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METHODS FOR THE STUDY OF RETAIL RELATIONSHIPS

By

WILLIAM J. REILLY, Ph.D.

Marketing Specialist

Associate Professor of Business Administration

Bureau of Business Research

Research Monograph No. 4



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The benefits of education and of useful knowledge, generally diffused through a community, are essential to the preservation of a free government.

Sam Houston

Cultivated mind is the guardian genius of democracy. . . . It is the only dictator that freemen acknowledge and the only security that freemen desire.

Mirabeau B. Lamar

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PREFACE

This study represents an attempt to develop methods that might be useful in the study of some of the more practical problems in retailing. It rests almost entirely upon information secured from hundreds of business establishments and consumers throughout the State of Texas. Owners and managers of retail stores which were called upon, furnished information about the various lines of merchandise which they handled and generously permitted the author and his staff to examine their sales records.

To these retail stores, to retail merchants' associations, and to newspaper publishers throughout the State, without whose help this study could not have been made, the author wishes to express his great indebtedness.

WILLIAM J. REILLY.

METHODS FOR THE STUDY OF RETAIL RELATIONSHIPS

I. INTRODUCTION

Most of the changes which have affected retailing in the last few years have happened *outside* the four walls of the retail store—in the mind of the consumer. Not long ago the retailer was able to conduct a successful business without much knowledge about the consumer. At that time the housewife had less definite ideas about what she wanted; she commonly bought her clothes in her home town and took whatever the local merchant had to offer. But talk with the housewife today. You will find that the automobile and good roads have increased her trading radius so that now it includes stores in larger cities that offer wide selections. Movies, national magazines, newspapers, radios, rising standards of living, increased leisure and social life have all conspired to develop in the mind of the housewife a high degree of style sensitivity. The pace has been fast. Recently, those who live in small towns have come to want the same things as those who live in larger cities.

These consumer changes are definitely reshaping the whole business of retailing. All retailers are affected but not all in the same way. To indicate how differently retailers in various-sized cities and towns feel these changes, we have only to observe the desire in the minds of women to buy their style goods in a city larger than the one in which they live. Naturally different income classes are involved in outside trade in various-sized cities. In very small towns all but the poorest classes buy style goods such as dresses, hats, or shoes in larger cities and towns. In cities of less than 100,000 a large share of the families whose annual income exceeds \$3,000 buy part of their style goods in larger cities and the wealthier families even in Chicago and New York like to buy some of their style goods in London and Paris.

Some observers have become alarmed at this situation and have predicted the doom of the smaller town. Retail merchants' associations and chambers of commerce in smaller cities and towns have spent time and money attempting in various ways to fight outside trading and to hold all retail trade at home. These associations, upon discovering that a large share of their city's trade is lost to a larger market, have in some instances concluded that their city should have more stores in order to control the business. This conclusion may be a grave error. It has its roots in an early concept of consumer buying habits popular when the housewife bought almost all of her merchandise in the city or town in which she lived.

Obviously smaller towns cannot economically support as many or as large retail institutions as larger cities can. The significant thing for the merchants of any city to discover is what place that city occupies in the scheme of distribution, what lines of merchandise it is especially fitted to sell, and what classes of people it is in a most favorable position to serve in competition with nearby larger markets. Any merchant who can forget the mechanics of running his store long enough to make such an analysis of outside conditions is almost sure to develop a more profitable business. Witness the success with which many chain organizations are operating exclusively in smaller towns. That success is due largely to the fact that these stores cater primarily to classes of people who buy their style goods in the town in which they live.

While the effects of consumer changes are perhaps more obvious in the smaller town, they are nevertheless present in the larger city. Style-goods stores in larger cities, as they attempt to extend their retail-trade territories, are confronted with a number of problems including the coördination of advertising media with sales territory, the determination of what outlying territories are profitable to develop, and the maintenance of good will among smaller cities and towns in their trade territory.

In recognition of the foregoing problems, the purpose of this monograph is:

(1) To present methods for the study of retail relationships involved in selling different kinds of merchandise to various classes of people in different-sized cities and towns.

(2) To indicate to the retailer what classes of people and what kinds of merchandise are involved in outside trade in various-sized cities and towns. Such information should help any retailer to adapt his business to the fundamental changes which are taking place and to see more clearly his place in the scheme of retailing.

II. DESCRIPTION OF METHOD USED IN THIS STUDY

The following classification of different-sized population centers has evolved in the course of this study:

(1) *Primary Retail Markets* are defined as cities, the retail stores of which practically control the style-goods trade as well as the standardized-goods trade of those families who live in that trade territory irrespective of the amount of income they enjoy. There are approximately 81 cities in the United States over 100,000 that fall roughly into this class.

(2) *Secondary Retail Markets* are defined as cities, the retail stores of which control the style-goods trade as well as the standardized-goods trade of only those families in that trade territory who enjoy an annual income of less than \$3,000 (a large share of the style-goods business, as well as some of the standardized-goods business, of those families whose annual income exceeds \$3,000, is lost to primary markets).

(3) *Tertiary Retail Markets* are defined as very small towns which are primarily convenience markets for standardized goods and which lose practically all of the style-goods business with the possible exception of very low-priced style merchandise which is bought by the poorer classes of people.

This study divides itself into two main parts:

1. A study of the retail-trade territories of primary markets in Texas.

2. A study of secondary and tertiary markets in Texas in an attempt to discover the retail relationships existing between primary, secondary, and tertiary markets.

Those who are familiar with various attempts that have been made in the past to measure a city's retail-trade territory, will probably recall that the territory is usually represented by some kind of a line drawn around the city, accompanied by the claim, "This trade territory belongs to us." But as long as people in most smaller cities and towns are subject to the competitive appeal of merchants in more than one city, and as long as customers pass each other on the highways going in opposite directions to buy the same merchandise, a line will be an inappropriate symbol for representing a trade territory. Markets do not behave that way. They do not come up to any given line and suddenly stop. They almost invariably overlap.

The influence of those retail outlets which handle only standardized merchandise in common demand is relatively easy to anticipate. The trade of a drugstore, a grocery store, or a cigar store is usually confined to an immediate neighborhood. On the other hand, those retail outlets handling style and specialty goods exercise a wide influence that is difficult to anticipate. For instance, Mrs. Jones, who buys her staple groceries at a neighborhood store, may be willing to motor 100 miles or more if she thinks she can find a hat that she likes—a hat that her friends at the bridge party have never seen and will admire because it came from a distant and larger city.

It becomes clear then that any city exercises an influence in the surrounding territory because leading style- and specialty-goods stores of that city handle lines of merchandise that people are willing to travel some distance to secure, and that the farthest territory served by these leading stores represents the outer limit of the retail-trade territory of the city.

Certain steps of the methods here presented can be used to measure the retail-trade influence of any given type of retail outlet, from the smallest neighborhood store to the largest department store of a city.

The retail-trade territory of each of the larger cities in Texas was measured by the following procedure:

1. From leaders of retail merchants' associations qualified to give such information, a list was secured of those retail stores which exercise most influence in the territory surrounding the city. This list was approved by each coöperating store. In most instances these stores were leading department stores. In a few cases, however, a women's specialty shop, a high-grade jewelry store, or a furniture store, having an appreciable influence outside the city, was included.
2. The charge-account ledgers of each store were examined and an individual-store list was secured showing the *number* of active charge accounts which that store had in each surrounding city and town. (An active account is defined as one in connection with which a purchase has been made within the preceding year.)
3. From these individual-store lists, a composite list was made, showing the *total number* of accounts enjoyed by all the included stores of the city in each surrounding city and town.¹

In addition to the above measure of the retail-trade territory of each city, the circulation² offered by daily and Sunday newspapers of each city was summarized as follows:

1. An individual circulation statement was secured for each newspaper of the city, showing the number of newspapers distributed in each surrounding city and town.
2. From these individual circulation statements, a composite list was made showing the total number of newspapers distributed by all of the newspapers of the city in each surrounding city or town.

This summary makes possible a comparison between retail-trade territories and newspaper circulation.

¹This study relates primarily to the retailer. The above method, however, might also be employed by wholesalers in measuring their trade influence.

²Audit Bureau of Circulation Reports, January, 1928.

The following methods were used in an attempt to discover the retail relationships existing between primary, secondary, and tertiary markets.

First. A check was made of the kinds of merchandise found in the stores of various-sized cities and towns ranging from crossroad communities to metropolitan centers.

In the beginning there was a very definite feeling that the popular names given to types of stores may be very misleading. The drug store, for example, seldom sells drugs exclusively. It may sell cigars, tobacco, soft drinks, jewelry, stationery, electric percolaters and toasters, desk lamps, women's hose, thermos bottles, and other allied standardized merchandise. Similarly, a grocery store may sell tobacco, patent medicines, or kitchen utensils; a hardware store may sell coffee, soap, or sporting goods. Because of this condition, retail stores were checked in various-sized cities and towns in order to discover:

- (a) the lines of merchandise each store carried (specialized or general),
- (b) the price range of each of these lines of merchandise,
- (c) the selections offered in each line.

