to overcome the lack of small area and shopping trip data. The catchment areas of the service centres in the contiguous inner built-up area were defined using the 'laws of retail gravity'.[55] Their respective populations were the product of each catchment area multiplied by the gross residential density. When the residents in the inner South London suburbs decided which of the local service centres, high streets or street markets offered the best value and range of goods and services, they were in fact considering the intervening opportunity cost of each.[56] It has been assumed that most of the residents in the outlying towns and villages were presented with less choice and would visit their nearest accessible service centre, bearing in mind that they still rarely walked further than seven miles to meet, and still knew next to nothing of what was happening in other places.[57]

South London retailing in 1824

Retailing in the South London study area in 1824 was still the prerogative of small firms, corner shops, and street markets. The initial capital required to establish a shop, reflected its location, size, and branch of retailing. For example, the capital needed to establish a shop could range from £50 to £200 (for an apothecary) and £1000 to £5000 (for a woollen draper).[58] The annual cost of renting a shop in the West End ranged from £400 (St James's Street) to £112 (Piccadilly) whilst the cost in South London ranged from £133 (the Borough) to £21 (Richmond, Surrey).[59] The increase in the number of small shops suggests that working-class families were able to meet the start-up costs of setting up a shop.[60] Many of the small shopkeepers came from the same social background as the unskilled families they served.[61] They were independent, lived over the shop which was open all hours, were only able to purchase goods in small quantities, expected to allow credit, and were willing to deliver to counter the competition from hawkers. Further information about the difficulties they experienced, including the costs of setting up a shop, can be found in various House of Commons Select Committee reports.[62] Different views have been expressed about the importance of itinerant street traders[63] who tended to congregate in a number of street markets in Southwark, Bermondsey and Lambeth, where the working class bought their food, clothing, cutlery and crockery.[64] These street markets stayed open late on Saturdays and increasingly on Sundays.

The South London shopping centres in 1824

According to Pigot's Directory, there were at least 4721 shops and business premises in the study area. This total included 1356 shops (28.7%) selling foodstuffs, 1250 premises (26.8%) providing commercial services, 1053 shops (22.3%) selling clothing, 478 premises (10.1%) providing professional services, 308 shops (6.5%) selling household goods and 276 shops (5.8%) selling luxury goods. (See the Appendix for details of this classification). These shops and business premises were grouped in 39 shopping centres (see Figure 2) which, regardless of their size, provided a similar range

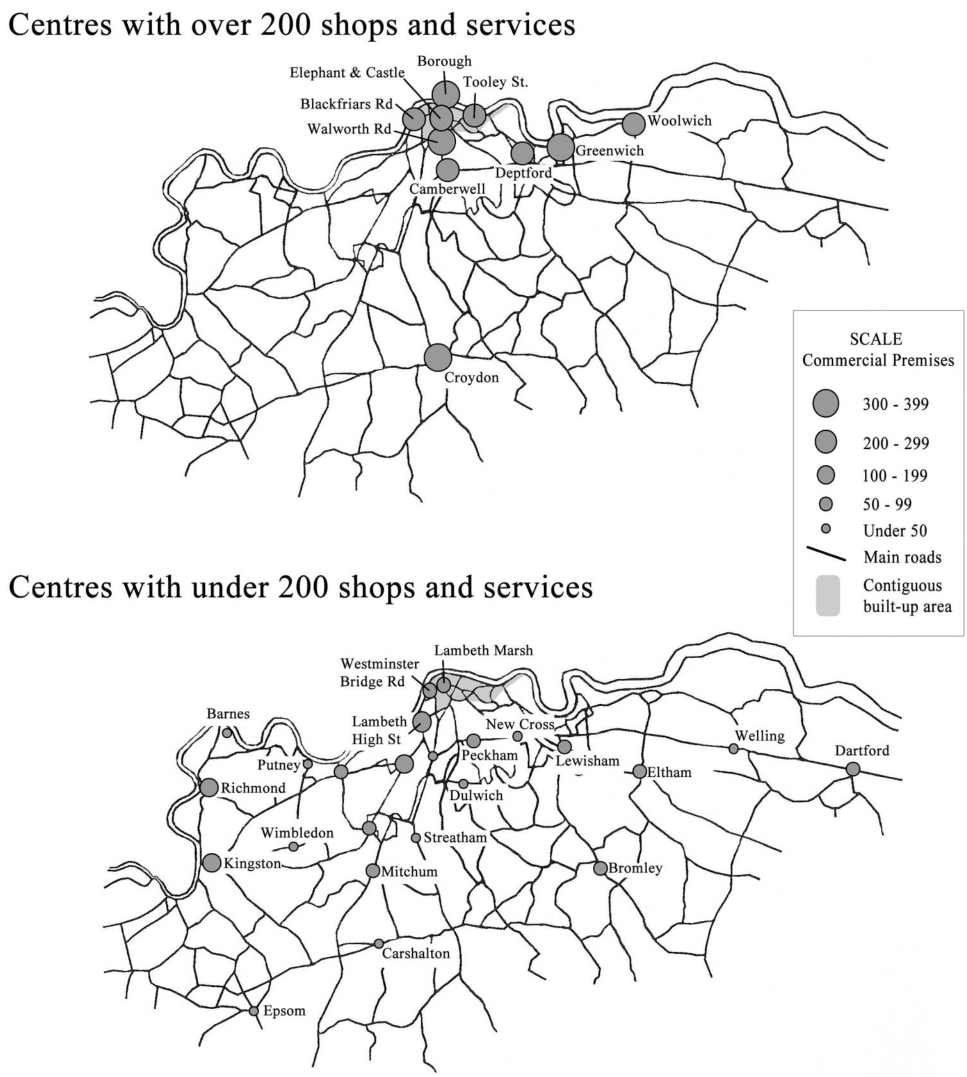


Figure 2. South London shopping centres 1824.

of goods and services. It is worth noting, at this juncture, that 24 of these centres are listed as either Metropolitan, Major or District town centres in the 2021 London plan.[65]

Very little public control was exercised over the development of the commercial cores of towns and villages due in part to the lack of local government regulatory powers, capital and expertise.[66] Only two of the fifty Local Acts promoted by parish vestries in the South London study area included provision for the construction of a market house,[67] and two empowered local vicars to grant building leases on their Glebe Lands.[68] When minimum regulations did exist, they were applied patchily by the local parish vestries.[69] The development process was instigated mainly by local land and property owners. It was often undertaken by small builders, craftsmen and tradesmen. The new commercial buildings included purpose-built premises with residential accommodation above, developing the front gardens of rows of terraced cottages, and the conversion of the front rooms of individual houses.[70]

Although the available information is difficult to disaggregate, previous studies have provided interesting data on the turnover, margin and credit of individual retailers in the Borough, Old Kent Road, Richmond, and Woolwich;[71] and on the house class assessments, trade and income of the persons who lived in the properties visited by the London Window Shop Tax Commissioners.[72] The assessments of shops in the Southwark parishes ranged from under £1 (23.1% of the shops) to between £10-£20 (5.4% of the shops).[73]

Regression analysis has confirmed that a significant statistical relationship[74] existed between the resident population in the catchment areas of each centre and its size and composition (see Table 1). This relationship was less pronounced with respect to the retailers selling household goods[75], and the premises providing commercial[76] and professional services[77] (See the Appendix for list of shop types and commercial and professional services). The significant variations that have been identified reflect the location and economic base of each centre, the socio-economic composition and disposable income of the resident population, and its proximity to neighbouring centres. The Borough of Southwark, for example, was an important centre for textiles, clothing, and hat-making, furniture making, leather goods, machine and tool making.[78] The disposable income would have been greater than that of the neighbouring districts, which may explain why 34.4% of all the shops in the study area were in the Borough of Southwark, together with 45.4% of all the shops selling luxury goods and 45.4% of the premises providing services. Croydon, however, was an important exception. It was the fourth largest shopping centre in the study area although its population was less than half that of the three larger centres located approximately eight miles to the north. By the early 1800s it was an important communications hub[79] with daily stage-coach services to the City, Westminster and Brighton,[80] and one of the four towns where the Surrey county assizes met.[81] It was the largest shopping centre in N.E. Surrey and N.W. Kent, where the neighbouring competing centres were much smaller. This highlights the importance of the scale constraints imposed by early nineteenth-century parish boundaries.[82] An analysis of the relationship between house patterns and type of property found that the correlation coefficient was 0.529 for local authorities in England whereas in Richmond-upon-Thames it ranged from 0.93 (detached houses) to 0.74 (terraced houses).[83]

Further information is provided in Figure 3, the scatter diagram depicting the spatial relationships between population and the size of each centre, Figure 4 depicting the spatial concentrations of retail and services activity, and Figure 5 depicting the numbers and sizes of centres.

Table 1. South London 1824 regression equation.

1	Total Premises = 14.46156 + (0.01169462 x Population)	R squared 0.8503
2	Business Types = 18.35941 + (0.00156924 x Population)	R squared 0.70797
3	Food Shops = 11.12345 + (0.003260439 x Population)	R squared 0.5274
4	Clothing Shops = 4.058698 + (0.002470302 x Population)	R squared 0.7115
5	Household Goods = 1.099711 + (0.0004974347 x Population)	R squared 0.3603
6	Luxury Shops = 0.259688 + (0.0008226422 x Population)	R squared 0.5922
7	Commercial Services = 5.747025 + (0.003859434 x Population)	R squared 0.6909
8	Professional Services = 4.13246 + (0.0008355573 x Population)	R squared 0.4028

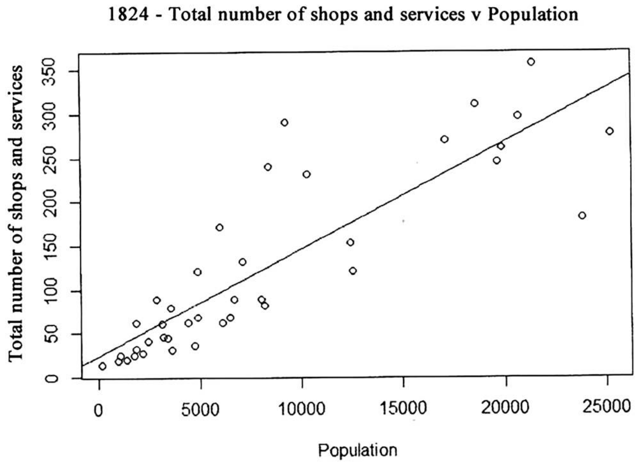


Figure 3. South London regression analysis 1824.

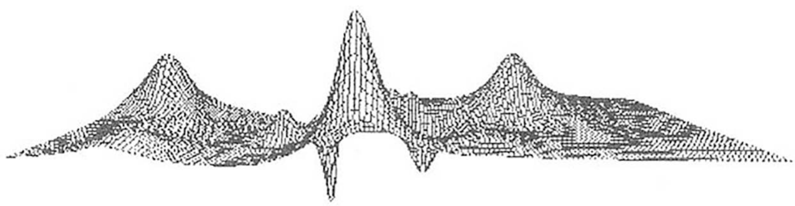


Figure 4. South London: spatial concentrations of retail and service activity1824.

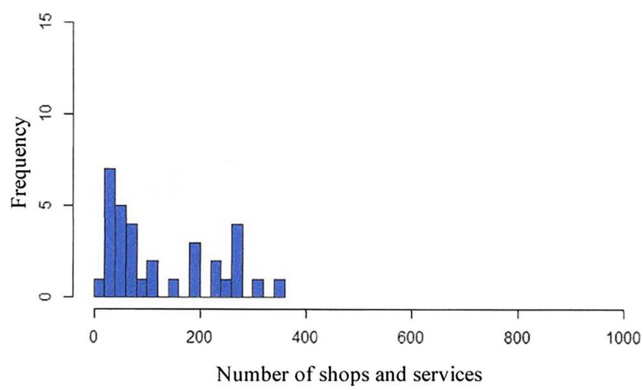


Figure 5. South London: the number and sizes of shopping centres 1824.

