THE GEOGRAPHICAL ASPECTS
OF HISTORICAL NEWSPAPER ADVERTISING

by

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Foreword

Newspapers were and are sources of information. As permanent communicative tools, they bear mute witness to the occurrences of past and present. On their pages are printed important events, great plans, and inconsequential happenings. And yet, newspapers are much more than mere disseminators of news, for they also offer commercial information, and as such, supply their readers with a veritable directory of neighbouring merchants. Through its advertisements, the newspaper makes available at a glance, the location and price of the various goods and services of which the newspaper reader may have need. This is true of present day newspapers, and it is true of past newspapers.

These advertisements may expound the advantages of a shop in the town in which the newspaper is based, or it may give the newspaper reader information about a commercial establishment outside of that town. These advertisements offer information about not only the merchant's store, but also about the merchant. That he sent an advertisement to any newspaper, says something about him; but that he sent it to that particular newspaper, says even more. This study aspires to define that "even more".

In trying to define that phrase, the author hopes to introduce newspaper advertisements as a source of data for historical geographers. As such, this study is a continuation of several previous investigations carried out on historical newspaper advertisements by other researchers, and a paper presented by the present author.
There are various types of studies which can be done using this data as a primary source. Some of these studies will be investigated in great detail in this paper; others will be merely mentioned. It is hoped that through this paper, the validity of this data source will be established, and the various problems or pitfalls will be defined.
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The Geographical Aspects of Historical Newspaper Advertising.

A. Introduction.

This study is based on the idea of "town orientation", or "town allegiance" in the directional sense; that is: which way is the town facing, or: is the town tending to be aligned towards another town of similar size, or perhaps to a set of smaller towns.

To take a present-day example: in writing the Steele Commission Report on Regional Government for Hamilton - Wentworth, the researchers had great difficulty in deciding what to include and not to include in the new region. Where should the lines fall? The two greatest problem areas were the Grimsby - Beamsville corridor and the Burlington - Oakville corridor. To which cities (St. Catharines, Hamilton, or Toronto respectively) were these four towns oriented? To resolve such a problem, the researchers used absolute and relative measurements of these events:

1. inter-zonal traffic movements (number and percentage of trips to and from certain towns).
2. types of traffic movements.
3. inter-zonal telephone calls.
4. place of hospitalization of residents of the four towns.

On the basis of this information, Oakville was seen to be oriented to Toronto, Beamsville to St. Catharines and Burlington and Grimsby towards Hamilton.

John Marshall tackled a similar sort of problem in the book, The Location of Service Towns. Couched in a framework of central place theory, an abstract model of a theoretical set of
towns was set up, each being or not being oriented to another
town, smaller of larger than itself. The set of towns was broken
down into a seven point classification, based on functional inter-
relationships between towns. These inter-relationships were in
turn based upon the concept of patronization; that is, the resi-
dents of one town patronize the functions performed in another
town.

The seven town types are:

1. central city.
2. non-competitive centre.
3. major competitive centre.
4. primary tributary centre.
5. secondary tributary centre.
6. primary peripheral centre.
7. secondary peripheral centre.

When the model is mapped (fig. 1), a line is drawn around
several of the cities, and a central place system is developed.
The linkages are in terms of major and minor allegiances. This
system, as proposed by Marshall, is based upon field experience,
and is therefore empirical. The data is gathered via personal
interviews of merchants of the several towns, and of consumers
in the several towns. The model is then testable in present-
day situations where personal interviews or questionnaires can
be used.
Thus, the idea of town orientation is not a new one; it has been investigated. It is a valid concept for studies of both the present and the past.

One of the questions to which this present study hopes to offer a solution, is: how can we find town orientation in the nineteenth century? The only data available on inter- or intra-
zonal traffic movements are the spotty toll gate records, which were far from being provincially omni-present. Telephone calls, personal interviews and questionnaires are ruled out at the outset, and hospitalization locations are limited to the records kept. What can be used to derive town orientation?