The importance of checking each line in each store will become clear as the use of the material secured is developed in later sections. Other pertinent and significant information concerning each city and town was also secured; such information as the estimated population, the occupations of the people, the proportion of homes in various income classes, the directions in which the retail trade lost by that city or town tends to flow, the conditions of roads in the surrounding territory, the kinds of transportation that serve the town, the circulation offered by local newspapers, and the general characteristics of the city or town.

Second. House-to-house interviews were secured with various classes of housewives in different-sized cities and towns in order to discover what percentages of different classes of people buy part of their style or specialty goods outside of the city in which they live.

III. ASSUMPTIONS, LIMITATIONS, AND SCOPE OF THIS STUDY

Prerequisite to the intelligent use of the material presented in this monograph is a thorough understanding of the assumptions, the limitations, and the scope involved in the methods used and the results secured.

It would be ideal if one had some convenient way of checking every dollar's worth of various kinds of merchandise that customers in smaller cities and towns buy in larger cities. For then a knowledge of the actual volume of business enjoyed by larger city markets in surrounding towns could be somewhat complete.

But methods for study depend upon available records of experience. Although a complete record of cash sales, C. O. D. sales, and mail-order sales is seldom available and there is therefore no easy way to measure actual volume, a complete record of the actual number of charge accounts is available which permits one to measure the *extent* of the retail-trade influence of a city and the *relative proportion* of business enjoyed by two or more cities in a smaller town.

Let us consider the adequacy of a list of charge accounts as a measure of the *extent* of the trade influence of a city. The fact that credit business within the past few years has assumed such a prominent position in retail trade probably justifies the statement that the stores of a city do not enjoy any large amount of business in a surrounding town in which they have no charge customers. In other words, it is perhaps safe to say that a geographical distribution of charge accounts of all the leading retail stores of a city provides a significant measure of the geographical extent of that city's retail-trade territory.

In considering the adequacy of a list of charge accounts as a measure of the *relative proportion* of business enjoyed by two or more cities in a smaller town, the basic assumptions are: (1) that the amount of business represented by the average charge account held by stores of one large city is approximately equal to the amount of business

represented by the average charge account held by stores of another large city, and (2) that the volume of charge account business might be used as a barometer of all outside business (whether cash, charge, mail-order, or C. O. D.) enjoyed by a city in the surrounding territory.

An array of facts supports our first assumption, and nothing that is apparent seriously undermines it. Some of the more important supporting facts are: (1) that stores in cities of nearly the same size are being compared, (2) that the same types of stores have been included in each city so that the amount of the average volume of business per charge account should be approximately the same, (3) that even though there is a variation in the volume of business per charge account among individual stores of a city, the effect of this difference will be minimized through the combination of several stores in any given city, for although the average volume per charge account in one store may be low and the average for another store high, yet when the figures for several stores in a city are combined, the error is a balanced one which tends to diminish with an increase in the number of cases included.

One improbable condition which might disturb the conformity of actual practice with the second assumption is a case where the percentage of charge account business (in comparison with the cash, mail-order, and C. O. D. business) of all the stores included in the study in one large city is widely different from the percentage of charge account business of the stores of another large city. In such a case the city with the lower percentage of charge account business would be under-rated. Here again, it is true that an individual store in a city may differ considerably in its percentage of charge account business from any other individual store in that city. But since a number of stores are combined in each city and since the percentages of charge account business of all the stores in a city are averaged together, another case of a balanced error is apparent and the effect of individual store differences is minimized in

the average for the city as a whole. It is highly improbable, then, that the average percentage of charge account business for all of the included stores of one city will be significantly different from the average percentage of charge account business for all of the included stores of another city.

The reader will probably recall that an active charge account has been defined as one in connection with which some purchase has been made within the preceding year. The assistant who counted the charge accounts from the ledgers of the various stores, however, learned that in two or three scattered instances a store discarded inactive accounts from the ledgers every three months. This means, of course, that such stores may be slightly under-rated in the number of outside charge accounts. But the percentage of error caused by such a small understatement in the case of one store would seldom be serious. And the fact that such an under-statement is likely to be about the same for one city as for another, tends to balance the under-statement so that, in considering the *relation* of one city to another, it may have little or no effect.

Mention should be made of another point that may cause some confusion unless it is explained. Within recent years the tendency has been for a customer to open a charge account with several leading stores of a city rather than to trade altogether with one store. There is no convenient way to remove this duplication from the total number of charge accounts of a city. But the extent of duplication is approximately the same for all cities compared in this study. Therefore, a comparison of the number of accounts enjoyed by the stores of one city in a small town with the number enjoyed by the stores of another city in that town, measures the *relative* strength of the two cities in that town about as accurately as if there were no duplication at all in the number of accounts. In short, comparison diminishes a biased error.

Finally, the reader should not lose sight of the fact that material presented in this study is confined in scope to the State of Texas.

IV. RESULTS OF THIS STUDY

Law of Retail Gravitation

After the sales of leading stores of all the larger cities in Texas had been measured, after buying habits of consumers had been studied by house-to-house interviews and retail stocks checked in different-sized cities and towns, the data revealed that retail business gravitates from smaller to larger cities with striking consistency, in accordance with a definite law of retail gravitation. In its simplest terms, the law may be expressed as follows: under normal conditions two cities draw retail trade from a smaller intermediate city or town in direct proportion to some power of the population of these two larger cities and in an inverse proportion to some power of the distance of each of the cities from the smaller intermediate city. In any particular case, the exponents used in connection with population or distance are dependent upon the particular combination of retail circumstances involved in that case. Typically, however, two cities draw trade from a smaller intermediate city or town approximately in direct proportion to the first power of the population of these two larger cities and in an inverse proportion to the square of the distance of each of the larger cities from the smaller intermediate city.¹

Since the calculation of the appropriate exponent in any particular case is a complicated problem in mathematics, and since the retailers who will use this law are, as a rule, not mathematicians, the application of the law has been simplified so that the ordinary retailer can use it. One of the most significant discoveries in this study that has made simplified application possible is the close relationship between newspaper circulation of a city and the retail influence of that city's leading stores. As one travels along the main lines of transportation that lead from a city, newspaper circulation of that city usually diminishes at

¹Those interested in the mathematical implications of the law, see Appendix, p. 48.

about the same rate as retail strength. In other words, it has been found that newspaper circulation of two large cities in an intermediate city or town typically approximates (in a large proportion of the cases within 10 per cent accuracy²) the relative amount of retail business which the two larger cities enjoy in the smaller intermediate city or town.

TABLE I

SHOWING THE ACCURACY³ WITHIN WHICH NEWSPAPER CIRCULATION OF A CITY⁴ IN SURROUNDING TOWNS MEASURES THE RETAIL TRADE OF THAT CITY IN THOSE TOWNS

<i>Per Cent of Error</i>	<i>Number of Cities</i>
0- 4	419
5- 9	166
10- 14	149
15- 19	102
20- 24	67
25- 29	44
30- 34	77
35- 39	31
40- 44	28
45- 49	19
50- 54	19
55- 59	12
60- 64	13
65- 69	16
70- 74	12
75- 79	3
80- 84	9
85- 89	11
90- 94	4
95-100	3

This does not mean that newspaper circulation is the only factor that regulates or controls the retail strength of

²See Table I.

³Example: In 419 smaller cities and towns newspaper circulation of larger cities in those towns approximates within 5 per cent accuracy the proportion of retail business which the larger cities enjoy in those towns.

⁴Seven Texas cities.

a city. It does mean that the newspaper circulation of a city and the retail trade of leading stores of that city are, to a large extent, both conditioned by the same factors. Both newspaper circulation and retail trade are helped or hindered in a similar way by the strength or weakness of such characteristics in the surrounding territory as road conditions, lines of transportation and communication, class of consumers in the surrounding territory, density of population, business institutions, social and amusement attractions of the city, the nature of competition offered by smaller towns, the natural barriers such as mountains or rivers.

The law of retail gravitation interprets a tendency toward outside buying that has been recognized for some time but that has never been clearly defined or understood. The law permits one to measure and to analyze outside trading in terms of classes of people and kinds of merchandise involved in various-sized cities and towns. Only through such measurement and analysis can outside trade, and the factors which influence it, be understood.

The law involves all different-sized cities and towns and to some extent all kinds of merchandise. When one city attracts retail trade from a small city or town, the basis for that attraction is primarily the retail service offered in connection with style and specialty goods. But the purchase of standardized goods is frequently involved as an incident to the purchase of style and specialty goods. Many consumers, living in a small city or town, correctly or incorrectly hold the idea that they are able to buy standardized merchandise in larger cities at a saving.