South London 1824 ranking the fifteen largest shopping centres

The 'median rank' system used in an earlier study, which is easy to understand, rigorously calculated and not fitted to the data,[84] has been adapted using the means of the eight functional variables to rank the fifteen largest shopping centres in South London in 1824. (See Table 2). The disparities between the luxury goods and professional services

Table 2. London 1824: ranking the 15 largest shopping centres.

Centre	CP	BT	F	C	H	L	CS	PS	Mean	RANK
Elephant	1	2	8	1	6	1	1	5	3.12	**1**
Borough	2	4	4	2	8	2	5	12	4.87	**3**
Greenwich	3	2	2	4	5	14	7	5	5.25	**4**
Croydon	4	1	3	5	8	6	9	1	4.62	**2**
Tooley St	5	7	7	14	14	3	2	2	6.75	**6**
Woolwich	6	3	6	3	4	4	11	6	5.37	**5**
Deptford	7	6	1	13	2	9	17	7	7.75	**9**
Blackfriars	8	10	9	8	8	5	3	9	7.5	**7**
Walworth	9	5	6	16	1	7	16	3	7.87	**10**
Camberwell	10	8	5	9	3	8	10	8	7.62	**8**
Lambeth High St	11	14	12	12	13	12	9	15	12.25	**13**
Richmond	12	9	10	7	12	11	13	4	9.75	**11**
Uniion St	13	10	16	13	12	9	6	19	12.25	**13**
Clapham	14	12	11	11	8	13	14	13	12	**12**
Kingston	15	11	13	15	7	13	17	10	12.62	**14**

CP = Commercial Premises, BT = Business Types, F = Food, C = Clothing, H = Household Goods, L = Luxury Goods, CS = Commercial Services, PS = Professional Services

rankings of the centres, which suggest higher levels of disposable income, reflect both the size and the socio-economic character of their respective catchment areas. For example, the Elephant and Castle was ranked first for luxury goods and fifth for professional services, Croydon was ranked sixth for luxury goods and first for professional services, the Borough High Street was second for luxury goods and twelfth for professional services, Greenwich was ranked fourteenth for luxury goods and fifth for professional services.

South London retailing 1825–1872

The population increased by 308.1% from 379,849 in 1821 to 1,588,105 whilst the number of shops and services increased by 70.1% from 4721 in 1824 to 7464 in 1872. The ratio of persons per shop ranged from 272.7 persons in the Tower Bridge Road to 11.2 persons per shop in New Malden. The 1871 Census provided only limited data on the number of persons engaged in retailing. There was concern about the probable under reporting of the resident population together with the difficulties that had arisen since 1801 with respect to the classification of occupations.[85] For example, the persons listed in the Sixth Sub-Group of Commercial Class III include bankers, merchants, brokers, tradesman of all types including hawkers and pedlars. Whilst the women in this order included capitalists, shareholders, shopkeepers, saleswomen, commercial clerks, hawkers and pedlars.[86] Some 22,177 persons in London were listed as ‘other general Dealers’ which included pawnbrokers (9.4%), Dealers (42.3%), Hucksters and Costermongers (11.7%), Hawkers and pedlars (36.3%).

It has been suggested that the increasing supply of manufactured goods required more retail and commercial premises as well as increasingly sophisticated and well-organised internal trade networks.[87] During this period the retail and distribution industry responded positively to the challenges and opportunities posed by the rapid growth of urban population which grew from 379,849 in 1821 to 1,588,105 in 1871 (see Figure 6) and to the changing economic climate.[88] London wages were higher than the rest of Europe.[89] There were increases in the tax that was paid,[90] the returns of the savings banks and building societies, and the demand for a wider range of foodstuffs and

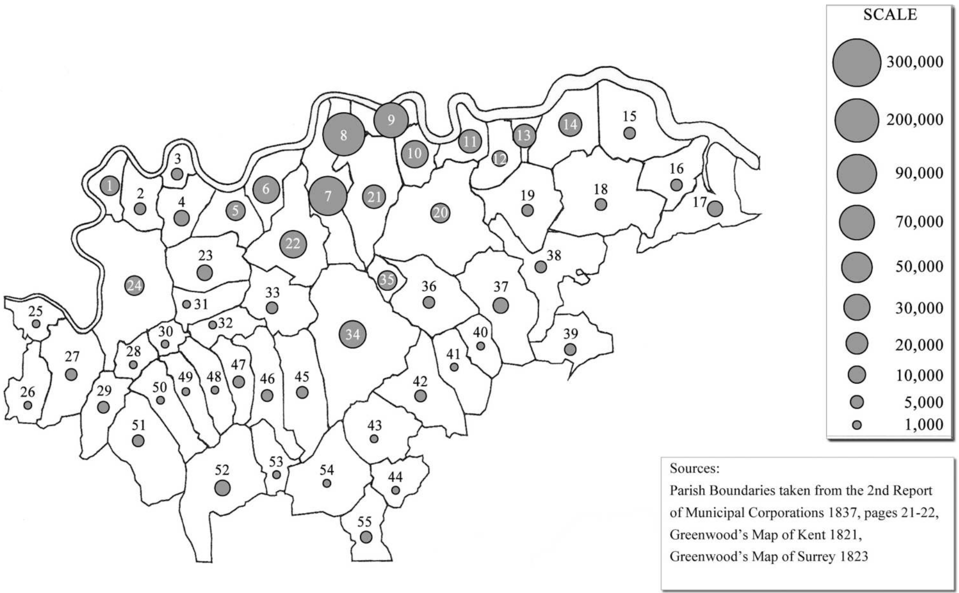


Figure 6. South London population 1871.

durables.[91] These stimulated the emergence of mass marketing and consumption,[92] changing retail practices including hire purchasing and the use of advertising to attract customers, and the emergence of new forms of retailing. The Co-Operative movement reached South London in 1824 when branches were opened at Kennington, Lambeth, and Southwark. This added a new dimension to retailing by introducing an element of democratic control, open dividend on purchases and cash only trading. By 1871 some 250 local co-operative societies had been established in the Metropolis and the surrounding settlements.[93] The establishment of department stores in the West End was soon followed by similar developments in the adjacent suburban centres and outlying market towns to meet the growing middle-class demand for a greater range of goods and services.

The evidence presented in 1833 to a House of Commons Select Committee shed light on the changing character of retailing in the UK in general and the metropolis in particular. An examination of the payments, capital, profits and general mode of doing business by retailer dealers confirmed that a better system of doing business had been introduced, and that the smaller shops suffered from competition of the larger shops which were doing more business.[94] Although retail trade in the metropolis had increased considerably during the last eight to ten years, the rate of profit was lower than it had been formerly, due to the increased level of competition from the larger establishments which had adversely affected the smaller retailers. In 1843 there was widespread bankruptcies among the small retailers who were unable to offer credit.[95] In 1865 70% of the 430,000 debt judgements in England and Wales were below 20 shillings. The creditors were primarily local drapers, grocers, general dealers, jewellers and money lenders.[96]

The Report from the Select Committee on Sunday Trading (Metropolis) provided further information on the increased scale of retail activity in South London and the range of goods, which now included boots, shoes, drapery, toys, furniture, crockery, ironmongery as well as perishable goods.[97] Attention was focussed on the extent of Sunday trading in Lower Marsh and the New Cut in Lambeth, where the shops 'were as large and respectable as in any town' and the problems that it posed.[98] An estimated 100,000 'labouring population were loitering in the streets, hanging about old clothes or boot shops, or other shops, or buying inferior articles at extravagant price, in consequence of the comparative monopoly enjoyed by the Sunday Traders'.[99] During the 1840s and 1850s various attempts were made to restrict Sunday trading and a range of legislative measures were adopted to exercise public control over street markets.[100] In 1860 petitions were presented to Parliament to express concern at the provisions of an Act to legalise aspects of Sunday trading in the Metropolitan Police District and the City of London.[101]

Although the shopkeepers tended initially to be entrenched in their local areas, they occupied a significant place in local society.[102] They participated in local affairs, served in the Vestries and Boards of Guardians, and favoured the new Poor Law to keep the local rates down.[103] From 1824 retailers had to comply with the provisions of the Weights and Measures Act which was renewed, changed nine times and culminated with the 1997 Act. The Margarine Act 1865 further constrained their activities in order to protect their customers. The provisions of these Acts were initially enforced by inspectors appointed by the individual parish vestries.

The South London shopping centres 1872

It was noted earlier that the population in the study area increased much faster than the number of shops and related commercial and professional services This differs from the findings of previous studies where the number of shops had increased faster than the population.[104] The number of shopping centres, however, had increased from 39 to 80. Fourteen of these new service centres were located in the inner London boroughs of Battersea (1), Bermondsey (2), Camberwell (2), Lewisham (6) Southwark (1), Wandsworth (1), and Woolwich (1). The remaining twenty-seven shopping centres were located in the adjacent country towns and villages (see Figure 7). New shops and commercial premises were located either where old premises had already been established on main roads and connecting side streets in the core of existing settlements or in new locations. Some of the railway stations, for example, became the nucleus for new settlements and local shopping centres[105] at Bickley, Chislehurst, Clapham, New Malden, Sidcup, Surbiton and Wimbledon.

Whilst few areas were markedly 'superior' or 'inferior' in socio-economic terms during the first half of the nineteenth century each centre had its own special character and clientele which reflected its size, location, and place in the fashion hierarchy. For example, Walworth was deemed higher than Bermondsey but lower than Lewisham.[106] Examinations of the service centres in Battersea and Clapham,[107] Peckham,[108] Streatham[109] and Woolwich[110] provides further information on local development processes, and the redevelopment of existing shopping centres to meet the building requirements of retailing.[111] Landowners converted their leases into building leases which enabled commercial and residential development to take place in the high streets and the open land on the outskirts of the metropolis.[112] Landowners continued to extract monopoly rents in London during the nineteenth century.[113] The town and parish councils made slow progress in adopting measures to meet the requirements of retailers.

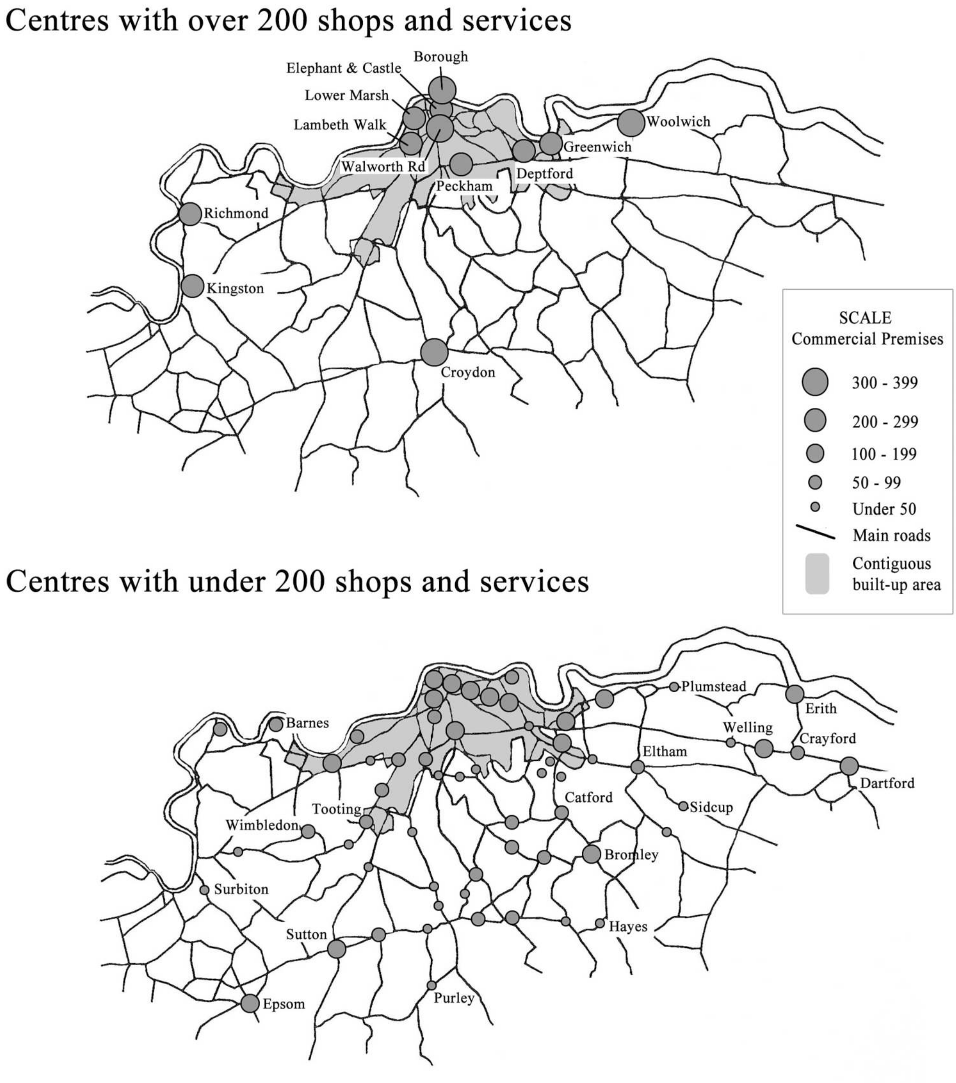


Figure 7. South London shopping centres 1872.