An often-overlooked source is the merchant of the town, and his attempts to set up linkages and his perception of his drawing area. Merchants in the nineteenth century often advertised their goods and/or services in newspapers. These merchants, then, attempted to set up information linkages between the readers of the newspaper and themselves. As newspapers were not published in every town, merchants often had to send their advertisements by mail to a town which had a newspaper. (see page 6) Advertisements were sent to the newspapers of such towns as would yield the greatest return for the merchants. Thus, the merchant would mail his advertisement to a newspaper of a town which was oriented towards his town, or which was linked to his own town either physically or functionally, for if two towns were oriented towards each other, the residents of each would be more apt to patronize the functions of the other. In this way then, town orientation, and mercantile information links are analogous (see part C: scope and method).

Newspaper advertisements can be used for the study of these orientations, because of three fundamental facts. First of all, there were few newspapers outside of the larger cities before 1851, due to the high postage rates. When these rates were modified to ½p. for each newspaper sent anywhere in the province,
a swarm of "country" newspapers started. It was not difficult to start a newspaper: a few hundred dollars would pay for a patent, and subscribers were easy to get.

Secondly, advertising itself was on the increase, and many merchants saw the value of advertising. An edition of a "country" newspaper in Colbourne, 1857, put it this way:

Advertising: notwithstanding all that has been said about advertising, there is a vast deal of ignorance on the subject. But when editors call attention to it, they are generally accused of selfishness. But we ask anyone to note what place of amusement succeeds the best: those who pay liberally for advertising, or those who parsimoniously restrict their expenditures in that line? What would the various artists who have come to this country and made their fortunes, have done if they had not received support of the press? The fact is those who have advertised most liberally, have universally succeeded the best. Those business men whose advertising costs them thousands of dollars a year, make more money in one year than does the close-staked dealer who dribbles out a few hundreds only, in ten years. This fact is daily proved.

The author of an article in "Leisure Hour" (a British newspaper) in 1866, made this observation.

The public faith in advertising, as evidenced by the multiplication of advertisement, would seem to have been regularly on the increase in the last twenty years or more, though its full development did not take place until the advent of cheap newspaper postage [1851], after the repeal of the paper duty [1850].

Even Ontario's first newspaper, "Upper Canada Gazette and American Oracle," contained advertisements, indicating that very early, both merchants and editors saw the value of advertising.

Thirdly, all advertisements given to any editor of any newspaper, had to be written. A merchant could not simply tell an editor what to put into an advertisement. In a typical note on
advertisements (these notes being printed in each issue of each newspaper), the editor of the Northumberland Pilot underscored the instructions in this way:

Advertisements, without written directions, will be inserted till forbid, and charged accordingly. All transitory advertisements from strangers and irregular customers, must be paid for when received for insertion. All orders for discontinuing advertisements must be delivered IN WRITING, at this office on Tuesday before publication. [capital his].

It is because of these three fundamental reasons that the concept of orientation can be devised from newspaper advertisements: first, there were many newspapers; second, advertising was seen by business men and editors alike to be profitable; and third, these advertisements had to be delivered or mailed in. The merchant of any city or town, indicated that town or region from which he thought most response would come, by placing his advertisement in that newspaper.

The concept of orientation is basic to the study, for several reasons. First of all, the present author feels that newspaper advertisements are a very valid source for the investigation of this concept, as "orientations" can scarcely be derived from any other data source. Secondly, the idea of functional linkages (to be defined thoroughly in section C) is based on this idea of orientation, as is in effect all of the work of this study.
B. Previous Studies Using Newspaper Advertisements