Obviously, the law involves only those classes of people who do part of their trading outside of the city or town in which they live. In cities over 100,000 population, those families whose annual income exceeds \$5,000 are most likely to be responsible for the business that is lost to a larger city. In small towns, however, all but the poorest classes of people are usually involved in out-of-town trading.

The reader should bear in mind that the law of retail gravitation presented in this section is offered merely as a simplified summary⁵ of existing conditions.

There is no contention that cities in other parts of the country not included in this study draw trade from intermediate cities or towns in conformance with the same law that holds for Texas. But it would not be surprising if the collaboration of market authorities in other sections should support a rather general application of the law in other parts of the United States.

*Factors That May Influence the Retail-Trade
Territory of a City*

It is hardly possible for one to contemplate any sort of measurement of the retail-trade territory of a city without immediately being confronted with evidences of certain causal factors which vitally influence that trade territory.

Lines of transportation and communication, connecting a city with its surrounding territory, obviously bear an important relation to the influence of the city in that territory. For instance, the condition of public highways in these days, when automobile travel occupies such an important place in our transportation system, is one factor which can either greatly help or materially hinder a city as it attempts to exercise an outside influence. And an extremely important means, currently available and perhaps most used, for communicating the message of the merchant to prospective customers in the territory surrounding a city, is the daily newspaper—one of the most powerful agents that can be employed in extending the frontiers of a market.

But public highways and newspaper circulation are not the controlling factors. They in turn are dependent upon many other factors. Without the offerings of prominent style-goods stores and without the attractive programs of larger theaters, a newspaper could not so easily pull outside consumers to the city and the demand for good roads would probably not be so great.

⁵See Figure I.

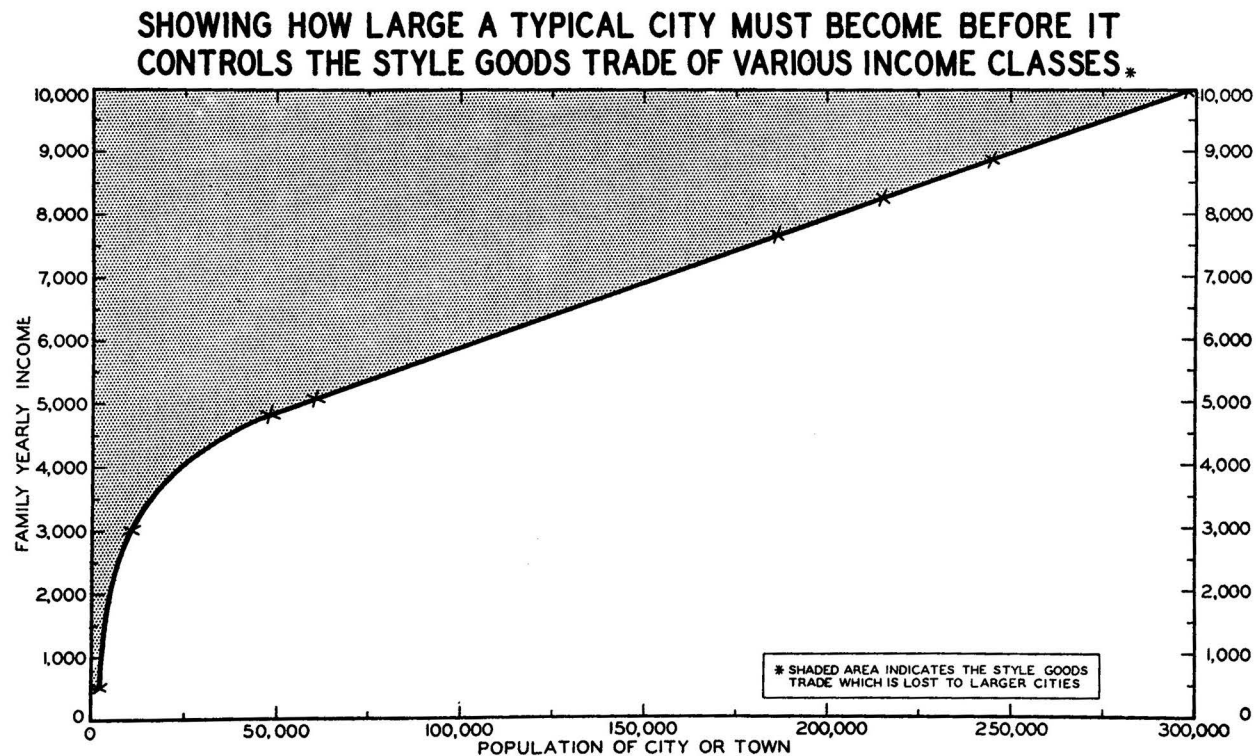


FIGURE I

The actual size of a city in which a retailer is located is not so important. But the *relative* size of the city in comparison with other nearby cities and towns *is* important. One large city, because it is near another larger city, may lose some trade that it would probably enjoy if it were, let us say, 200 miles distant from any other large trading center. Proximity to a larger market may be a very important factor in the study of the trade influence of one city, and yet occupy little or no importance as a factor in the study of the trade influence of another city.

In other words, every city presents an individual case with its characteristic differences, and the retail-trade territory of any given city is the resultant of a highly complicated inter-relationship of a large number of factors rather than the direct resultant of the influence of one or two or three or four factors. The study of any retail-trade territory is a problem involving the consideration of those special factors which influence the extension of that particular trade territory.

For the above mentioned reasons, the author will venture a provisional list, rather than an arbitrary classification, of factors that may influence the retail-trade territory of any given city.

Outline of Factors

1. Lines of Transportation

- a. Public highways
- b. Railroads and railroad rates—including special rates to commuters
- c. Electric lines—regular and special rates
- d. Bus lines—regular and special rates
- e. Waterways—regular and special rates
- f. Express and parcel post rates—regular and special
- g. Air lines

2. Lines of Communication

- a. Circulation of the daily newspaper
 - (1) Number of papers distributed
 - (2) Geographical territory covered
 - (3) Classes of people reached
- b. Telephone and telegraph lines and rates

3. The Class of Consumer in the Territory Surrounding the Market
4. Density of Population in the Territory Surrounding the Market
5. Proximity of the Market to a Larger City Market
6. The Business Attractions of the City
 - a. The nature of the leading stores of the city
 - (1) The kinds of goods and selections of goods offered by stores in the market
 - (2) The delivery, credit, and other services offered by these stores
 - (3) The general reputation of these stores as style-goods centers
 - b. The extent to which the city offers storage and a market for the sale and redistribution of goods produced in the surrounding territory
 - c. The banking facilities of the city
7. The Social and Amusement Attractions of the City
 - a. Theaters
 - b. Educational institutions and facilities
 - c. Musical attractions
 - d. Athletic events
 - e. Church, society, or fraternal gatherings
 - f. Fairs and expositions
8. The Nature of the Competition Offered by Smaller Cities and Towns in the Surrounding Territory
 - a. The kinds of goods and selections of goods offered by stores in smaller locations
 - b. The general attitude of these surrounding cities and towns toward the larger city
9. The Population of the City
10. The Distance Which Prospective Customers Must Travel in Order to Reach the Market, and the Psychology of Distance Prevailing in That Part of the Country
11. The Topographical and Climatic Conditions Peculiar to the City and Its Surrounding Territory
12. The Kind of Leadership Offered by the Owners or Managers of Various Business Interests of the City

Specialization in Retailing

As actual lines of merchandise were being checked in retail stores in various-sized cities all the way from the crossroad to the metropolitan market, specialization in the performance of the retail function was observed as follows.

In towns of 400 or 500 the first stage in specialization is observed. Men's and women's apparel and dry goods as a group break away from the general store and are sold in a separate retail establishment. Similarly hardware, furniture and undertaking may separate as a group as may meats and groceries. At this point the drug store, which is rapidly becoming the general store of the small town, sells all kinds of standardized merchandise. In the smaller towns the drug store usually sells most of the jewelry sold in the town.

In towns of 1,000 to 2,000 population, the second stage of specialization begins to appear. Stores are found which sell only women's wear or only house-furnishings but in either case the lines are incomplete. In connection with women's wear, we find that the lines are fairly complete with the consistent exception of women's shoes. In other words, it seems that the town of 1,000 is large enough to support every item of women's wear except shoes. Frequently in towns around 2,000 we find that the furniture and undertaking business go together. Also in towns around 2,000 stores that sell only men's and women's apparel begin to appear.

The next stage of specialization is found in towns from 2,000 to 3,000. Here jewelry stores and music stores begin to appear, but the jewelry store is usually combined with either the service of an optometrist or the sale of musical instruments. In a few cases, however, stores that sell only musical instruments are found in these towns from 2,000 to 3,000 population. Towns around 3,000 seem to be large enough to support a store that sells only men's apparel and they usually have complete lines including men's hats, shoes, suits, overcoats, and general lines of men's furnishings.