There were at least 2659 shops (35.6%) selling foodstuffs, 1577 shops (21%) selling clothing, 847 shops (79%) selling household goods, and 1395 premises (18.7) providing commercial services and 476 premises (6.4%) providing professional services. The range of shops and services in these centres was very similar in that they met most, if not all, of the basic needs (food, clothing, and household) of the residents in their respective catchment areas (see the Appendix). There were no luxury goods shops and professional services in the 15 smallest centres (less than 42 premises). The size and to a lesser extent the number and range of shops and services is still the main criteria for defining the shopping centre hierarchy in 1872. Further information is provided in Figure 8 the scatter diagram depicting the spatial relationship between population and the size of each centre, Figure 9 depicting the spatial concentrations of retail and commercial activity, Figure 10 depicting

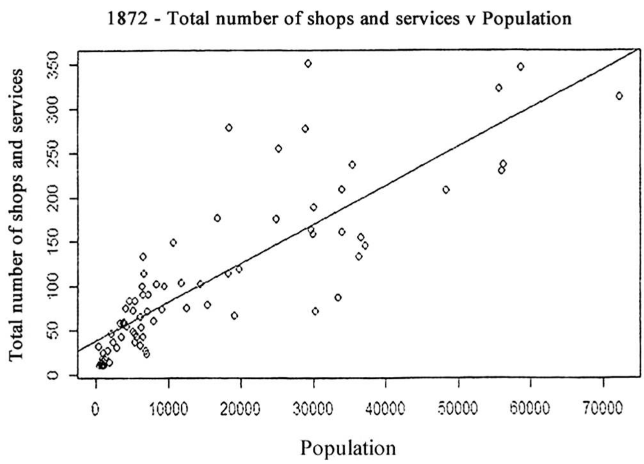


Figure 8. South London regression analysis 1872.

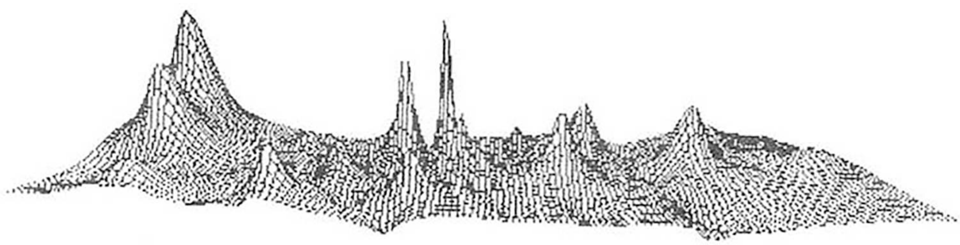


Figure 9. South London: spatial concentrations of retail and service activity 1872.

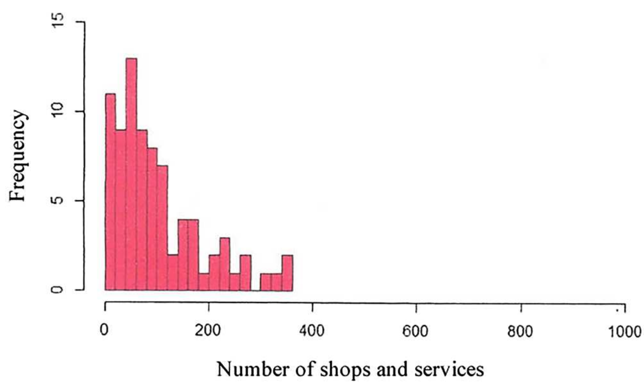


Figure 10. South London: the number and sizes of shopping centres 1872.

the numbers and sizes of the service centres, and Figure 11 which depicts the amount of credit available on 21st of December 1870.

The establishment of department stores at Streatham (1850s), Sydenham (1860), Bexleyheath (1861), Kingston-upon-Thames and Peckham (1867) often began with the gradual expansion of a drapery store to assemble sufficient floor space to accommodate new facilities such as toilets, restrooms, cafes and tea rooms.[114] They varied in terms of

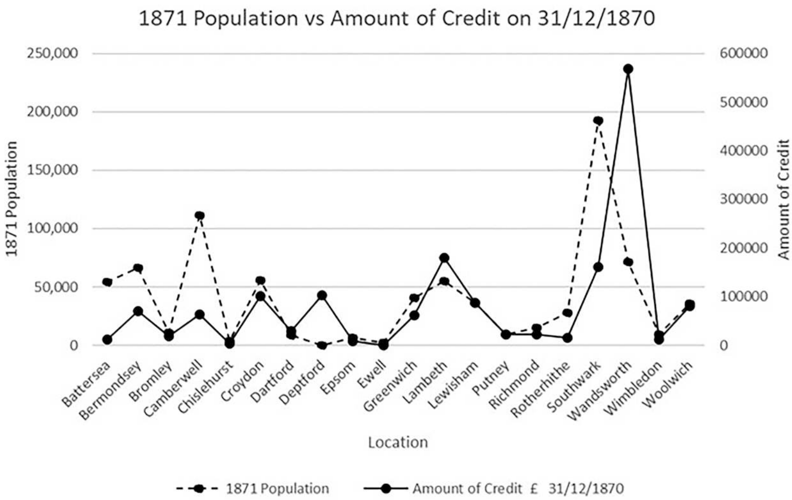


Figure 11. South London population and credit (31/12/1870).

their organisation, profitability and productivity and relied initially upon middle-class customers for the first decades of their existence. The establishment of these stores in shopping centres, which varied greatly in terms of their catchment areas, the growth of population, the numbers of shops and services, and initial ranking in 1824 (see Table 3) raises questions about the criteria which influenced these investment decisions.

Bexleyheath is an example of what Hall referred to as an accident of local history.[115] It was not until 1814 that an Enclosure Act facilitated the construction of a limited number of houses and shops, a market house in 1830 and the establishment of a department store in 1861. This 'New Town' was not connected to the railway network until 1895 and the local tramway in 1903.

Regression analysis confirmed that the relationship between resident population and the number of shops and services in the catchment areas of each centre was statistically significant[116] (see Table 4). It was less pronounced in respect of the relationship between

Table 3. South London: the location of department stores 1850–1867.

Shopping centre	Rank 1824	Population change 1821–1861	Shops and services change 1824–1872
Kingston-Upon-Thames	14	258.1%	109.9%
Peckham	24	2357.5%	282.3%
Streatham	33	129.9%	35.5%
Wimbledon	34	262.5%	174.1%
Bexleyheath	/	+113.9% *	/

* = The percentage change for the Parish of Bexley.

Table 4. South London 1871 regression equations.

1	Total Premises = 37.25667 + (0.004392065 x Population)	R squared 0.7022
2	Business Types = 15.94235 + (0.001388085 x Population)	R squared 0.4558
3	Food Shops = 16.04858 + (0.001388085 x Population)	R squared 0.6843
4	Clothing Shops = 6.072707 + (0.001010139 x Population)	R squared 0.6641
5	Commercial Services = 9.427995 + (0.0006686801 x Population)	R squared 0.4477
6	Luxury Shops = 1.361708 + (0.0003617007 x Population)	R Squared 0.676
7	Household Goods = 1.471692 + (0.00066632422 x Population)	R Squared 0.5185
8	Professional Services = 2.828473 + (0.0003003033 x Population)	R squared 0.4153

resident population and household goods[117], commercial[118] and professional[119] services in each centre. These variations reflect the socio-economic character of the catchment areas as evidenced, for example, by the local taxation returns of the borough, parishes and vestries in which they were located,[120] and the amount of credit on deposit in Post Office Savings Banks in 1870 (See Figure 11).

Ranking the fifteen largest shopping centres

By 1871 some changes had taken place to both the ranking and composition of the 15 largest shopping centres in 1824 (See Table 5). Croydon, the third largest centre was ranked third for luxury goods and first for professional services, the Borough High Street, the largest centre was ranked second for both luxury goods and professional services, the Elephant and Castle, the nineth largest centre was ranked fifth for luxury goods and eleventh for professional services, Greenwich, the eleventh largest centre was ranked nineth for luxury goods and fourth for professional services. Peckham, the eighth largest centre, was ranked seventh for luxury goods and fourteenth for professional services, Deptford, the twelfth largest centre, was ranked eleventh for luxury goods and seventeenth for professional services.

South London retailing 1872–1901

The development of large-scale retailing was well advanced in the study area during this period. The distributive trades continued to respond positively to the opportunities and challenges posed by the shifting patterns of consumption in South London.[121] This response was facilitated by Britain's ability to open new areas of production and to finance imports of an increasing range of manufactured goods that were not subject to tariffs,[122] and stimulated by higher wages,[123] lower prices, the growing demand for a wider range of manufactured products and enhanced shopping experiences.[124] Improved communications and technology facilitated the transportation of both perishable and frozen food which were now sold in the emerging multiple food store chains as well as

Table 5. South London 1872: ranking the 15 largest shopping centres.

CENTRE	CP	BT	F	C	H	L	CS	PS	MEAN	RANK
Borough	1	5	4	3	2	2	2	2	2.62	**1**
Woolwich	2	2	4	4	1	1	6	12	4	**3**
Croydon	3	4	5	1	7	3	3	1	3.37	**2**
Walworth rd	4	8	1	2	5	4	11	8	5.37	**5**
Richmond	5	3	2	6	11	7	7	3	5.5	**4**
Lower marsh	6	1	6	8	7	8	1	9	5.75	**6**
Kingston	7	6	11	5	5	6	9	5	6.75	**7**
Peckham	8	9	7	14	2	7	19	14	10	**11**
Elephant	9	7	12	9	4	5	6	11	7.87	**8**
Lambeth walk	10	11	14	8	6	1	10	10	8.75	**9**
Greenwich	11	10	16	11	8	9	8	4	9.62	**10**
Deptford	12	11	8	10	9	11	13	17	11.37	**13**
Old Kent Rd	13	11	15	12	10	9	14	6	11.25	**12**
Tooley Street	14	6	13	27	3	15	5	17	12.5	**15**
Bermondsey Street	15	5	19	19	7	16	1	16	12.25	**14**

CP = Commercial Premises, BT = Business Types, F = Food, C = Clothing, H = Household Goods, L = Luxury Goods, CS = Commercial Services, PS = Professional Services.

the street markets. The demand for these new products was stimulated by the growth of fly sheets, posters, trade magazines and the establishment of low priced national daily, evening and weekly local newspapers which publicised the range of goods and personal services that were now provided in the larger shopping centres.[125] By 1901 some 87 local weekly newspapers had been established in the study area.[126] The increase in literacy that had taken place enabled these newspapers to promote local shops and services and widen the experiences of the majority of the urban work force.[127]

New department stores were established in Brixton (1877 and 1880s), Clapham Junction (1881), Woolwich (1884 and 1886), Eltham (1887), Erith (1894), Croydon (1894 and 1898) and Wimbledon (1894). There were significant variations in the size, ranking, composition and the growth rates of population and shops and services in these shopping centres (See Table 6). The increases in the number of shops and services ranged from 171.2% in Croydon to 473.6% in Brixton whilst the population increased from 17.1% (Woolwich) to 884.8% (Clapham Junction). Twelve new centres were located in the Outer Metropolitan country towns where the road and rail communications had been improved, and residential developments were taking place.