There have been very few researchers who have used historical newspapers and the advertisements displayed in them to find linkages between towns. La Rose\(^{10}\) attempted to define "spheres of influence" by using newspaper advertisements. His method of treating and developing these spheres of influence can be illustrated by using an example: there were several towns whose merchants sent advertisements into the Rutland (Vermont) Herald in 1800. The townships surrounding these towns were then considered to lie within the Rutland sphere of influence for 1800\(^{11}\). These spheres of influence were mapped by shading the appropriate township\(^{12}\). There is however, no empirical or theoretical support offered for such statements, nor can any support be given to the cartographic treatment of the results of the study. To take one newspaper, and shade an entire township on the basis of the origins of the advertisements in that newspaper, is simplistic at best. As will become evident in the body of this present study, advertisements emanating from one township may be sent to three or more towns in different townships. However, La Rose mentioned two problems that were basic to his, and also to this present study. First, some newspapers were found in very limited quantities, and second, some newspapers were not available for the sample years selected.\(^{13}\)

La Rose, in 1973,\(^{14}\) attempted a study again using newspaper advertisements. This second attempt was more successful however, as it was more refined. Attempting to find "and locate the perti-
nent geographic individuals in the (cotton factor) system, and the specific relationships and the relative importance of the linkages. La Rose turned to newspaper advertisements again. On the basis of the percentage of the total cotton factor advertisements per newspaper per year, he defined two linkage systems: first, the dominating linkage, which he assumed existed if the relative majority of advertisement placements per newspaper and/or the majority of representatives emanated from a particular factorage centre; and second, the competing linkage, which was assumed to exist if the advertisement placements in a particular newspaper or the number of agents of the factorage centre was not a majority of the total factorage advertisements in that newspaper. The cartographic treatment of the problem, reflected his changed approach, in that star-diagrams were used, not sphere of influence shading.

Another study which used newspaper advertisements was carried out by Moline. Few conclusions were drawn from the advertisement study itself, as it played but a small role in the complete work. Trade areas and town allegiances were only just mentioned, and only percentage figures were used. There were no accompanying tables, graphs, or maps. The study was helpful to this present paper in that some of the major advantages and pitfalls of this type of research were noted. Particularly significant in the context of this research, were the parochial attitudes towards the out-of-town advertisements, reflected in somewhat restrictive policies which at time obscured what was taking
place... The editors however, generally reflected the sentiments of the majority of their clientele, lest business be lost."20. Practically the only way of discovering whether these policies were in existence, is the fortunate chance of discovering them in an editorial. Even though the policy may be reflected in advertisement content of the newspaper, this reflection may or may not be the direct result of a conscious policy such as this.

Lastly, Park21 used circulation areas of the several newspapers around Chicago, Ill., as an indication of metropolitan dominance. Secondary to this major theme, advertisement frequency was studied, to determine the degree to which the towns around that city were within the sphere of influence of Chicago. However, Park's method was designed for a contemporary view of newspaper circulation and advertisements, for Park knew the circulation areas of the Chicago newspapers, from maps or lists given to him by these newspapers, and he could thus build his methodology upon this knowledge. It is generally important to have knowledge of the circulation areas of a newspaper, for responses to an advertisement placed in the newspaper of a town, will come not only from that town, but also from the circulation area, for all the subscribers in that area have a chance to read and act upon that advertisement, wherever its origin may be.
C. Method and Scope.

Before entering upon a discussion of the methodology used in this study, some definitions must be made. "Incoming advertisements" are all those which were sent in to a newspaper of any town, whether the sender was based in that town or not. "Outgoing advertisements" are all those which are sent out from the merchants of a certain town, to the newspaper of another town. These are the two broad viewpoints in which newspapers can be studied. Those views can be broken down farther. This further breakdown is made so as to present the theoretical framework for this study.

In terms of outgoing advertisements, merchants in a town (town A), send advertisements to the newspaper of another town (town B). The receiver of these advertisements may fall into one of three size categories, in relation to the size of town A: it may be smaller, of the same size, or larger than town A (see fig. 2).