The next stage of specialization is the appearance of the furniture store in towns beginning around 4,000—usually

in the form of a store that sells not only new but also second-hand furniture.

In towns around 6,000 population the stores seem to become sufficiently specialized to *emphasize one* item of men's and women's apparel. For example, stores that emphasize men's and women's shoes begin to appear but we consistently find that men's and women's hosiery are combined with shoes. And not until one gets into towns above 10,000 do stores begin to appear that sell *only* men's and women's shoes.

As a town passes the 30,000 mark, we begin to observe some of the final stages of specialization. We find stores that emphasize one item of women's wear such as hats or shoes but usually in towns from 30,000 to 60,000 women's hosiery is sold in those stores that sell women's shoes. In towns around 40,000 stores that sell only women's hats begin to appear.

Finally, in cities from 60,000 up, we find a number of stores appearing that sell women's shoes only, men's hats only, men's shoes only, without any supplementary lines whatsoever.

These various stages in specialization can also be summarized in terms of particular lines of merchandise.

In the first place stores that sell only hardware appear in towns of 500 to 1,000. Stores that sell only housefurnishings appear with incomplete lines beginning in towns of 1,000 but not until one gets into towns of 5,000 and above are stores found that have complete lines of housefurnishings including sewing machines, washing machines, vacuum cleaners, furniture, rugs, silverware, dishes and glassware, draperies, lamps, shades, and wall paper.

Jewelry stores begin to appear in towns around 12,000 to 15,000 population but they usually sell musical instruments and optometrist service, and not until one gets into towns around 40,000 or 50,000 do jewelry stores appear with fairly complete lines of jewelry and without any supplementary lines.

In connection with women's wear, stores that sell only women's apparel but with incomplete lines (consistently without women's shoes) begin to appear in very small towns from 500 to 1,000 but not until one gets into towns around 10,000 do stores begin to appear with complete lines of women's wear including shoes. There are two or three exceptions of stores that have complete lines of women's wear in smaller towns around 5,000 but usually these are small towns in which women's colleges are located.

As far as men's apparel is concerned, stores that sell complete lines of men's apparel appear in towns from 3,000 to 5,000.

Stores that sell only musical instruments such as victrolas, pianos, sheet music, records, and radios begin to appear in towns as small as 2,500.

Stores that sell only men's and women's shoes with supplementary lines of hosiery begin to appear in towns of 6,000 but not until one gets into towns around 10,000 to 15,000 do stores begin to appear that sell only men's and women's shoes without any supplementary lines of hosiery. As far as children's shoes are concerned, there is evidence to show that stocks of children's shoes are frequently incomplete until one gets into cities of 75,000 to 100,000.

Stores that sell women's shoes with supplementary lines of hosiery begin to appear in towns of 30,000 but not until one gets into cities of 60,000 do stores begin to appear that sell only women's shoes.

As far as women's hats are concerned not until one gets into towns of 40,000 do stores sell a complete line of women's hats without any supplementary lines. Stores that sell only men's shoes, only men's hats, or only women's shoes do not begin to appear until one gets into a city of 60,000 or over.

The following table is offered to indicate the size of locations at which the various stages of specialization begin to appear.

Although a few highly specialized retail stores begin to appear in cities around 60,000, yet a sufficient number of these specialized outlets to insure the adequate shopping

facilities of a primary retail market are rarely if ever found in cities of less than 100,000.

TABLE II

Specialized Stores That Sell Only the Following Lines: *The Approximate Population of the City or Town in Which These Specialized Stores Begin to Appear:*

Men's and women's apparel and dry goods.....	500
Hardware, furniture and undertaking.....	500
Meats and groceries.....	500
Hardware	500
Housefurnishings (incomplete lines).....	1,000
Women's apparel (without shoes).....	1,000
Jewelry (with musical instruments or optometrist service)	1,000
Hats and dressmaking.....	1,000
Men's and women's apparel (incomplete lines).....	1,000
Music stores.....	2,500
Men's apparel.....	3,000
Furniture, new and second-hand.....	4,000
Men's and women's shoes and hosiery.....	6,000
Men's and women's shoes.....	10,000
Women's shoes and hosiery.....	30,000
Women's hats.....	40,000
Women's shoes.....	60,000
Men's shoes.....	60,000
Men's hats.....	60,000

Although the large-city department store appears as one business and very much like the small-town general store, it is in reality an integrated business representing the combination of a large number of highly specialized and somewhat independently operated departments, combined under one organization largely for the sake of convenience in shopping.

Explanation of Figure II—Business Which Larger Cities Attract from Outside Cities and Towns of Various Populations

In studying the amount of outside business which larger cities attract from different-sized cities and towns, we find that in the case of every large city in Texas the number of

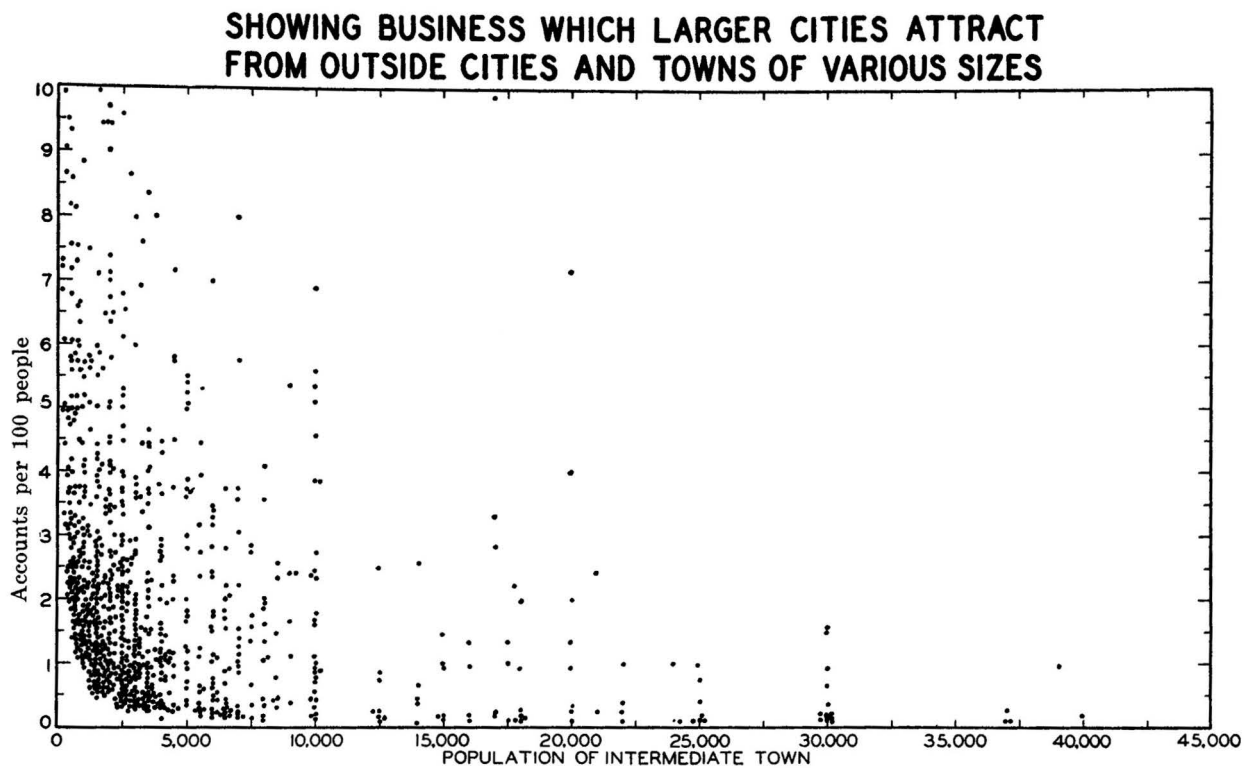


FIGURE II

accounts per capita which that large city enjoys in surrounding towns decreases as the population of the surrounding towns increases.

Since the number of accounts per capita in surrounding towns declines as the population increases, in the same way for Fort Worth, Dallas, Waco, San Antonio, Houston, Austin, El Paso (all of the larger cities in Texas included in this study), perhaps a composite curve for all cities will be sufficient to indicate graphically the way in which the number of accounts per capita (which these cities have in surrounding towns) declines as the population of the town increases. On the composite curve each dot represents a particular surrounding town in relation to a single city.