The number of multiple shop firms and branches in the study area grew rapidly and now included grocery provisions, meat, shoes, clothing, household goods, footwear, clothing, and pharmaceuticals.[128] In 1894 Marks and Spencer established branches in Southwark (8, London Road) and in Lambeth (25, New Cut). By 1901 the following companies had already established branches in the study area: the Home and Colonial (40), the International (19), Liptons (16), Sainsbury (7), Boots the Chemists (9), Mence Smith (26), Lilley and Skinner (6), Dunn and Co (6), Freeman Hardy and Willis (3), and J. Hepworths (2). Several independent grocers, butchers, confectioners, tobacconists and chemists had also established branches in neighbouring local district high streets and shopping centres.

The Guild of Co-operators, a London-based group of middle-class sympathisers helped to establish co-operative societies in London and the southeast. The number of co-operative societies in London grew steadily during the period 1872–1893. Local cooperative societies were established throughout the study area and, together with the CWS and the Royal Arsenal Societies, continued to expand and provide good quality, fair-priced goods to meet the basic needs of working-class families in the study area, who also shared in the profits. [129]

Towards the end of the nineteenth century the small shopkeepers established retail trade alliances to counter the increased competition from the department, multiples, and co-operatives stores. They sought to create a regulated retail environment and protect their reputations, traditions, skills and profits, as well as responding to local government controls and restrictions, the levels of local rates, and the quality of utility

Table 6. South London: location of department stores 1877–1898.

Shopping centre	Rank 1872	Population change 1871–1901	Shops and services change 1871–1901
Croydon	1	64.4%	171.2%
Brixton	3	77.3%	473.6%
Clapham junction	11	884.8%	739.4%
Woolwich	5	17.1%	26.7%
Eltham	41	75.7%	29.3%
Erith	34	204.1%	71.8%
Wimbledon	31	358.4%	294.6%

services. Various branches tried to foster the introduction of retail price maintenance to counter growing price competition in the last two decades.[130]

By 1901 The number of shops increased by 125.01% from 8035 to 18,322 and the population had increased by 42.91% from 1,585,105 to 2,269,570 (see Figure 12). The ratio of population per shop ranged from 42 per shop in the Old Kent Road to 391 per shop in Greenwich Town Centre. The Registrar General confirmed that doubts existed about the accuracy of the occupation tables in the 1901 County of London Census.[131] In 1901 some 68,255 persons worked in the shops together with 3119 costermongers, hawkers, and street sellers. Although most workers in London were better paid than elsewhere by the end of the nineteenth century, female workers in the retail trade were still poorly paid (see Table 3).[132] The findings of successive Parliamentary Select Committees paved the way for statutory provisions, enforceable by local authorities, to improve the working conditions of shop assistants.[133] Between 1st January 1899 and the 31st March1901 the London County Council's inspection of 9410 indoor and 24,924 outdoor premises found that only 0.7% of the 45,506 young persons were working over 80 hours per week.[134]

South London shopping centres 1901

The number of shopping centres increased from 80 in 1872 to 97 in 1901 (see Figure 13). Six new centres were located in the metropolitan Boroughs of Deptford (1), Lambeth (1), Lewisham (2), Southwark (1) and Woolwich (1), together with two new centres in Outer Metropolitan Kent and nine new centres in Outer Metropolitan Surrey (see Figure 13). There were at least 18,322 retail and commercial premises in the study area, 3962 shops (21.6%) selling foodstuffs, 2681 shops (14.4%) selling clothing, 1598 (10.7%) selling household goods, 1394 (7.6%) selling luxury goods, and 6241 premises (34.1%) providing commercial services, and 2091 premises (11.4%) providing professional services.

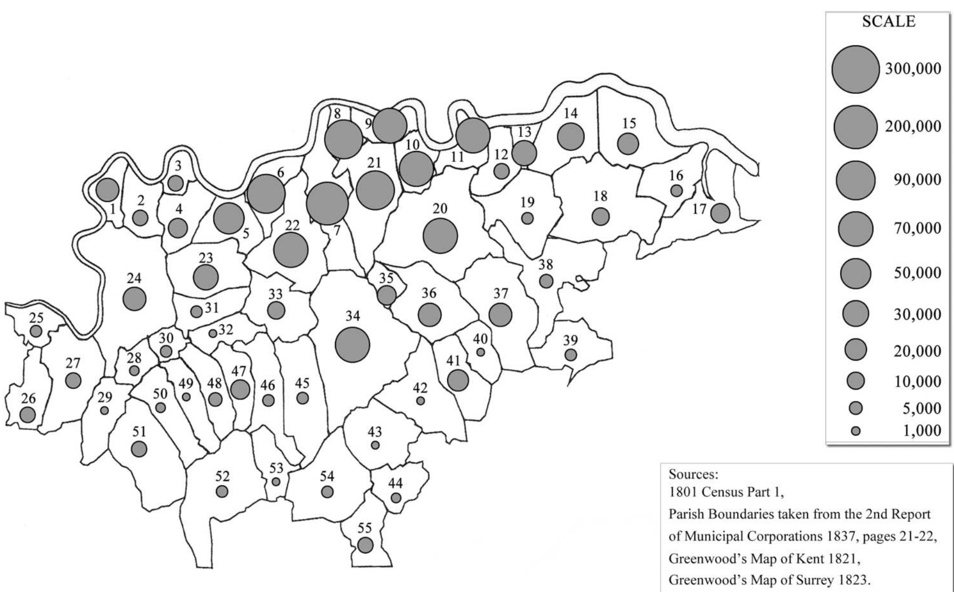


Figure 12. South London population 1901.

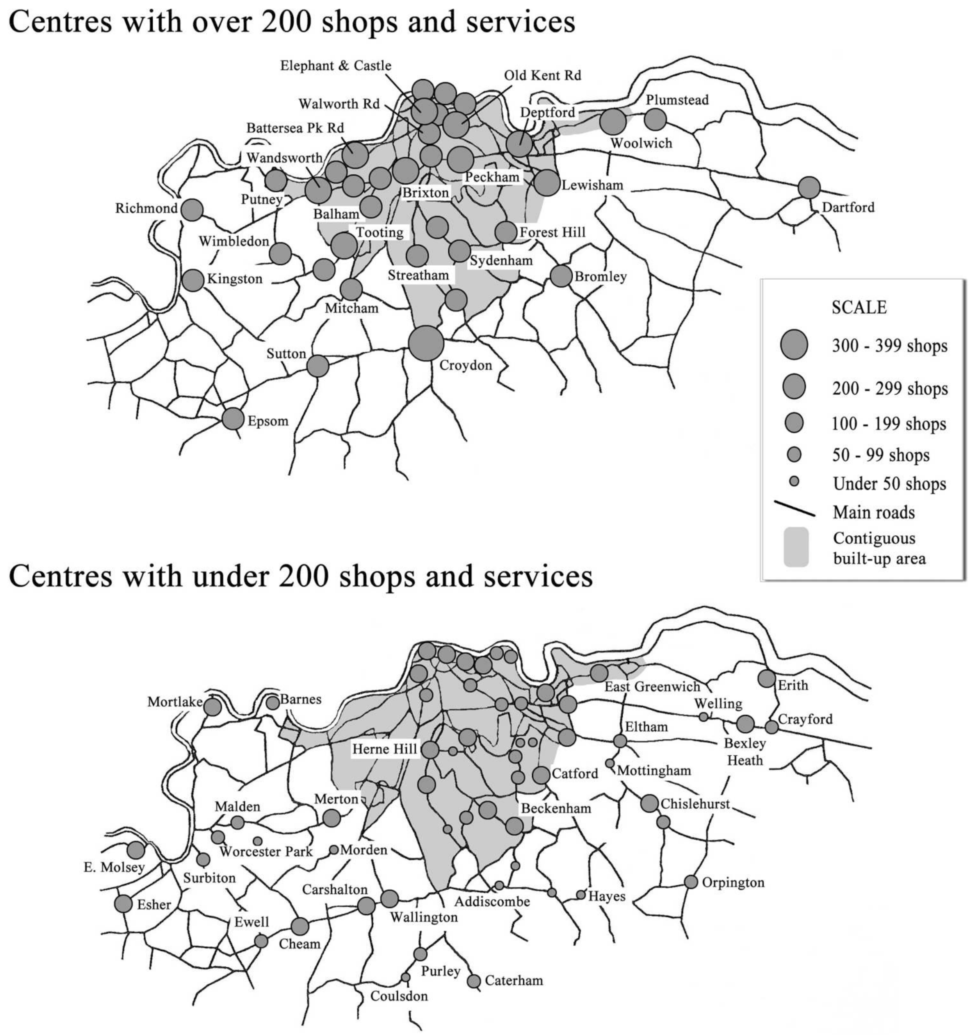


Figure 13. South London shopping centres 1901.

Regression analysis has confirmed that there is a slightly lower but still statistically significant relationship between resident population and the number of shops[135], household goods[136], commercial[137] and professional services[138] (see Table 7). Although the resident population in the Bermondsey Street, Blackfriars Road, Southwark Park Road, Tooley Street and Tower Bridge Road catchment areas fell, the number of shops, commercial and professional services premises grew in all but the Tower Bridge Road centre, where the number fell by 41.7%. The service centres in the study area were also adopting new retailing and marketing technologies to meet the changing demands and expectations of consumers, and increased competition from neighbouring centres. Further information is provided in Figure 14 – the scatter diagram depicting the relationship between population and the size of each shopping centre, and Figure 15 the number and sizes of the shopping centres (see Table 8 and Figure 14).

Table 7. South London 1901 regression equations.

1	Total Premises = 65.11192 + (0.005679116 x Population)	R squared 0.6786
2	Business Types = 27.17343 + (0.0004247113 x Population)	R squared 0.6155
3	Food Shops = 19.179 + (0.00100971 x Population)	R squared 0.445
4	Clothing Shops = 2.601742 + (0.001137779 x Population)	R squared 0.694
5	Commercial Services = 25.63141 + (0.001813665 x Population)	R squared 0.6118
6	Luxury Shops = 4.7228243 + (0.004683437 x Population)	R squared 0.4818
7	Household Goods = 1.364917 + (0.0007671123 x Population)	R squared 0.7048
8	Professional Services = 11.88943 + (0.0004750332 x Population)	R squared 0.2647

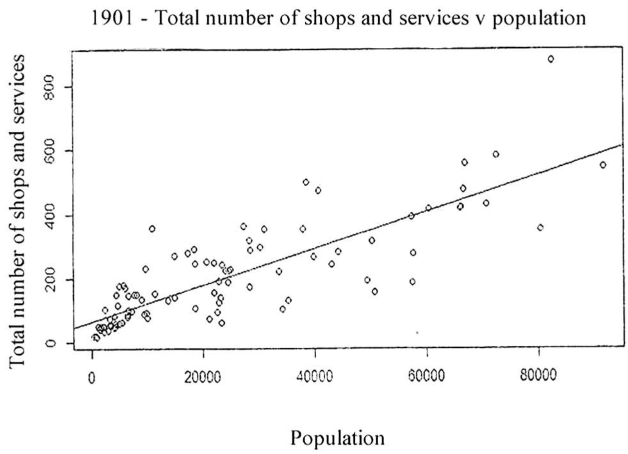


Figure 14. South London regression analysis 1901.