![Diagram of Outgoing Advertisements]

**FIG. 2: OUTGOING ADVERTISEMENTS**
A similar categorization may be made in terms of incoming advertisements. There is one receiver of the advertisements in this case: the newspaper in town D. The sending towns can be classified into 3 different size categories, depending on the size of each, relative to that of the receiver. The sending towns (towns C), may be larger than, of the same size as, or smaller than town D (see fig. 3).

(SMALLER THAN TOWN D) C3

(SAME SIZE AS TOWN D) C2

(LARGER THAN TOWN D) C1

D

FIG. 3 INCOMING ADVERTISEMENTS

If from the viewpoint of outgoing advertisements, town A is advertising in town B's newspaper, it is suggested that there is a link between the towns: an information link. It can further be suggested that in terms of this link, town A is in some way associated with town B, or: town A is oriented towards town B. This orientation may be mapped or graphed over time, in terms of orientation duration.

There may be changes in these information links over time. These changes may be the result of:

1. the circulation area of town B's newspaper shrinks or
disappears.

2. transportation links may appear, leading elsewhere.

3. population changes in: town A
   : town B2

This suggests a re-adjustment of information links, due to a possible re-adjustment of economic potential for the advertisers.

If town A advertises in (the newspaper of) town B at one period of time, and shifts its advertisements to a different town B after a period of time, its orientation is thus also changed to this new receiver of the advertisements.

Functional links are defined as follows: if one town performs a function (selling either goods or services) which another town does not perform, there is a relative vacuum in the latter town. This relative vacuum is filled when the performer of such a function advertises, or makes his goods or services known to the populous of the latter town. Armed with such knowledge, the inhabitants of the latter town are aware of where they can purchase the goods or services missing in their town. Thus, a "functional link" exists between the two towns.

However, these functional links cannot be determined if town A advertises in the newspapers of towns B1 or B2, for in that respect, only circulation area can be dealt with; i.e., town A is in the circulation area of town B1's (or B2's) newspaper, and will receive responses from that town's circulation area, not necessarily only from town B1. If town A advertises in town B3's newspaper however, functional links can possibly be derived in this way:
1. note the type of outgoing advertisements from town A.
2. note the number of establishments of that type in town B.
3. if there are nil, or "very few" (relative to town B's population), it may be presumed that the information is flowing to fill an existing need, and that town B is functionally tied to town A (see fig. 4, a, b, c).

--- CIRCULATION AREA OF TOWN B'S NEWSPAPER ---
--- INFORMATION FLOW ---
--- ADVERTISEMENT RESPONSE FLOW ---

FIG. 4: DEFINITION OF FUNCTIONAL LINKS
Thus, this information can be derived from outgoing advertisements:

1. (information) links,
2. orientation of the town,
3. (possible) cut of link,
4. (possible) shift of orientation,
5. functional tie (limited to A-B3).

A town may also be the receiver of advertisements from another town. This town then receives information about the latter. In that respect, town D (in terms of the town advertising destination classification) is a focal point of information gathering and dissemination. In disseminating information, it sends information about itself, and about all towns advertising in that newspaper. Thus, town D is the centre of an information region, this region being defined as the circulation area of the newspaper.

The whole information region may spatially change, yet town D remains the focal point of that region. The information region may: shrink, grow, change shape.

The information senders may also change. A sender may start or stop sending advertisements into town D. The receiver stops getting advertisements from towns C1,2,3 due to:

1. population changes in all three.
2. increased competition in town D for the product advertised, making it possible for the inhabitants of town D to buy the product in their own town, thus offering no
(or little) response to the goods advertised from town C.
3. shrinking of the circulation area of town D's newspaper.
4. death of town C1,2,3.
The receiver starts getting advertisements from town C1,2,3
due to:
1. birth of town C.
2. birth of a new function in town C.
3. growth, or lateral change of circulation area.
4. death of town C's newspaper.
Functional links cannot be determined if town D receives
advertisements from town C2 or C3 within the circulation area.
However, if it receives advertisements from a larger town,
whether inside the circulation area or not, functional ties can
be determined, through the use of directories.