*Explanation of Figures III and IV—The Business
Which a City Draws from Intermediate Towns
at Various Distances*

In studying the business which larger cities in Texas draw from towns at various distances from the larger cities, we find that cities of 100,000 population and over (Dallas, Fort Worth, Houston, San Antonio, and El Paso) draw a large number of accounts per capita from towns as far as 200 to 250 miles away. For smaller cities between 50,000 and 100,000 population (Austin and Waco) the outside trade practically disappears as one exceeds the distance of one hundred miles from the city. Figure III shows the way in which the number of accounts per hundred people (which cities over 100,000 population have in surrounding towns) declines as the distance to these towns increases. Figure IV shows the way in which the number of accounts per hundred people (which cities between 50,000 and 100,000 population have in surrounding towns) declines as the distance to these towns increases. Each dot represents an intermediate town in relation to a single city.

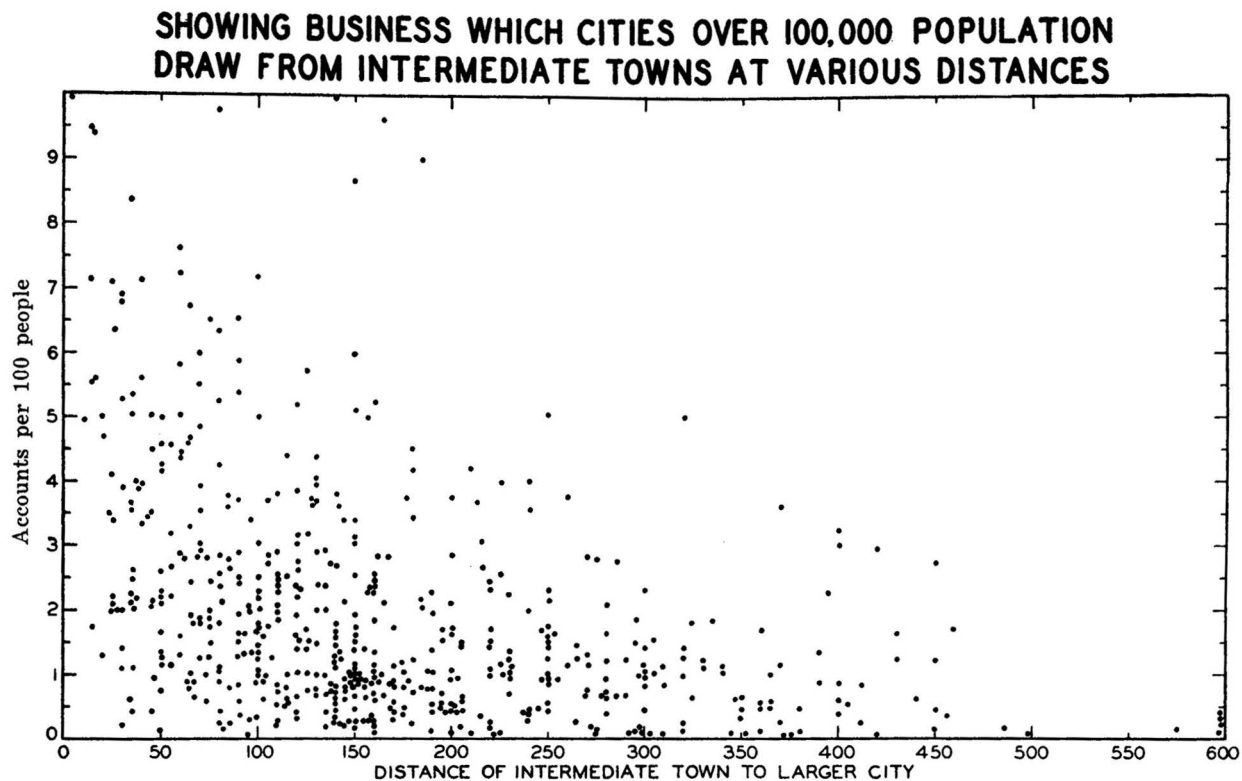


FIGURE III

SHOWING BUSINESS WHICH CITIES BETWEEN 50,000 AND 100,000
POPULATION DRAW FROM INTERMEDIATE TOWNS AT VARIOUS DISTANCES

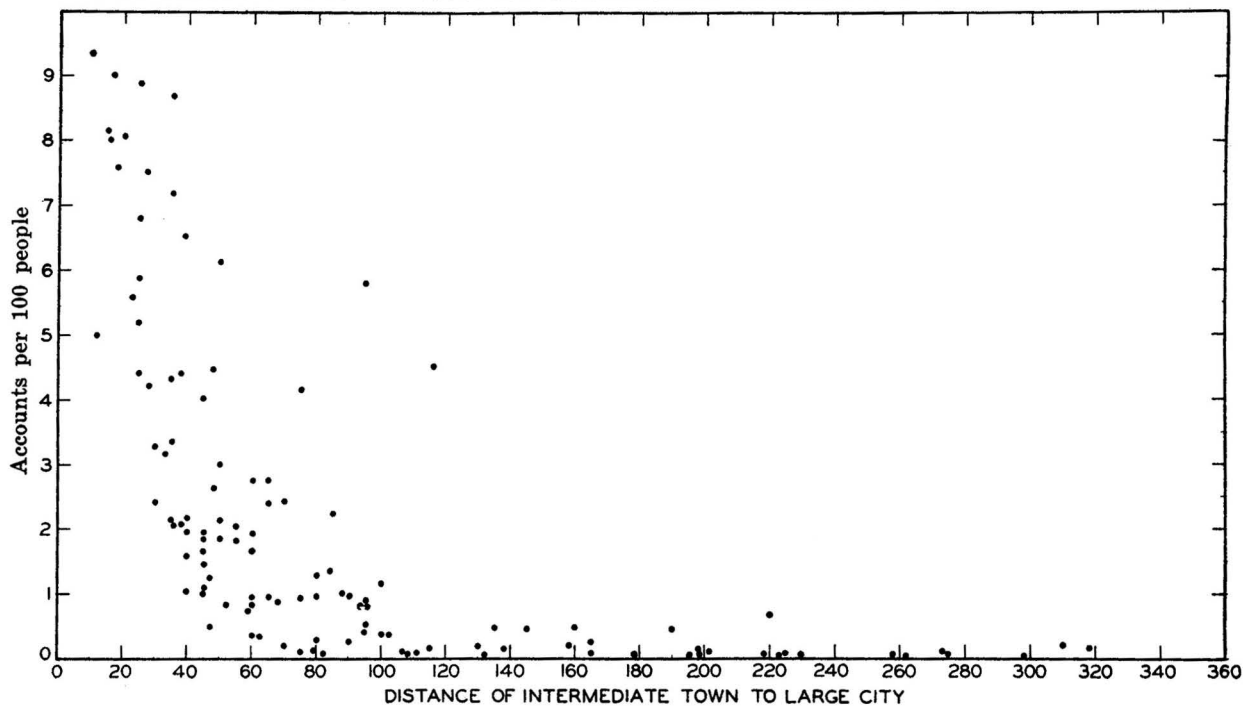


FIGURE IV

V. RETAIL RELATIONSHIPS AND FUNCTIONS

What Is the Function of the Retailer

The old idea still prevalent that a retailer is a purchasing agent for his entire community is hardly an accurate one. It is too inclusive. No retailer, unless he has in his store goods which fully satisfy every need of every class of consumer, is really a purchasing agent for his *community*. It is more accurate to say that each retailer is a purchasing agent for certain groups of consumers and for certain types of merchandise. After his function is thus accurately defined in terms of the classes of people he is trying to serve and in terms of the types of merchandise he is attempting to sell, the retailer is in a more intelligent position to discover whether or not his business is organized to serve that function. Now let us consider how various retail relationships affect the performance of that function.

The Service Relationship of Various Methods for Retailing Goods

Perhaps it might be well to devote a few short paragraphs to the possible relationships that exist among the three commonly recognized methods for retailing goods; mail-order selling, house-to-house selling, and localized retail-store selling.

It is important to realize that neither mail-order selling nor house-to-house selling accounts for a very high percentage of the total retail sales of the United States. And there is evidence to show that within the past few years each has experienced an appreciable decline. According to an estimate by Dr. Paul H. Nystrom,¹ the percentage of goods retailed through mail-order houses has decreased from 4.2 per cent in 1923 to 3.5 per cent in 1928. Similarly, he estimates that the percentage of retail sales accounted for by house-to-house selling has decreased from 2.5 per cent in

¹Dr. Paul H. Nystrom, Retail Trade, 1928, *Journal of Retailing*, January, 1929, p. 26.

1923 to 2 per cent in 1928. An estimate of the present percentage of retail sales enjoyed by mail-order houses and by house-to-house selling organizations is given by Mr. George B. Everett, President of Montgomery Ward and Company. Mr. Everett estimates that mail-order houses are at present enjoying 4.6 per cent of retail sales and that house-to-house canvassers are doing .13 per cent of the retail business in the United States.²

So far, experiments that would reveal the relationship between house-to-house selling and "over-the-counter" selling have been lacking. But within the past two years there has been a noticeable growth of so-called "mail-order houses" in the field of localized retail or "over-the-counter" selling. The reader is certainly familiar with this marked development. This new venture should yield experience data that are extremely valuable to anyone interested in the study of the relationship between mail-order and retail-store selling. To begin with, there is the problem of separating products that require the service offered by a retail store from products which can be sold with limited mail-order service. But it is not a simple problem. Montgomery Ward and Company, according to Mr. Everett,³ have approximately one-tenth as many items in their retail stores as they have in their mail-order catalogues.