Figure 15. South London: spatial concentrations of retail and service activity 1901.

South London 1901 ranking the fifteen largest shopping centres

Bermondsey Street, the Borough High Street, Lambeth Walk, Lower Marsh, Richmond, and Tooley Street have been replaced by Battersea Park Road, Brixton, Bromley, Clapham Junction, Epsom, Tooting and Wandsworth (see Table 8). Croydon, the largest centre, was ranked first for both luxury goods and professional services, the Elephant and Castle, the second largest centre was ranked second for luxury goods and tenth for professional services, Epsom, the fourteenth largest centre, was ranked eleventh for luxury goods and second for professional services, Lewisham, the seventh largest centre, was ranked fourth for luxury goods and seventeenth for professional services, Tooting, the fifth largest centre was ranked eighth for luxury goods and nineteenth for professional services, Peckham, the tenth largest centre was ranked seventh for luxury goods and twenty-second for professional services, and Clapham Junction, the twelfth largest centre, was ranked seventh for luxury goods and fourteenth for professional services (Figure 16).

Table 8. South London 1901: ranking the 15 largest shopping centres.

Centre	CP	BT	F	C	H	L	CS	PS	MEAN	RANK
Croydon	1	1	4	1	2	1	1	1	1.5	**1**
Elephant & Castle	2	3	8	2	1	2	3	10	3.87	**2**
Battersea Park Rd	3	10	2	7	4	12	4	15	7.12	**6**
Old Kent Road	4	5	9	4	3	9	3	11	6	4
Tooting	5	12	3	10	14	8	2	19	9.12	**7**
Woolwich	6	2	12	3	8	6	9	7	6.62	**5**
Lewisham	7	13	11	6	7	4	5	17	10	**9**
Deptford	8	9	7	9	5	11	10	21	10	**9**
Brixton	9	6	8	6	10	5	13	5	5.25	**3**
Peckham	10	4	10	5	12	8	7	22	9	**6**
Wandsworth	11	12	6	5	13	9	8	13	9.62	**8**
Clapham Junction	12	15	18	10	16	7	6	14	14	**11**
Bromley	13	11	24	11	23	3	14	3	12.75	**10**
Epsom	14	15	13	25	24	11	11	2	14.37	**13**
Kingston	15	14	29	18	9	5	15	4	13.62	**12**

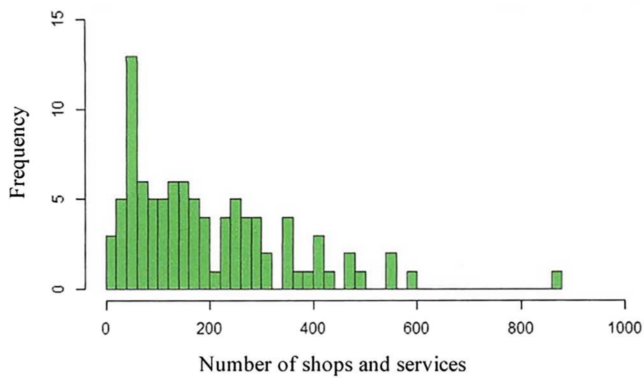


Figure 16. South London: the number and sizes of service centres 1901.

These changes reflect their size, geographical location, accessibility, the amount of retail floorspace, land availability, the size and economic base of their catchment area,[139] the proximity of neighbouring rival shopping centres, local entrepreneurial resourcefulness, and the availability of investment capital (see Figure 17) which depicts the amount of financial credit available on 21st November1901). The Booth's maps of poverty in 1899[140] confirmed that the richest and poorest residents lived in close juxtaposition within the catchment areas of the shopping centres. For example, the 'poor' residents[141] lived mainly in Bermondsey and Rotherhithe, north of Jamaica Road; in Southwark, in the areas bounded by Blackfriars Road, Thames Street, and Newington Way, and bounded by Great Dover Road and Long Lane. The 'fairly comfortable residents'[142] lived in large estates located in Rotherhithe, to the south of Jamaica Road, in Southwark, to the south east of the Elephant and Castle, and in North Lambeth Battersea and Camberwell. The well-to-do middleclass residents[143] were located along the main access and distributor roads[144] where most of the shops, commercial and professional service providers were located. The wealthy families[145] were located primarily along Clapham Rise and Clapham Road, Brixton Road, Camberwell Grove Lane and in small areas in the vicinity of Denmark Hill, Angel Town and south of St Johns

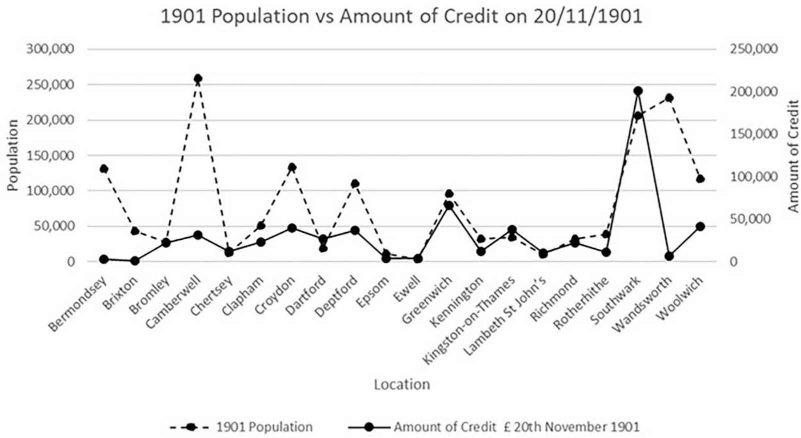


Figure 17. South London population and credit (20/11/1901).

Railway Station. These new inner urban suburbs were comprised of terraced houses which were located between the main access roads and packed tightly around newly constructed railway stations.[146]

An overview of the changing relationship between population and the size and composition of shopping centres in 1824, 1872 and 1901

The relationship between population and the number of shops and services remained statistically significant despite the reductions of the R-squared values in 1872 and 1901.[147] The heterogeneous spatial variations in the provision of shops and services

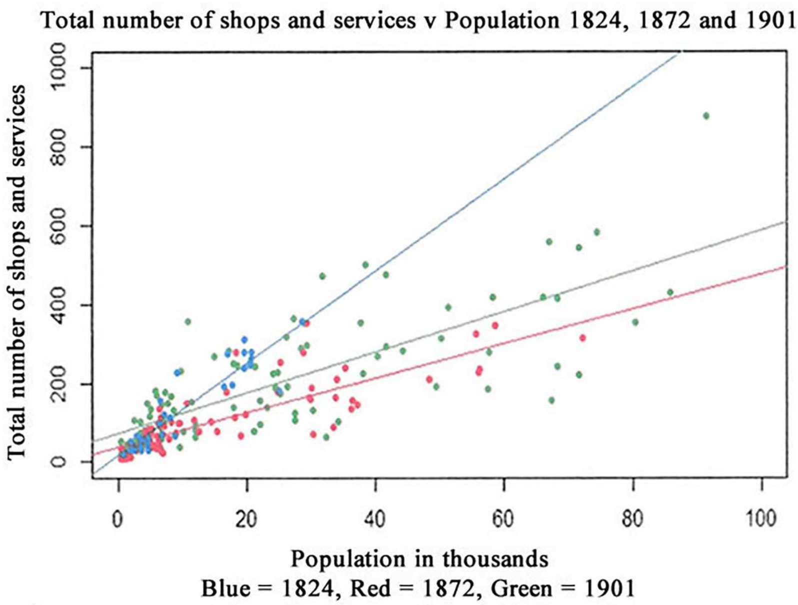


Figure 18. South London regression analysis 1824, 1872 and 1901.

reflect the interaction of exogenous factors (e.g. national economic growth, the exercise of public control over retailing, the establishment of railway links, poor harvests and rising food prices, and the proximity of the nearest rival centres.) and local endogenous factors (e.g. proactive local authority involvement, road improvements, land ownership, availability of suitable sites, local entrepreneurial expertise and capital, and occasional accidents of history).[148]

This relationship also reflected: the frictional impact of distance, which compelled most residents to shop locally until extensive public transportation networks were first established in the study area in the 1870s. It also reflected both the disposable income levels and the close proximity of neighbouring shopping centres. In North Lambeth and Southwark, for example, the 'well-to-do' and the 'fairly comfortable' residents lived in close juxtaposition,[149] and the Elephant and Castle and the neighbouring Walworth Road/East Street shops almost merged in the late nineteenth century. They were amalgamated for a short period of time when the Elephant and Castle centre was demolished in 2020, [150] and they are also linked together as a Major Centre in the London Plan 2021.[151]

Conclusions

The growth of retailing in the nineteenth century has been described severally as either a revolution or the conjunction of an evolution and reformation.[152] A global review of retail history, however, has argued that the continued existence of 'traditional' retail formats suggests that the simple notions of a retail revolution have long lost taction.[153] The retail and distributive trades in the UK responded positively to the challenges and opportunities posed by population increases, changing socio-economic conditions, improved road and rail communications, and the increased demand for a wider range of foodstuffs and cheaper mass-produced consumer goods. During the late nineteenth-century retail developments in North-Western Europe also undertook a 'feverish technological journey towards mass production of standardised consumer goods' which were distributed through the department stores and the chain stores.[154]

This study has demonstrated the varying impacts of increased population upon the development, size, composition and ranking of shopping centres in South London during the nineteenth century. It has also shed further light on the origins and ranking of many of the South London shopping centres now classified as either Metropolitan, Major, Central Activity Zones (CAZ), District and Neighbourhood centres in the 2021 London Plan Town Centre Network. Regression analysis has examined the changing temporal and spatial relationships between the growth of urban population and the changing size, composition and ranking of these shopping centres in 1824, 1872 and 1901 (see Figure 18). It has also identified the differences that existed between the size of population and the numbers of shops and services in the shopping centres in the urbanised inner London Metropolitan Boroughs, the outlying towns and villages in extra Metropolitan Kent and Surrey; and in the shopping centres where the department stores were located. These heterogenous relationships were all statistically significant and free from autocorrelation. The ranking of these shopping centres is based solely on their size and composition. Only a limited number of the 'higher order' criteria[155] used in later 'classic' studies of urban and retail hierarchies[156] were gradually being established in the study area during the mid and late nineteenth century. Department stores, multiple firm branches in the main consumer goods trades, theatres and town halls, for example, were mainly established in existing shopping centres for a variety of reasons.[157] This analysis has confirmed that the South London shopping centre hierarchies constituted a linear continuum rather than being stepped.[158]

Notes

1. Alexander, *Retailing in England*, 238; Jeffreys, *Retail Trading in Britain 1850–1950*, 14; and Shaw and Wild, “Retail Patterns in the Victorian City”.
2. Berg and Clifford, *Consumers and Luxury Consumer.*
3. Mui and Lorna, *Shops and Shopkeeping*, 108–20.
4. Alexander, *Retailing in England*, 239–40.
5. Scola, *Retailing in the Nineteenth Century Town*, 177; Atkins, *The Directories of London 1677–1977*.
6. Kelly, *London's Street Markets* , 189–200.
7. MacKeith, *Shopping Arcades 1817-1939*.
8. Griffiths et al., “The Persistence of Suburban Centres in Greater London”.
9. Stobart, “Cathedrals of Consumption, 1–36; Ashmore, “Extinction and Evolution?, 41–63.
10. Rappaport, *Shopping in Style*, 1–8; Crossick, “The Petite Bourgeoisie in Nineteenth Century Britain”.
11. Shaw, “The Role of Retailing”, 177.
12. Stobart and Howard, Eds, “Arcades, Shopping Centres and Shopping Malls”, 1–12.
13. Blonde, “From Consumer Revolution to Mass Market”, 33.
14. Stobart and Howard, “Arcades, Shopping Centres and Shopping Malls”, 197–215.
15. Spellman, “Penny Retailers and Merchant Princes”, 241; Lancaster, *The Department Store: its Social History*.
16. Hall, Marshall, and Lowe, *The Changing Urban Hierarchies*, 1–2; Jones, “Redressing Reform Narratives”, 160–81; Phillips, “The Evolution of Markets and Shops in Britain”.
17. Wilson, *Urban Modelling*, Part 1.
18. Berry, “The Retail Component of Urban Models”; Huff, “Defining and Estimating a Trading Area”; Lakshmann and W.G. Hansen, “A Retail Market”; ODPM, *Producing Boundaries and Statistics for Town Centres.*
19. ODPM, *Producing Boundaries and Statistic for Town Centres.*
20. Ball and Sunderland, *An Economic History of London 1800–1914*, 23.
21. Adburgham, *Shops and Shopping 1800–1914*, 6; Alexander, *Retailing in England During the Industrial Revolution*, 107–8.
22. *Census of Great Britain*, 1851, Tables on the Population and Houses, Table xxvii; Purvis, “The Development of Co-operative Retailing in England and Wales”.
23. *Ibid* between pages xlvii an xlix.
24. Park, *et al*, *The City*.
25. Christaller, *Die Zentralen Orte Suddeutschland*.
26. Losch, *The Economics of Location*
27. Smailes, “The Urban Hierarchy in England and Wales”.
28. Smailes and Hartley, “Shopping Centres in the Greater London Area”.
29. Carruthers, “A Classification of Service Centres in Greater London.
30. Collins, “A Study of Urban Complexes”.
31. Smith, “The Changing Urban Hierarchy”.
32. Smith, *Retail Distribution*.
33. Davies, “Centrality and the Central Place Hierarchy”.
34. Thorpe, “The Main Shopping Centres of Great Britain”.