Thus, this information can be derived from incoming adver-
tisements:
1. focal point of an information dissemination region.
2. this information dissemination region may change spa-
tially.
3. receiver stops getting advertisements from town C.
4. receiver starts getting advertisements from town C.
5. functional links.
Through this framework then, these following points con-
stitute themes in this study:
1. information links, information region, and town orien-
tation determination.
2. derivation and examination of functional links.
3. central place study.

The choice of the area studied was a function of several aspects. First, the author wanted an area with an adequate coverage time, such that time span research could be done. Second, an area which was both well settled and in parts still opening up to settlement was needed because, in the first place, orientation shifts, if any, could be noted, and in the second place, the birth of new towns and the creation of their post offices would offer an excellent change to note any initial orientation which the town would take. Third, for the sake of familiarity, an area was preferred which was at least partially known to the author.

The area chosen therefore, consists of the counties of Durham, Northumberland, Victoria and Peterborough (see figs. 5, 6, 7, 8, book 2).

The time period chosen was a function of the following three aspects for which the author was searching: first, a period in which gross settlement changes were occurring; second, a period in which newspaper coverage was adequate; and third: a period for which population figures and town functions could be found. For those reasons, the time period chosen was 1850-1900.

"In the field of journalistic research, there is not greater need than for a simple, workable, yet sound method of quantitative measurement of newspapers. When such a method is worked out, an almost limitless body of knowledge on past newspaper content will await the investigator." Though this statement was made about content analysis of newspaper news coverage, it
holds within it the key to problems of how to approach the measurement of the data available. Some workable solution had to be derived.

A five year interval for sampling was decided upon, for this was sufficient time for some changes and information link feedbacks to occur. Where this five year interval was not possible (due to loss of copies of the newspaper for that year), an allowance of plus/minus one year was made. All advertisements were noted from a sample of five issues/year/newspaper of the copies of that newspaper of that year which survived (the issues being chosen randomly). Where more than one newspaper occurs in a town at one time period, each of these were used so as to minimize any (possible) effect of editorial discussion, as noted by Moline.

The analysis applied is basically a simple one. The proportion of total incoming advertisements over time sent to town D from the various centres around it were discovered, or: if the total incoming advertisements received by town D was 100, and town C, sent in 39 advertisements, town C2 sent in 21, etc., then town C1 sent in 39% of the total incoming advertisements received by town D, town C2 21%, etc. These advertisement proportions were then plotted on flow maps.

Based on the town A-B3 link and the town C1-D link, the directories were examined to discover if the towns A and C1 (the sending towns) were filling a need for a specific function in towns B3 and D respectively.

The derivation of the circulation areas proved to be a dif-
difficult problem. No surviving circulation lists were found, therefore some other method had to be used. A surrogate was used, that of content analysis. Circulation areas of the newspapers were often derivable from that newspaper in that the high frequency of occurrence of place name X in the text of that newspaper, suggests that that newspaper was being circulated in that area, particularly when the news carried was of this type: "Mrs. Johnson fell off her porch last week and sprained her ankle." Sometimes however, the newspaper carried no local news whatsoever (though carrying local advertisements), thus no content analysis of this type could be carried out.
D. Observations on Orientations.

The gross changes occurring in the four counties can be observed from figs. 9-14 (book 2). These maps show the incoming and outgoing advertisements to and from each town, expressed as a percentage of the total advertisements coming into that town. Rather than discuss each newspaper town in turn, two towns have been selected as examples to point out aspects which they had in common with other towns, and aspects which were uniquely theirs. These two towns are Peterborough and Bowmanville.

Bowmanville always appeared to be a city oriented solely to its hinterland, or to those towns which sent advertisements into it. Only in 1850 did its merchants send advertisements out to another town: Port Hope. In 1870 and 1880, Port Hope merchants sent advertisements into the Bowmanville newspaper, but each time, these advertisements amounted to merely 2% of all the advertisements in the newspaper.