Those items selected for *retail stores* have some such characteristics as the following:

- (1) Style and specialty merchandise in connection with which the customer prefers to make personal selections
- (2) Products for which the customer is unwilling or unable to wait until an order has been filled
- (3) Products that can be bought conveniently and that involve a small amount of money

²George B. Everett, New Sales Problems Created by Montgomery Ward Retail Stores, *Sales Management*, December 1, 1928, pp. 551-552.

³George B. Everett, New Sales Problems Created by Montgomery Ward Retail Stores, *Sales Management*, November 24, 1928, pp. 475-477.

On the other hand, the following types of merchandise are more appropriate for the *mail-order* catalogue:

- (1) Standardized items easily described in connection with which the personal selection by the consumer is not involved
- (2) Products for which the customer is willing to wait until an order has been filled
- (3) Products which involve an amount of money sufficient to permit a reasonable saving if bought by mail

These types of merchandise fall nicely into either one class or the other. The difficulty, however, is that so many lines of merchandise are in the twilight zone. Different consumers may demand widely different services in relation to the same kinds of merchandise. Of course the field for mail-order service is further complicated by the size of the cities or towns in which the customers live, for this definitely affects the type of retail-store service which is close to home. Naturally those who live on farms or in smaller cities or towns are forced to rely more upon mail-order service.

As has been intimated, those mail-order houses which have lately launched into the field of retail-store selling are in an excellent position to discover, through a summary of experience, more about the relationship of these two methods of retailing. According to the estimates that have been given, house-to-house selling does not occupy a very important place in the scheme of retailing. But in the retailing of certain products it is of sufficient importance to deserve a discussion of its relation to retail-store selling. Mr. A. C. Fuller, president of the Fuller Brush Company⁴ mentions some of the disadvantages and advantages of house-to-house selling, as follows:

The Disadvantages of House-to-House Selling

1. Inconvenience of customers
2. Restriction of customers' shopping privileges
3. Hostile customer attitude

⁴A. C. Fuller, *Where Are We Headed in House-to-House Selling?* *The Magazine of Business*, December, 1927, pp. 703-705.

4. Difficulty of reaching salesmen
5. High turnover of salesmen
6. Limited supply of competent salesmen
7. Necessity of extensive national advertising
8. Expense of maintaining the selling organization

The Advantages of House-to-House Selling

1. Opportunities for greater sales effort
2. Display of goods where they are to be used
3. Complete control of distribution
4. Ease of maintaining standard prices
5. Frequent opportunities to iron out customers' difficulties
6. Steady growth for the newcomer at as rapid a pace as he can readily maintain

From the point of view of the consumer, the retail service offered by house-to-house selling is so unsatisfactory in connection with almost all products that this method is not looked upon with particular favor. Perhaps the greatest disadvantage of the method is the lack of timeliness of its sales service. Very seldom does the time of the salesman's call coincide with the time at which the goods are desired by the consumer. This fact together with the other disadvantages mentioned by Mr. Fuller are sufficient to restrict house-to-house selling from the consumer service point of view in a way that easily explains its relative unimportance in the scheme of retailing.

This brief discussion on the basis of service offered the consumer by these three methods of retailing should be sufficient to indicate the general relationships that hold among house-to-house selling, mail-order selling, and localized retail-store selling. It should intimate that the most important problems incident to a division between products that might be sold by mail and products that demand retail-store service must be studied in terms of the service requirements of different kinds of merchandise and in terms of different classes of people living in various-sized cities and towns that offer different types of retail-store service.

*Centralization of Retail Markets for Style Goods;
Decentralization of Markets for Standardized
Goods*

Almost no one would deny that within recent years there has been a steadily increasing emphasis upon style. Perhaps the automobile, by increasing social intercourse and style consciousness and by making it easier for consumers to travel longer distances to satisfy their style requirements, has been partly responsible. But whatever factors are responsible, the effect of this increasing style demand for the satisfaction of individual tastes may be observed in the centralization of style-goods markets. Ten years ago the major shopping centers in the United States numbered over 1,000, whereas now, in spite of a marked increase in population, the number of major shopping centers has decreased to less than 700.⁵

On the other hand, retail markets for the distribution of standardized products, such as soap, cigarettes, staple food products, drugs, refrigerators, and automobiles, are becoming more highly decentralized. The number of such markets is increasing. Retail outlets for the distribution of standardized products are now found in nearly every neighborhood.

But in connection with the centralization of markets for style goods, a noticeable reaction has already begun. The use of the automobile has resulted in such congestion in the downtown sections of our larger cities that the inconveniences involved have tended to repel rather than to attract retail trade; particularly the retail trade of poorer classes of people who do not care to pay for parking privileges in the downtown section. As has been intimated this condition affects the great middle class of people who cannot well afford to pay for the extra privilege and who, therefore, are likely to buy an increasing proportion of their style and

⁵Controllers' Congress Official Publication, National Retail Dry Goods Association, 1927, Vol. XV, No. 5, p. 14.

specialty goods in smaller cities or in the suburbs of larger cities.

Mail-order houses that have recently launched into "over-the-counter" selling have followed the practice of locating their stores in smaller cities and on the edge of larger cities rather than in the heart of the congested section.

In the very large cities such as Chicago and Los Angeles, there has been a noticeable development of suburban branches by large downtown style- and specialty-goods stores. In Los Angeles there are a number of department stores, women's shops, jewelry stores, shoe stores, hat shops, music stores, furniture stores, men's shops, that have established branches of their downtown store in such suburban locations as Glendale, Pasadena, and Hollywood. In Chicago, State Street stores have established branch stores in Evanston, Oak Park, and the South Side.

The Retail Relationship Between Chain and Independent Stores

It would be difficult to think of any subject in retailing that has been given more attention within the past few years than comparison of chain stores with independents. Unfortunately, by far the bulk of the material that has been published is biased one way or the other. Merchants in various localities have banded themselves together to further "Buy at Home" movements or "Patronize Your Neighborhood Store" campaigns. Attempts have been made to legislate chains out of business. On the other hand many have been willing to emphasize the advantages of chain stores and to credit them with a large share of the economies that have been effected in retailing.

More impartial comparisons have come from a few authorities.⁶ Many of the advantages that are commonly identified with chain organizations are in reality within

⁶James L. Palmer, Assistant Professor of Marketing, the University of Chicago; Paul H. Nystrom, Professor of Marketing, Columbia University.

reach of independent merchants. The function of the retailer is to serve the consumer. When a merchant, either chain or independent, discovers he is losing business, he usually finds, upon examining his business, that there is something the matter with the services that he offers. His location may be bad; his merchandise may be out of season; his prices may be out of line; his display of merchandise may be poor. Other merchandising mistakes may be responsible in part for his failure to measure up to the market possibilities. The retailer should start out with the idea that the consumer owes him nothing, that he has no inherent right to be in business, and that in return for the profit that he makes in retailing, he owes the consumer a commensurate service. Furthermore, any retailer, independent or otherwise, by observing the practices of successful competitors, can apply to his own business most of their methods.

Of course there will probably always be a large group of retail merchants, just as in other businesses, who are inefficient, wasteful, and either unaware of, or unwilling to apply, those improved methods that lead to more satisfactory and economical services to the consumer. It is from this group that one might expect complaints to continue. Naturally these complaints are fired at the target easiest to hit; i.e., the recent chain-store expansion. But in reality this inefficient group is complaining against the program of improvement not only by chains but also by independent merchants; a program that is making it more difficult for the inefficient merchant to continue to make a satisfactory profit.

One of the noticeable differences between chain organizations and independent stores is that chains usually have well defined *what* service they are trying to sell. They have very definite ideas in relation to the particular restricted lines of merchandise they are trying to sell and they have made a selection of particular classes of people whom they are attempting to serve. The most successful

national dry goods, women's ready-to-wear, or men's clothing chains direct their attention primarily to particular income classes—those homes which enjoy an income from \$1,000 to \$3,000 a year. They restrict their merchandise to selected lines which they have found can profitably be sold to these classes of people. The emphasis is usually first upon price, second upon quality as fine as they can give for a reasonable price, and third upon an extremely limited delivery, credit, or exchange service.

The retailing methods employed by organizations that have been most successful are readily available.⁷ Briefly then, if any retailer, either independent or chain, understands his function as a retailer and intelligently applies improved methods for performing that function, he is in a favorable position to continue to serve the customer on a profitable basis.