35. Schiller and Jarrett, “Ranking of Shopping Centres”.
36. Reynolds, and Schiller, “A New Classification of Shopping Centres”.
37. Hall, Marshall and Lowe, *The Changing Urban Hierarchies*, 1–2.
38. NEDO, *The Future of The High Street*.
39. Ministry of Housing, Communities and Local Government, *National Planning Policy Framework*, 27.
40. The Greater London Authority, “The London Plan”, Annex 1.
41. Reynolds and Schiller, “A New Classification of Shopping”, 124 and 142.
42. Davies, *Marketing Geography with Special Reference,* 113; Phillips, *The History and Antiquities*.
43. Barratt, *The Story of the Suburbs*, 110–120; Greater London Authority, *A City of Villages*, 6–7.
44. The population grew by 747% from 267,939 in 1801 to 2,269,570 in 1901.
45. Dyos, *Victorian Suburb*, 66-69; Roebuck, “Lambeth, Battersea and Wandsworth”, 123.
46. Abernathy, “Opening up the Suburbs”, 70–88.
47. “Street Tramways”, *The Times*, 26th May 1869.
48. Ambler, *The Story of Lambeth*; Anderson, *History and Antiquities of Kingston-on-Thames*; Buckler, *Buckler's History*; Dunkin, G.W. *History of the County of Kent, Deptford* (1904); Harris, *Parish of Erith in Ancient and Modern Times*; Hart, *History of Lee and it's Neighbourhood*; Phillips, *The History of the Parish of Bermondsey* 1941); Dunkin, *History of the County of Kent, Deptford* 1904; Allen, Thomas (2011).
49. Scola, *Retailing in the Nineteenth Century Town,* 156.
50. Rogerson, *Statistical Methods for Geography*, 173–5; Thurston-Goodwin, “Data Surfaces for a New Policy”, Chapter 8.
51. Pigot, J & Co, *London and Provincial New Commercial Directory*.
52. Alexander, *Retailing in England During the Industrial Revolution*, 90.
53. Atkins, *The Directories of London*, Chapters 4 and 5.
54. Scola, *Retailing in the Nineteenth Century Town,* 156.
55. Reilly, *The Law of Retail Gravitation*; Berry, “The Retail Component of Urban Models”, 40–43.
56. Bacon, “An Approach to the Theory of Consumer Shopping Behaviour”, 55–64.
57. Read, *The English Provinces c. 1760–1960*, 59.
58. Ball and Sunderland, *An Economic History of London, 1800-1914*, 126; Gregory, “The Friction of Distance?”, 130–54.
59. Alexander, *Retailing in England During the Industrial Revolution*, Table 6.9, 200–201.
60. Benson, *Tauris Industrial Histories, The Retailing Industry*, 143.
61. Hosgood, “The Pigmies of Commerce and the Working Class Community”, 41–57.
62. House of Commons, Report of the Select Committee on the Petitions, 1822.
63. Phillips, “The Evolution of Markets and Shops in Britain”, 53–56.
64. Hamish Fraser, *The Coming of the Mass Market 1850–1914*, 99.
65. London Plan, 2021, Annex 1, Town Centre Network.
66. Alexander, *Retailing in England During the Industrial Revolution*, 6–12; Chalkin, *The Rise of English Towns 1650–1850*, 58-65; Perry, *A Geography of 19th Century Britain*, 45; Roebuck, *Urban Development*, 8–27.
67. The Kingston-upon-Thames and Imworth Inclosure, Court House and Market House Act 1808; the Croydon Court House, Market House and Buriel Ground Act, 1800.
68. The St May Woolwich Glebe Lands and Rectory House Act, 1812; The Camberwell Parish Glebe Lands and Rectory House Act, 1813.
69. Corfield, *The Impact of English Towns 1700–1800*, 179.
70. Clout, *The Times History of London*, 179.
71. Alexander, *Retailing in England During the Industrial Revolution*, Table 6.9, 200-201.
72. Select Committee on Sunday Trading (1847), 4.
73. Mui and Lorna, *Shops and Shopkeeping* (1989), Table 19, 116.
74. The R-squared value was 0.8503.
75. The R-squared value was 0.3603.
76. The R-squared value was 0.6909.

77. The R-squared value was 0.4028.
78. Field, “Economic Change in a London Suburb”, 244–6.
79. The Surrey iron railway was opened in 1803 and extended to Merstham in 1805; the Croydon canal was opened in 1809.
80. Gerhold, “The Growth of the London Carrying Trade”, 392–410.
81. Chalkin, *English Counties and Public Buildings 1650–1830*, 133.
82. Thurston-Goodwin, “Data Surfaces for a New Policy Geography”, 151–4.
83. UCL Working Papers Series, Paper 213, Sept 2019, 18.
84. Hall, Marshall and Lowe, *The Changing Urban Hierarchies in England and Wales 1913–1998*, 8.
85. Census of England and Wales, 1871, XXViii-XL.
86. Ibid., XLViii.
87. Thirsk, *Economic Policy and Projects*.
88. Ball and Sunderland, *An Economic History of London*, 86–117; Brown and Hopkins, *A Perspective of Wages and Prices*; Tebbutt, *Making Ends Meet*, 22–25.
89. Groschen and Hunt, *Regional Wage Variations in Britain 1850–1914*, 114.
90. Porter, “The Accumulation of Capital”, 195–7; Hartwell, “The Rising Standard of Living in England”, 94–95.
91. Fraser, *The Coming of the Mass Market*, 1–10.
92. Glennie, “Consumption, Consumerism and Urban Form”, 930––6; Eds, Berg and Clifford, *Consumers and Luxury Consumer Culture in Europe*.
93. Purvis, “The Development of Co-operative Retailing”, 315; Cole *A Century of Co-operation*.
94. Select Committee on Manufacturers, 1422–30.
95. Treble, *Urban Poverty in Britain 1830–1914*, 16–18.
96. Johnson, “Small Debts and Economic Distress”, 68.
97. Select Committee on Sunday Trading 1847.
98. Proceedings of the Select Committee, 12th July 1847, Vi.
99. Ibid., Q. 127–8.
100. Green, “Street Trading in London”, 138–46.
101. Public Petitions, Appendix.
102. Crossick, “The Petite Bourgeoisie in Nineteenth Century Britain”, 623.
103. Kitson, *The Making of Victorian England*, 35 and 122.
104. Shaw and Wild, “Retail Patterns in the Victorian City”, 99–101; Jeffreys, *Retail Trading in Britain 1850–1950*, 14–15; Alexander, *Retailing in England*, Table A1, 239–41.
105. Roebuck, *Urban Development*, 121–6.
106. Olsen, *The Growth of Victorian London*, 24.
107. *Survey of London* (English Heritage, 2012, Volume 48), Chapter 10, “The Shops of Clapham Junction”.
108. Dyos, *Victorian Suburb*, 151–5.
109. Adburgham, *Shops and Shopping*, 165–7.
110. *Survey of London*, (English Heritage, 2013, Volume 40), Chapter 4 “Powis Street and Green’s End”.
111. Whitehand, *The Changing Face of Cities*, 115.
112. Thorns, *Suburbia*, 44.
113. Harvey, *Social Justice in the City*, 187–189.
114. Stobart, “Cathedrals of Consumption”, 1–36; Pandermadjian, *The Department Store*, 21.
115. Hall, Marshall and Lowe, *The Changing Urban Hierarchies in England and Wales*, 33.
116. R-squared value was 0.7622.
117. R-squared value was 0.5185.
118. R-squared value was 0.4477.
119. R-squared value was 0.4155.
120. Tax Returns for Home Secretary.
121. Ball and Sunderland, *An Economic History of London*, 141–2.
122. Fraser, *The Coming of the Mass Market 1850–1914*, 233–4.

123. James Rebel, (1979), 19.
124. Adburgham, *Shops and Shopping*, 19.
125. Boyce, *et al*, *Newspaper History from the Seventeenth Century to the Present Day*, 120–1.
126. Kelly's London Suburban, Part 2 (1901).
127. Corfield, *The Impact of English Towns 1700–1800*, 32; Ball and Sunderland, *An Economic History of London 1800–1914*, 144.
128. Jeffreys, *Retail Trading in Britain 1850–1950*, 21–25.
129. Brown, *A Century of London Co-Operation*, 34–38; Hood and Yamey, "The Middle-Class Co-operative Retailing Societies in London", 309–1.
130. Yamey, *The Origins of Retail*, 523.
131. Census of England and Wales 1901, County of London Cd, 1902, Cd 875, Xii.
132. Treble, *Urban Poverty in Britain 1830–1914*, 47; *Abstract of Labour Statistics, Seventh Annual*, 119–3.
133. The Shop Hours Acts, 1886, 1892 and 1895; and the Seats for Shop Assistants Act 1899.
134. London County Council, *London Statistics*, *1894–95*, 234–5; London County Council, *London Statistics*, *1900–1901*, 682–3; London County Council, *London Statistics*, *1903–04*, 433.
135. R-squared value was 0.5987.
136. R-squared value was 0.5874.
137. R-squared value was 0.5404.
138. R-squared value was 0.2589.
139. Field, "Economic Change in a London Suburb", 260–2.
140. *Charles Booth's Descriptive Map of London Poverty*, 1899.
141. Persons whose weekly salaries ranged from 18 to 20 shillings per week.
142. Good ordinary earnings.
143. Persons who employed two servants.
144. Blackfriars, Borough, Clapham, Great Dover, Kennington, Lambeth, Old Kent, Walworth and Wandsworth.
145. Persons who employed two servants.
146. Greater London Authority, *A City of Villages*, 9, 2.9.
147. 1824 = 0.8503, 1872 = 0.7022, and 1901 = 0.5944.
148. Hall, Marshall and Lowe, *The Changing Urban Hierarchies in England and Wales*, 32.
149. *Booth's Descriptive Map of London*, South Eastern and South Western Sheets.
150. Humphrey, *Elephant and Castle - A History*.
151. London Plan,2021, Annex 1, Town Centre Network, Centre Ref 45.
152. Jeffreys, *Retail Trading in Britain 1850–1950*, 6; Perry, *A Geography of 19th Century Britain*, 145; PMathias, *Retailing Revolution*; Benson and Shaw, "The Retailing Industry", 3.
153. Stobart and Howard, Eds, *The Routledge Companion to the History of Retailing*, 201, 4.
154. Blonde, "From Consumer Revolution to Mass Market", Chapter 3.
155. Department Stores, Multiple Stores, Theatres, Banks, Local Government Offices.
156. Hall, Marshall and Lowe, *The Changing Urban Hierarchies in England and Wales*, 6–8 and 29–31.
157. Jefferys, *Retail Trading in Britain 1850–1950*, 21–25.
158. Beavon, *Central Place Theory*, 1–4; Berry, *Geography of Market Centres and Retail Distribution*, 16–19; Reilly, *The Law of Retail Gravitation*, 7–25; Huff, "Defining and Estimating a Trading Area", 34–38.