During all this time, more and more towns north and north-east of the city sent advertisements into Bowmanville. As time progressed Bowmanville moved into sole possession of its information region. All the towns which lay to the north of the city within the county, were oriented towards one city: Bowmanville.

However, there was one aspect to the Bowmanville newspaper which was unique to that town, and which coloured the data after 1880: its editors. Before 1880, a man by the name of W. Climie edited the newspaper; his view towards his editorship was a rather loose one, in that no apparent restrictions were placed on incoming advertisements, attested by the fact that in both
1870 and 1880, Port Hope advertisement was allowed into the newspaper. In July of 1880, however, the editorship changed hands and with the new editor, came a new policy: "Our town and county first, the world afterwards". Following that date, little news of Port Hope was carried. Most of the content was from points north and north-east (none whatsoever from the west, Ontario County). Its advertisement policy changed along with its news policy. In 1885, the editor, M.A. James, wrote: "As a local advertising medium, this journal is unsurpassed by any paper in its class".

This new policy was evidenced in the advertisement origins. Following 1880, no advertisements entered the newspaper from any large town inside the county, or from any town outside the county. No town which sent advertisements to Bowmanville also sent then to another town in Durham County. The editor had done his work well; Bowmanville, according to the newspaper advertisements, may be assumed to have been in complete possession of the region it served with information. This assumption is contestable, however, for one could suggest that the trend evidenced under the editorship of Climie was merely working itself into fruition, and would have appeared as the pattern in fig. 14, with or without the intervention of James. It could also be suggested of course, that James did colour the actual changes taking place.

Peterborough had a newspaper also, the early history of which was similar to that of Bowmanville, and in fact the newspapers in the four counties. In 1850, it received advertisements from merchants in three towns: Lindsay, Port Hope, and Cobourg.
As time progressed, and as the areas around Peterborough became more populous and prosperous, merchants in neighboring smaller towns sent advertisements into the newspaper in Peterborough. That town thus shifted its orientation from a southerly one, to one which faced east, north, and south. By 1870, it received advertisements from 10 towns around it, thus strengthening its northerly and easterly orientation. Its orientation had shifted from a dominant south facing one, to a dominantly north and east facing one.

In 1878, however, a novel event occurred in the offices of the Peterborough Weekly Review which precluded any further attempt by this author to research subsequent incoming advertisements. The Weekly Review had become the Daily Review, and with this change came a change in advertising policy that makes it imperative for this author to look toward advertisement going out of Peterborough for any subsequent discussion of its orientation.

In 1878, in the last volume of the weekly review, this article exemplified the new policy:

The policy and politics of the Daily Evening Review will be similar to those which have characterized the Weekly Review, save for a much greater attention on matters of more local interest.

By 1880, the columns which had been previously made up of news about such places as Hasting, Lakefield, and Young's Point, were replaced by columns headed: "The City and Suburbs".

Concurrent with this change in philosophy, was a decision of more far-reaching importance. Fewer copies of the Daily Review
were going to be mailed out; subscriptions would be sought in
the city to a greater extent than they had in the past.

On, and after Monday next, the Daily Evening Review
will be sold by carrier boys at 2 cents a copy or
10 cents per week. To subscribers, by the year or
week, they will be regularly delivered on their
leaving their names at this office. (35)

Thus, with outside "petty" news not being printed, and with
a concerted effort at making the Review a city newspaper in every
sense of the word, merchants from towns outside of Peterborough
stopped sending their advertisements into that town. In 1880,
the merchants of 3 towns sent advertisements in, in 1890, 1 town,
and in 1900, 100% of the advertisements in the Review emanated
from Peterborough itself.