VI. APPLICATION OF THE LAW OF RETAIL GRAVITATION

The immediate practical value of the law of retail gravitation given in Section IV is obvious when one considers that the retailer can approximate at his desk, on the basis of newspaper circulation reports, the proportion of outside business which goes from his store or his town to each of a number of larger cities. For example, suppose city A

⁷Some of the more helpful material in this connection has been prepared by Dr. Paul H. Nystrom in *Women's Wear Daily*, March 31, 1928, "Only Group Buying or Owned Chains Can Serve Independents" (also March 24 issue); "Merchandising and Sales Promotion Errors of Today," by Amos Parrish, *Women's Wear Daily*, July 14, 1928; "Together We're Licking the Chains," by Henry Lohmann, *Nation's Business*, September, 1928; "How the Independent Store Fits Into the Motion Picture," by Milton Ahler, *Women's Wear Daily*, March 26, 1928; "Statistics Show Independent Stores Holding Their Own," by Alexander Kalin, *Women's Wear Daily*, September 29, 1928; "There Is No Monopoly in Selling," by Charles R. Walgreen, *Nation's Business*, October, 1928; "How Far Can the Chain Store Go?" by William A. McGarry, *Printer's Ink*, February 28, 1929; "Pet Substitutions the Distribution Surveys May Explode," by O. H. Cheney, *Sales Management*, March 2, 1929.

delivers 1,000 newspapers in a certain intermediate town and suppose that city B delivers 500 newspapers in that town. Because of the close relationship between newspaper circulation of these cities and the retail trade which these cities draw from the intermediate towns, it is fairly safe to approximate that city A draws about twice as much retail business from the intermediate town as city B.

By calling attention to the fact of "out-of-city trading" in connection with style goods, the law helps the retailer in any-sized city or town to decide whether he should extend or contract his trade territory, and whether he is attempting to serve those classes of people whose trade he is most likely to enjoy.

A Definition of the Retail-Trade Territory Served

Almost any retailer, who extends credit, may secure an indication of the geographical extent of his market by analyzing the location of his charge accounts. He is then in a favorable position to discover the proportion of various income classes of people within that territory, to decide which of these classes he wants to serve, and to adapt the merchandise in his store so that it will be more acceptable to those particular classes.

An Analysis of Outside Business

After the retailer has defined the geographical extent of his potential trade territory, one of his first questions in considering the possibility of encouraging outside business, is "How profitable is this outside business?" For, if the development of trade in this territory surrounding the city is found to be profitable, it is probably to be encouraged; on the other hand, if it is found to be unprofitable, a retailer may not only decide against such an extension of his business, but he may decide to discourage that which he already has.

The question of whether or not outside business is profitable, is largely dependent upon the nature of the outside territory, i.e., the classes of consumers who live there, the

buying habits of these consumers, and the credit risks which they represent.

Studies of consumer buying habits conducted by the author have shown that families whose annual income is less than \$3,000 are usually able to satisfy their needs in smaller cities of less than 100,000 population, and that these classes of people trade very little outside of the community in which they live unless they live in a small town or exceptionally near a large city, i.e., ten or twenty miles away. Only those families whose annual income exceeds approximately \$3,000 travel long distances to satisfy their demands and when they do travel far it is usually to purchase such merchandise as women's style goods and special lines of jewelry and furniture.

It becomes quite clear, then, that unless there is an appreciable proportion of these wealthier classes of customers in smaller cities and towns which surround a large city market, that large city is quite limited in its possibilities for the profitable extension and development of its retail-trade territory.

As the retailer attempts to answer the question of whether or not his outside business is profitable, his attention is invited to an analysis of the business which he enjoys from outside locations, so that he may discover such information as:

1. What is the average size of an order secured from these outside locations? How does this compare with the average size of an order from city customers?
2. What is the percentage of returned goods from outside customers and from city customers?
3. What is the nature of the merchandise bought by those outside the city and what is the profit on these lines?
4. What newspaper in the city offers the best circulation in the most profitable outside territory?
5. What is the average yearly volume bought by out-of-town customers and by city customers?

An Examination of Retail-Trade Territories of Competitors

As far as local competition is concerned, any retailer may be interested in comparing the distribution of his charge accounts with the distribution of total charge accounts of those competing stores in his city which are in a similar line of business. For he may have little or no business in a town where competitors have succeeded in developing an appreciable amount of business. The fact that other similar stores have secured customers in surrounding towns, offers significant evidence of a possibility of developing business there. In other words, an examination of the distribution of competitors' charge accounts gives a reliable basis on which the retailer may consider the possibility of extending and promoting his business.

But retailers of style goods often compete in the surrounding territory with retailers of style goods located in another large city. By furnishing a basis on which the relative strength of two or more cities in a smaller town may be measured, these methods enable a retailer of style goods to compare his competitive position in surrounding towns with the competitive position enjoyed by stores of another adjacent large city.

Analysis by Lines

Similarly the retailer upon analyzing his sales may find that a very high percentage of his profits are being made on an extremely small number of the total lines of merchandise which he handles. This may lead to restriction and reduction in the lines of merchandise so that the unprofitable lines are eliminated or at least reduced as far as possible. Through stock simplification, the retailer is able to reduce overhead costs as well as to concentrate attention on the buying, displaying, and merchandising of profitable lines. It is not uncommon for a store after such a stock study to cut as much as 50 per cent or more the number of lines handled. Even within profitable lines certain styles, colors, or sizes may be eliminated. Some of the more important benefits

that might be expected to result from stock simplification are as follows: (1) smaller inventories, (2) increased turnover, (3) smaller investment, (4) reduced interest charges, taxes, and other overhead charges, (5) reduced rent, (6) less obsolescence, (7) reduction in sales costs and operating expenses. Lines, styles, and sizes should be reduced in harmony with the merchandise demands of the larger share of those whom the store is attempting to serve.

The Coördination of Advertising with Selling Activity

The retailer will be interested particularly in comparing the trade territory of his store with the circulation offered by various newspapers. He may discover, by such a comparison, that the circulation of the newspaper which he has been using does not fully cover the trade territory of his store. He may find that another local newspaper offers a circulation more nearly co-extensive with the trade territory of his store. Or he may find it necessary to supplement the newspaper with some other advertising support in those outlying territories served by his store, but not reached by any local newspaper. On the other hand, he may discover that his trade territory is not so extensive as that territory covered by the newspaper. Such a comparison will give a picture of the waste circulation which he buys every time he advertises his products in that newspaper.

Quite obviously, the best newspaper for any particular merchant to use as an advertising medium (providing of course that the newspaper reaches those classes of people which the store is attempting to serve), is the one which offers a circulation most nearly co-extensive with the potential trade territory of his store.

In a case where several of the leading stores of a city find that the newspapers of that city are offering a circulation that is poorly coördinated with their trade territories, these stores might want to encourage the newspaper either to expand or contract its circulation, as the case may be, so as to keep newspaper circulation in step with the trade territories of the leading stores of the city.

*An Analysis of Conditions Which Facilitate or Handicap
the Growth of Any Particular Retail-Trade Territory*

An examination of the trade territory of a city may indicate a rather poor development in one particular direction. Such a discovery almost invariably leads to an inquiry into the causes of this poor development. Bad road conditions may be responsible. If such is the case the recognition of the seriousness of the condition usually encourages a correction. Any one of the factors already mentioned (page 21) may be partly responsible for a poor growth in one direction or for a favorable development in another direction.

The correction of such conditions which handicap the development of the trade territory of the city as a whole, is usually effected through some coöperative venture on the part of leading merchants. A retail merchants' association or a chamber of commerce is usually the agency through which unfavorable conditions are corrected. Such coöperative bodies are in a much more favorable position to effect improvements if they have information at hand to show what the present situation is and what contributory factors are involved.

The following questions are offered to suggest a plan of thinking for the retail merchant to follow as he attempts to analyze his particular business, and the foregoing discussion is intended to facilitate an understanding of the details of such an analysis:

1. What are the characteristics of your market?
 - a. What is the relation of the city in which your business is located to other nearby larger cities, i.e., what is the relative amount of business that these larger cities attract from your city and your store.
 - b. What is the geographical extent of your market?
 - c. What proportion of wealthy, of middle, and of poor classes of people are there in different sections of your trade territory and which of these classes of people are you attempting to serve?
 - d. What merchandise are you attempting to sell to each of these classes of people?
 - e. What are the buying habits of these classes of people whom you are attempting to serve in relation to the particular goods you are trying to sell?