Acknowledgements

I wish to acknowledge the support from Professor Michael Batty, the helpful advice from Emeritus Professors John Dawson and John Taylor, and the anonymous referees. Thanks are also due to Charlie Turpie, Sally-Ann Goold, Sara Arnold, and the ever-helpful Senate House and UCL Library Staff.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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Bibliography

Abstract of Labour Statistics, Seventh Annual Report, 1899-1900. *Cd* 495 (1901): 119–123.

Abernethy, Simon T. "Opening up the Suburbs: Workmen's Trains in London 1860-1914." *Urban History* 42, no. 1 (2015): 70–88.

Adburgham, Alison. *Shopping in Style: London from the Restoration to the Edwardian Elegance*. London: Thames and Hudson Ltd, 1979.

Adburgham, Alison. *Shops and Shopping 1800-1914*, 167–170. London: HarperCollins, 1981.

Alexander, David. *Retailing in England During the Industrial Revolution*. London: Athlone Press, 1970.

Allen, Thomas. *The History of the Antiquities of Lambeth and the Archiepiscopal Palace, in the County of Surrey*. London: British Library, Historical Print Editions, 2011.

Ambler, S. O. *The Story of Lambeth, 1924*. London: Sampson.

Anderson, A. *History and Antiquities of Kingston-on-Thames*. London: Andesite Press, 2017.

Ashmore, Sonia. "Extinction and Evolution? Department Stores in London's West End 1945-1982." *London Journal* 31, no. 1 (2006): 41–63.

Atkins, Peter J. *The Directories of London 1677-1977*. London: Mansell, 1990.

Bacon, R. W. "An Approach to the Theory of Consumer Shopping Behaviour." *Urban Studies* 8.1 (1971): 55–64.

Ball, Michael, and David Sunderland. *An Economic History of London, 1800-1914*. London: Routledge, 2001.

Barratt, Nick. *Greater London: The Story of the Suburbs*. London: Random House Publishing Group, 2012.

Beavon, Keith. *Central Place Theory, a Reinterpretation*. London: Longman, 1977.

Benson, John, and Gareth Shaw, eds. *Tauris Industrial Histories, The Retailing Industry*. London: I.B. Tauris Publishers, 1999. Volume 1. *Perspectives and the Early Modern Period*. Volume 2. *The Coming of the Mass market 1800-1945*. Volume 3. *Post 1945 - Retail Revolution*

Berg, Maxine, and Helen Clifford, eds. *Consumers and Luxury, Consumer Culture in Europe 1650-1850*. Manchester: Manchester University Press, 1999.

Berry, B. "The Retail Component of Urban Models." *Journal of American Institute of Planners* 31 (1965): 150–155.

Berry, Brian. *Geography of Market Centres and Retail Distribution*. Englewood Cliffs, NJ: Prentice-Hall, 1967.

Berry, Brian, and William L. Garrison. "Functional Bases of the Central Place Hierarchy." *Economic Geography* 34 (1958A): 145–154.

Blonde, Bruno, and Ilja Van Damme. "From Consumer Revolution to Mass Market.", Chapter 3, In *The Routledge Companion of the History of Retailing*, edited by Jon Stobart, and Vicki Howard, 32–49. London: Routledge, 2019.

Board of Trade. *Abstract of Labour Statistics*, *7th Annual Report*. 1899-1900, Cd 495.

Booth, Charles. "Occupations of the People of the United Kingdom 1801-1881." *Journal of the Statistical Society* XLIV (1886): 314–444.

Booth, Charles. *Descriptive Maps of London Poverty 1899, Reprinted in 1984 and 1997, Publication 130*. London: Topographical Society.

Boyce, Pauline, Curran James, and Wingate James. *Newspaper History from the Seventeenth Century to the Present Day*. London: Constable, 1978.
Brown, W. Henry. *A Century of London Co-Operation*. London: George Allen, 1928.
Brown, Henry Phelps, and Sheila V. Hopkins. *A Prospective of Wages and Prices*. London: Methuen, 1981. doi:10.4324/9780203118511
Buckler, John Chessell. *An Historical and Descriptive Account of the Royal Palace at Eltham*. London: Nichols, 1828.
Carruthers, W. I. "Service Centres in Greater London 1957-1960." *Town Planning Review* V1 (1962): 5–31.
Carruthers, W. I. "A Classification of Service Centres in Great Britain in 1961." *Urban Studies* 5 (1967): 65–80.
Chalkin, Christopher. *English Counties and Public Buildings, 1650-1830*. London: Hambledon, 1985.
Chalkin, Christopher. *The Rise of English Towns 1650-1850*. Cambridge: Cambridge Press, 2001.
Christaller, W. *Die Zentralen Orte Suddeutschland*. Jena: Fischer, 1933.
Clarke, Kitson, and G. Ed. *The Making of Victorian England*. London: Routledge, 1965.
Clout, Hugh, ed.*The Times History of London*. London: Times Books, 2007.
Cole, G. D. H. *A Century of Co-Operation*. London: George Allen, 1944.
Collins, Michael. "A Study of Urban Complexes Within the Southern Half of the Greater London Area." In *Report of the Royal Commission on Local Government in Greater London 1957-1960*. London: HMSO, 1962.
Corfield, P. J. *The Impact of English Towns 1700-1800*. Oxford: Oxford University Press, 1982.
Crossick, Geoffrey. "The Petite Bourgeoisie in Nineteenth Century Britain: The Urban and Liberal Case." In *Shopkeepers and Master Artisans in Nineteenth Europe*, edited by Geoffrey Crossick, and Heinz-Gerhard Haupt. London: Methuen, 1984.
Census of England and Wales, 1871, Vol iii, Population Abstracts; Age, Civil Condition, Occupations, and Birth Place. C872, 1873, Appendix A to Report, pp 22 and 65.
Census of England and Wales, 1881, General Report, Vol iv, C 3797, 1883, 25-26.
Census of England and Wales, 1891, General Report, Vol iv, C 7222, 1893, 35.
Census of England and Wales 1901, County of London Cd 875, 1902, p. xiii.
Census of England and Wales 1911, Vol X, Cd 7018, p. xxxv.
Charles Booth's Descriptive Map of London Poverty 1889. London Topographical Society, Publication No 130, 1984, Reprinted v1997.
Dacey, M. F. "An Explanation of the Observed Dispersion of Retail Establishments in Urban Areas." *Environment and Planning A: Economy and Space* 4 (1972): 323–330. doi:10.1068/a040323.
Davies, Wayne. "Centrality and the Central Place Hierarchy." *Urban Studies* 4 (1967).
Davies, Ross. *Marketing Geography, With Special Reference to Retailing*. London: Methuen, 1977.
Dunkin, Alfred John. *History of the County of Kent, Deptford. L.P.* London: Simpkin Marshall & Co, 1856.
Dunkin, Alfred John. *History and Antiquities of Dartford with Topographical Notices of the Neighbourhood*. London: J. & W. Davis, 1904.
Dyos, H. J. *Victorian Suburb: A Study of the Growth of Camberwell*. Leicester: Leicester University Press, 1966.
Field, Jacob. "Economic Change in a London Suburb: Southwark c.1601-1881." *The London Journal* 43, no. 3 (2018): 243–266.
Fraser, W. Hamish. *The Coming of the Mass Market 1850-1914*. London: Palgrave, 1982.
Gerhold, Dorian. "The Growth of the London Carrying Trade, 1681-1838." *The Economic History Review* 3, 2nd Series, XLI, (1988): 392–410.
Glennie, Paul. "Consumption, Consumerism and Urban Form; Historical Perspectives." *Urban Studies* 35, no. 5-6 (1998): 930–936.
Greater London Authority. *The London Plan 2021, Annex 1, Town Centre Network*.
Greater London Authority. *A City of Villages: Promoting a sustainable future for London's suburbs*, SDS Technical Report Eleven. August 2002.

Green, David R. "Street Trading in London: A Case Study of Casual Labour 1830-60." In *The Structure of Nineteenth Century Cities*, edited by James H. Johnson, and Colin Pooley, 129–152. London: Routledge, 1982.
Gregory, Derek. "The Friction of Distance? Information Circulation and the Mails in the Early Nineteenth-Century England." *Journal of Historical Geography* 13, no. 2 (1987): 130–154.
Griffiths, Sam, C. E. Jones, Laura Vaughan, and Mordechai Haklay. "The Persistence of Suburban Centres in Greater London: Combining Conzenian and Space Syntax Approaches." *Urban Morphology* 14.3 (2010): 85–99.
Groschen, G. J., and E. H. Hunt. *Regional Wage Variations in Britain 1850 −1914*, 114. Oxford: Clarendon Press, 1973.
Hall, Peter, Stephen Marshall, and Michelle. Lowe. *The Changing Urban Hierarchies in England and Wales 1913-1998. Paper 18*. Bartlett School of Planning, UCL, 2000.
Harris, John. *The Parish of Erith in Ancient and Modern Times*. London: Mitchell & Hughes, 1855.
Hart, Francis Hosier. *History of Lee and its Neighbourhood*. Lewes: Lee Press, Charles North, 1882.
Hartwell, R. M. "The Rising Standard of Living in England 1800-1850." *Economic History Review* XIII (1961): 94–95. 2nd Series.
Harvey, David. *Social Justice in the City*. London: Edward Arnold, 1973.
Hobsbawn, Eric. "The Nineteenth Century Labour Market." In *London: Aspects of Change*. London: Macgibbon and Kee, 1964.
Hood, Julia, and B. S. Yamey. "The Middle-Class Co-Operative Retailing Societies in London 1864-1900." *Oxford Economic Papers* 9 (1957): 309–331.
Hosgood, C.P. "The Pigmies of Commerce and the Working Class Community of Small Shopkeepers in England, 1870-1914", 393-413, *The Retailing Industry*, Eds. Benson John, and Shaw, Gareth, Volume 2, "The Coming of the Mass Market 1800-1945", London: I.B. Tauris Publishers, 1999.
Hotelling, Harold. "Stability in Competition." *The Economic Journal* 39, no. 153 (1929): 41–57.
Huff, David. "Defining and Estimating a Trading Area." *Journal of Marketing* 28, no. 3 (1964): 34–38.
Humphrey, Stephen. *Elephant and Castle – a History*. Gloucestershire: Amberley Publishing, 2013.
House of Commons, *Report of the Select Committee on the Petitions of Certain Country Bakers*, 1813, Paper No 12.
House of Commons, R*eport of the Select Committee on Policing the Metropolis,* 1822, Paper No 440.
House of Commons, *Report of the Select Committee on Manufacturers, Commerce and Shipping*, 1833, Paper No 690.
House of Commons, *Report of the Committee on Sunday Trading*, 1847, Paper No 666.
House of Commons, *Report of the Select Committee on Commercial Distress*, 1848, Paper No 395.
House of Commons, *Report of the Select Committee on Community Distress*, 1848, Paper No 395.
House of Commons, *Report of the Select Committee on Sunday Trading (Metropolis)*, 1850, paper No 43
House of Commons, *Report of the Select Committee on Metropolitan Communications*, 1855 Paper No 415.
House of Commons, *Report of the Select Committee on Policing the Metropolis*, 1828, Paper No 333.
House of Commons, *Report of the Select Committee on Shop Hours Regulation Bill*, 1886, Paper No 155.
House of Commons, *Repor*t *of the Select Committee on Shop Hours Regulation Bill*, 1892, Paper No 666.
Jackman, Lee. *Victorian London*. London: New Holland, 2004.
Jefferys, James B. *Retail Trading in Britain 1850-1950*. Cambridge: Cambridge University Press, 1954.
Jenkins, Simon. *A Short History of London, The Creation of a World Capital: London*. Penguin Books, 2020.
Johnson, Paul. "Small Debts and Economic Distress in England and Wales." *Economic History Review* XLVI (1993): 65–87.
Jones, Peter. "Redressing Reform Narratives: Victorian London's Street Markets and the Informal Supply Lines of Urban Modernity." *The London Journal* 41, no. 1 (2016): 160–181.