- (1) When, where, in what quantities, and how is this merchandise bought by your customers?
- (2) What colors, sizes, quantities, and price ranges of these lines of merchandise do your customers prefer?
- f. What is the nature of the occupations of your customers—industrial, commercial, or farm?
- g. What amount of leisure do these occupations permit and what is the relation of this leisure to the demands of your customers for style goods?
- h. What is the attitude of customers whom you are attempting to serve toward your store?
 - (1) The merchandise in each department
 - (2) The selections offered
 - (3) The prices charged
 - (4) The delivery service
 - (5) The return goods service
 - (6) The credit service
- i. What outside competition is present in this territory which you are attempting to serve, and in what parts of this territory, among what classes of people, and in connection with what lines of merchandise is this competition most serious to you?
- j. How does this trade territory which you are attempting to serve compare with the trade territory served by others in your community who are in a similar line of business?
2. What advertising media or methods can you best employ to tell the classes of people whom you are attempting to serve about the merchandise which you have to sell without wasting circulation of your message among those classes of people who will not be interested, and among those who live in territories which you are not attempting to serve?
3. In what way can you coöperate with other merchants in your city in an attempt to improve any conditions which may be handicapping the growth and development of your particular trade territory?

The Relation Between the Small-Town Retailer and the Large-City Retailer

After having read the preceding discussion relating to specialization in performing the retail function, after having recognized the effects of the recent tendency toward

centralization of retail markets for the sale of style merchandise and the effects of the opposite tendency of decentralization of retail markets for standard merchandise, the retailer should have a clearer understanding of the relationships that exist between small-town retailers and large-city retailers.

As has been intimated, each class of retailer has a definite place in the scheme of distribution. It is economically impossible for a retailer in a smaller location to carry the wide variety and large stock of specialty and style merchandise that is demanded of a retailer in a larger city.

In connection with standardized products, such as automobiles, groceries, drugs, hardware, standard lines of dry goods, of wearing apparel, and of furniture, the advantage of buying from a large-city retailer is not so pronounced. One prefers to buy these standardized products in the store most conveniently located. But in such lines as ladies' shoes, hats, dresses, and coats, the housewife likes to compare prices, styles and qualities before buying. In special lines of furniture and jewelry, the purchases are infrequent and important enough to induce customers to travel long distances for selections. The reader has also learned from previous discussions that the direction of trade of the different income classes involved in "out-of-city trading" is dependent upon a wide variety of circumstances, the most important of which are the population of the city in which the consumer lives and the proximity of this city to a larger city.

An appreciation of this retail relationship between larger cities and smaller cities leads the retailer into a study of the local buying habits of those classes of people whom he is attempting to serve in relation to the kinds of goods that he is attempting to sell. Take for example a retailer in a small town of 1,000 who is attempting to handle a full line of women's wear. Suppose that this retailer, in studying the buying habits of his customers, discovers that all but the very poor classes of women of that town prefer to buy their shoes in larger cities. That retailer has two alternatives. If he wishes to continue to sell high-grade women's

shoes, he must move his business into a larger city. But if he wishes to continue doing business where he is, he must discontinue selling women's shoes entirely or he may try to carry a lower price range of women's shoes that are suitable to the poorer classes of women in that town who buy their shoes at home.

When a merchant located in a small city attempts to offer full lines of style and specialty goods that the smaller city cannot afford to support, some unfortunate results are likely to follow. For example, suppose a merchant in a town of 5,000 advertises that he has fur coats for sale. In response to that advertisement, customers may call at the store, discover that his selection is inadequate and form an unfortunate attitude toward the store that may prevent them from buying those standardized goods for which his store is a legitimate outlet.

Because it is primarily in connection with style and specialty goods that large-city retailers draw trade from smaller towns, the small-town retailer should not look upon the large-city retailer *primarily* as a competitor, but should adapt his merchandise to those lines in connection with which he is able to supply the demand of his local trade.

The small-town retailer has some advantages over the large-city retailer in serving his immediate community, for he is nearer to customers in that community and he can give faster service. In fact, the case of the small-town retailer is by no means a hopeless one if he will adapt his business to the place which he naturally occupies in the distribution system.

It is equally important for the large-city retailer to realize that the primary basis for his attraction of business from smaller cities and towns is the service he offers in relation to high-grade style and specialty merchandise. In advertising to prospective customers in small cities and towns, therefore, the key note of his appeal might well be "If your home town merchant cannot supply you, shop at our store." Certainly a greater appreciation on the part of all merchants, no matter where they are located, of the place which

they economically occupy in the scheme of distribution should permit more intelligent plans for retail progress and development.

Program for the Small-Town Retailer

Some of the more important steps which might be taken by retailers in smaller cities and towns are:

- a. He should adapt his lines of merchandise to standardized goods and to those style goods bought by poorer classes who usually buy their style goods in the town in which they live.
- b. Whenever possible he should buy his merchandise in coöperation with others in order to enjoy a volume price.
- c. He should study and improve his merchandising methods, adopting whenever profitable those methods employed by successful competitors or other leading retailers in the same business.
- d. The retailers in smaller communities should somehow agree to reduce competing lines of specialty goods, so that one or two stores may feature adequate selections in connection with a particular line instead of having eight or ten stores carry small and inadequate selections.
- e. Experience has shown that when the stores in smaller cities and towns offer to buy at a reasonable price those agricultural products that come from the surrounding territory such as eggs, chickens, cotton, grain, they have a better chance of holding the staple goods trade that might very well remain in a small town but that is frequently lost to a larger city as an incident to the purchase of style and specialty goods.

Chain and independent stores alike have enjoyed remarkable success as small-town stores. But these successful merchants, in smaller cities and towns, do not try to sell style goods to higher classes of people because they know that these people buy style goods in larger cities. They handle standardized goods and selections of wearing apparel that will appeal to poorer classes who live in small towns and who trade at home. Naturally, a chain organization's buying power gives it a volume price. But coöperative buying among independents has accomplished volume prices.

Almost invariably one will find that chain organizations understand how to merchandise goods by timely offerings and appropriate displays. There is no reason why independents cannot do the same thing.

In conclusion, then, retailers in small towns who follow the general program outlined above, are usually the more successful ones. And those retailers in larger cities, who hope to serve as shopping centers for style and specialty goods, usually find that their success is dependent upon selections, prices, styles, and qualities which customers are likely to compare before buying.

VII. APPENDIX

The general formula for the law of retail gravitation is as follows:

$$\frac{B_a}{B_b} = \left(\frac{P_a}{P_b}\right)^N \left(\frac{D_b}{D_a}\right)^n$$

where B_a = the business which City A draws from intermediate Town T

B_b = the business which City B draws from intermediate Town T

P_a = population of City A

P_b = population of City B

D_a = distance of City A from intermediate Town T

D_b = distance of City B from intermediate Town T

It is so readily acceptable that the amount of outside trade which a city enjoys in any surrounding town is a direct function of the population of that city and an inverse function of the distance of the city from that town, that the general law needs no support.

In the general equation, however, there are two unknowns, i.e., N , the exponent of populations, and n , the exponent of the inverted distances, and it is in connection with the establishment of actual values of these exponents that we need to introduce objective data to support our use of particular values.

Concerning the exponent of populations, a study of the outside retail trade (i.e., the trade enjoyed in that territory

which surrounds a city) shows that a city with twice the population of another city enjoys about twice as much outside retail business as the smaller city half as big. A city five times as big as another enjoys about five times as much outside trade as the smaller city. For example, if City A, with a population of 50,000, has about 5,000 customers outside the city, City B, with a population of 100,000 typically has about 10,000 customers outside the city, and City C, with a population of 250,000, typically has about 25,000 customers outside the city. In other words, the evidence which has been secured on the amount of outside business enjoyed by different-sized cities and towns, supports the use of the first power of the population.

This leaves n , the exponent of the distance, the only unknown in the equation. Solving for n , then, in the above equation, we have

$$\begin{aligned} \left(\frac{D_b}{D_a}\right)^n &= \frac{B_a}{B_b} \times \frac{P_b}{P_a} \\ n \log \frac{D_b}{D_a} &= \log \left(\frac{B_a}{B_b} \times \frac{P_b}{P_a} \right) \\ n &= \frac{\log \left(\frac{B_a}{B_b} \times \frac{P_b}{P_a} \right)}{\log \left(\frac{D_b}{D_a} \right)} \end{aligned}$$

By actual investigation, the relative amounts of outside business enjoyed in surrounding towns by various-sized cities in Texas were found. In each case the actual values found were put in the equation to represent B_a and B_b . With the populations and distances known, we had only to solve for n .

Solving for n in 255 cases the following distribution of the values for n were found:

<i>No. of Cases</i>	<i>Value of n</i>
45	0 - 1.5
87	1.51- 2.5
35	2.51- 3.5
24	3.51- 4.5

<i>No. of Cases</i>	<i>Value of n</i>
15	4.51- 5.5
14	5.51- 6.5
6	6.51- 7.5
5	7.51- 8.5
12	8.51- 9.5
5	9.51-10.5
3	10.51-11.5
4	11.51-12.5

In other words, a clear mode occurs in the range 1.51-2.5 which shows that the exponent of the distance is nearer to the second power than to any other even power.

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