Kelley, Victoria. “London’s Street Markets: The Shifting Interiors of Informal Architecture.” *The London Journal* 45, no. 2 (2020): 189–210.
Kelly’s London Suburban Directory 1901.
Lakshmann, J. R., and W. G. Hanson. “A Retail Market Potential Market Model.” *Journal of American Institute of Planners* 3 (1965): 134–135.
Lampe, Marcus, and Paul. Sharp. “Greasing the British Wheels of Rural Transformation? Margarine and the Competition for the Butter Market.” *EHES Working Papers in Economic History* (2013).
Lancaster, Bill. *The Department Store: Its Social History*. London: Leicester University Press.1995.
Local Taxation, Accounts for Corporations. Towns, Vestries, Etc, 1868-70, 1871, HC No 432.
London County Council., *London Statistics 1894-95*. Vol 5, October 1895: 234-235.
London County Council., *London Statistics 1900*-1901. Vol XI, Table 79: 682-683.
London County Council., *London Statistics 1903-04*. 1905, 433.
Losch, A. *The Economics of Location*. New Haven: Yale University Press, 1954.
MacKeith, Margaret. *Shopping Arcades 1817-1939, A Gazetteer*. London: Mansell, 1985.
Masucci, A. Paolo, Kiril Stanilov, and Michael Batty. “*Limited Urban Growth: London’s Street Network Dynamics Since the 18th Century*.” *PLoS One* 8, no. 1: e69469.
Mathias, P. *Retailing Revolution*. London: Longman, 1967.
Ministry of Housing and Local Government. *National Planning Framework*, 2018.
Mui, Hoh-Cheung, and H. Lorna. *Shops and Shopkeeping in Eighteenth Century England*. London: Routledge, 1989.
National Economic Development Office (NEDO). *The Future of the High Street*. London: HMSO, 1988.
ODPM. *Producing Boundaries and Statistics for Town Centres - London Pilot Study Summary Report*. London: TSO, 2002.
Olsen, Donald J. *The Growth of Victorian London*. London: Batsford, 1971.
Pandermadjian, H. *The Department Store: Its Origins, Evolution and History*. London: Newman Books, 1954.
Park, R. E., E. W. Burgess, and R. T. McKenzie. *The City*. Chicago: Chicago University Press, 1925.
Perry, P. J. *The Geography of 19th Century Britain*. London: B.T Batsford, 1975.
Phillips, G. W. *The History and Antiquities of the Parish of Bermondsey*. London: J. Unwin, 1841.
Phillips, M. “The Evolution of Markets and Shops in Britain.” In *The Evolution of Retail Systems c1800-1914*, edited by J. Benson, and G. Shaw. Leicester: Leicester University Press, 1992.
Pigot, J & Co. *Pigot and Co.’s London and Provincial New Commercial Directory for 1823/4*. London: J. Pigot, 1823.
Porter, G. R. “The Accumulation of Capital by the Different Classes of Society.” *Journal of the Royal Statistical Society* XIV (1851): 193–199.
“Powis Street and Green’s End Areas” Chap 4 in *Survey of London*, Volume 48, Woolwich, 2012.
Purvis, Martin. “The Development of Co-Operative Retailing in England and Wales: A Geographical Study.” *Journal of Historical Geography* 16.3 (1990): 315.
Purvis, Martin. “Retail Management.” Chapter 16, In *The Routledge Companion of the History of Retailing*, edited by Jon Stobart, and Vicki Howard, 314–331. London: Routledge, 2019.
Rappaport, E. A. *Shopping in Style: London from the Restoration to the Edwardian Elegance*. London: Thames-Hudson Ltd, 1979.
Rappaport, E. A. *Shops and Shopping, 1800-1914*, 167–170. London: Allen and Unwin, 1981.
Read, Donald. *The English Provinces c 1760-1960, A Study in Influence*. London: Edward Arnold, 1964.
Reilly, W. J. *The Law of Retail Gravitation*. New York: Knickerbocker Press, 1931.
Reynolds, J., and R. Schiller. “A New Classification of Shopping Centres in Great Britain.” *Journal of Property Research* 9 (1992): 122–160.
Robinson, K. *Data and Retailing*, CES-WP-25: 9. London: Centre for Environmental Studies, 1969.
Roebuck, Janet. “Lambeth, Battersea and Wandsworth 1838-1888.” In *Urban Development in Nineteenth Century London*, 118–134. London: Phillimore, 1979.
Rogers, Andrei. “A Stochastic Analysis of the Spatial Clustering of Retail Establishment.” *Journal of the American Statistical Society* 60 (1965): 1094–1103.

Rogerson. *Statistical Methods for Geography*. James H and Pooley, Colin, eds. London: Routledge, 1982.
Schiller, R., and A. Jarrett. "Ranking of Town Centres Using Multiple Branch Numbers." *Land Department Studies* 2 (1985): 53–100.
Scola, Roger. "Food Markets and Shops in Manchester." *Journal of Historical Geography* I (1975): 153–168.
Scola, Roger. "Retailing in the Nineteenth Century Town: Some Problems and Possibilities." In *The Structure of Nineteenth Century Cities*, edited by James H. Johnson, and Colin Pooley, 153–170. London: Croom, 1982.
Sekon, G. A. *Locomotion in Victorian London*. Oxford: Oxford University Press, 1938.
Seats for Shop Assistants Act. 1899.
Shop Hours Regulation Act 1886.
Shop Hours Regulation Acts 1892 and 1895.
Survey of London, Vol 4, "The Shops of Clapham Junction. Battersea Part 1, Public, Commercial and Cultural". Chap 10, Yale University Press, 2014.
Survey of London, Vol 48, Woolwich, Chapter 4, "Powis Street and Green's End". *English Heritage* (2012).
Survey of London, Vol 40, Battersea, Chapter 10, "The Shops of Clapham Junction". *English Herita*ge (2013)
Shaw, Gareth. "The Role of Retailing in the Urban Economy." In *The Structure of Nineteenth Century Cities*, edited by James H. Johnson, and Colin Pooley, 171–194. London: Routledge, 1982.
Shaw, Gareth. "Evolution and Impact of Large-Scale Retailing in Britain." In *The Evolution of Retail Systems c1800-1914*, 162, edited by J. Benson, and G. Shaw. Leicester: Leicester University Press, 1992.
Shaw, Gareth, and Allison. Tipper. *British Directories: A Bibliography and Guide to Directories Published in England and Wales (1850-1950 and Scotland 1773-1950)*. London: Bloomsbury, 1989.
Shaw, Gareth, and M. T. Wild. "Retail Patterns in the Victorian City." In *The Transactions of the Institute of British Geographers*, Vol 4, 2. London: Royal Geographical Society, 1979.
Smailes, A. E. "The Urban Hierarchy in England and Wales." *Geography (Sheffield, England)* 29 (1944): 41–51.
Smailes, A. E., and G. Hartley. "Shopping Centres in the Greater London Area." *British Institute of Geographers* 2 (1961): 201–213.
Smith, Henry. *Retail Distribution: A Critical Analysis*. London: Oxford University Press, 1948.
Smith, R. D. P. "The Changing Urban Hierarchy." *Regional Studies* 2 (1968): 1–19.
Spellman, Susan. "Penny Retailers and Merchant Princes." In *The Routledge Companion to the History of Retailing*, edited by Jon Stobart, and Howard Vicki, 299–244. London: Routledge, 2019.
Stedman-Jones, G. *A Study in Relationships Between Classes in Victorian Society*. Oxford: Clarendon Press, 1971.
Stobart, J. "Cathedrals of Consumption? Provincial Department Stores in England c 1880-1930." *Enterprise and Society* 18, no. 4 (2017): 1–36.
Stobart, Jon, and Vicki Howard. eds. *The Routledge Companion of the History of Retailing*. London: Routledge, 2019.
The City Plan 2019-2040. City of Westminster Regulation 19 Publication Draft, June 2019. City of Westminster.
"Trades and Court Directories." *Kelly's London Suburban Directory* 1901, Vol II, Southern Part 2.
The Greater London Authority. "A City of Villages: Promoting a Sustainable Future." In *SDS Technical Report Eleven*. London: GLA, 2002.
Tebbutt, Melanie. *Making Ends Meet – Pawnbroking and Working Class Credit*. Leicester: Leicester University Press, 1983.
Thirsk, Joan. *Economic Policy and Projects: The Development of a Consumer Society in Early Modern England*. Oxford: Clarendon Press, 1978.

Thom, Colin. “Local History in London: Views from South of the River.” *The London Journal* 36 (2011.
Thorns, David. *Suburbia*. London: MacGibbon and Kee, 1972.
Thorpe, David. “The Main Shopping Centres of Great Britain.” *Urban Studies* 5 (1968): 165–206.
Thorpe, David, and Phillip. Kivell. *Atlas, Greater London Shopping Centres*. Retail Outlets Research Centre, Manchester Business School, 1974.
Thurston-Goodwin, Mark. “Data Surfaces for a new Policy Geography.” Chap 8. In *Advanced Spatial Analysis*, edited by Paul Longley, and Michael Batty, 145–169. Redlands: California ESRI, 2005.
Treble, James. *Urban Poverty in Britain, 1830-1914*. London: Methuen, 1979.
UCL Working Papers Series, Centre for Advanced Spatial Analysis, ISSN 1467-1298. Paper 213-SEPT 19, Undated, 1-39.
Van Damme, Ilja. “Western Europe (Including Scandinavia).” Chapter 22. In *The Routledge Companion of the History of Retailing*, edited by Jon Stobart, and Vicki Howard. London: Routledge, 2019.
Weightman, Gavin, and Steve. Humphries. *The Making of Modern London 1815-1914*. London: Sidgewick and Jackson, 1983.
Wenzhong, Shi, Michael Goodchild, Michael Batty, et al. *Urban Informatics*. Singapore: Springer, 2021.
White, H. F. *Greater London, The Southern Suburbs*. Volume 3, Chap 111. Newton Abbot: David and Charles, 1971.
Whitehand, J. W. R. *The Changing Face of Cities*. Oxford: Blackwell, 1982.
Wilson, Alan, ed. Urban Modelling, Part 1, 2012.
Yamey, B. S. “The Origins of Resale Price Maintenance: A Study of Three Branches of Retail Trade.” *Economic Journal* LXII (1952): 522–545.

Appendix. Shop types, and commercial and professional services

Food	Clothing	Services	Luxury	Household	Professional
Bakers	Breaches	Blacksmith	Antiques	Cabinet Maker	Academies
Butchers	Boot & Shoe	Blind Maker	Books	Chandler	Attorneys
Coffee	Clothier	Carpenter	Coach Maker	China/Pottery	Auctioneers
Confection	Draper	Chemist	Clocks/Watches	Furniture	Bankers
Cheese	Dress Maker	Druggist	Goldsmith	Ironmonger	Doctors
Fish	Hatter	Dyer	Leather Goods	Oil & Colour	Fife Offices
Fruit	Lace Maker	Farrier	Silversmith	Tallow	Insurance
Greengrocer	Linen Goods	Fell Monger	Toys		Lawyers
Grocer	Mercers	Hair Dresser			Physicians
Wine	Milliners	Locksmith			Surgeons
	Straw Hat	Pawnbroker			
	Stay Maker	Printer			
		Saddler			
		Stone Mason			
		Upholsterer			
		Wheelwright			