Thus, because of these changes, Peterborough's orientation
must be derived from outgoing advertisements, starting in 1880.
Using this new data, it can be seen that the orientation of
Peterborough in the years following the change, was still in a
north and east direction, though a new component had manifested
itself: that of a westerly orientation.

And so it was with each of the towns or cities displayed
on the orientation maps (figs. 9-14). Most of the newspaper towns
were very regular, that is: no influence other than the actual
incoming advertisements, altered the data so as to make it un-
readable; no parochial editor, no policy changes. These news-
paper towns, because of the mapped data available in figs. 9-14
(book 2), show their orientations through the period 1850-1900.

The smaller towns which send advertisements also show their
orientations through this time period. Many of them retained
their initial orientation throughout the period, like Woodville in Victoria County, Lakehurst in Peterborough County, Darlington in Durham County, and Wooler in Northumberland County. Others changed their orientations over the time span of 50 years, as merchants saw new opportunities for advertising, or as a newspaper opened in a town to which they had been oriented for some time. Such a case may have been Haliburton towards Bobcaygeon.

In all, the maps give a representation of the town orientations of the various centres in the four counties.
E. Discussion of Orientations.

The word "regular" has been interjected into the discussion of orientation and information links. But just how regular were the advertisement placements? Was there a spatial, temporal, or size regularity to the number of advertisements entering a newspaper.

The first postulate which we may try to test, is that a critical population level of a town had to be reached, before its merchants would send advertisements out. According to the several directories and gazetters available for this period, it appeared that a town had to reach the population 50 level before it sent advertisements out; that is, there are few towns whose merchants sent out, before the number of the inhabitants totalled 50. However, to postulate such an idea would be fallacious, for in these various directories, few towns are listed as having populations under 50. This apparent critical level is then not so much a critical level as it is a minimum cut-off point for the directories.

The second postulate which we may try to test, is that there is a critical distance between towns, beyond which small town merchants will not send out advertisements into the newspaper of a larger town. The solution to this postulation is of course, self-evident. If one finds the average maximum distances between the advertisers and the newspapers they used, this critical distance will emerge. The solution is thus displayed in fig. 15, which shows that average. The interesting aspect of this graph, is the upward trend it takes towards the end of the century. It
can be said then, that advertisers refrained from sending their advertisements any farther away than 11-14 miles from their hometown at the beginning of this period. Near the end of the century, however, merchants sent advertisements to newspapers as far away as 20-25 miles. The reason for this upward shift in maximum distance, could be that the road and rail network, in fact, transportation modes as a whole, had ameliorated greatly over the 50 years. While at one time a merchant could only ex-
pect response to his advertisement from 11-14 miles away, by the end of the century, he could expect it from 10 miles further away than that.

A third postulate which we may try to test, is that there were different critical distances for the different towns. The graphs testing this postulate are found as figs. 16-19 (book 2).

Several important facets of the newspaper advertisements can be derived from these graphs. First of all, in almost every case (save for the 3 largest towns: Peterborough, Port Hope, and Cobourg), the maximum distance lines trend upwards towards the end of the century. The reason for this upward trend has already been offered: a universal amelioration of transportation modes. Peterborough's downward trend (fig. 19 B) has been explained as a conscious effort on the part of the editors of the newspaper to be concerned with local events, and local advertisements. It may be hypothesized that similar policies were in effect in the Cobourg and Port Hope newspapers (fig. 19 A, and fig. 16 D), though this hypothesis cannot be tested for there is no proof of any such conscious policy in the newspapers of either of the towns.

Another important and noteworthy aspect of these graphs is that the towns with "different environments", have different types of lines. Using as examples Bobcaygeon and Colbourne (figs. 16 A, 17 C), it can be seen that the maximum distance from which the Bobcaygeon advertisements were sent, was between 30 and 50 miles, while the maximum distance of the Colbourne advertisements was between 5 and 15 miles. Bobcaygeon lay in an area in
which settlement was relatively sparse, even throughout the entire period; towns lay greater distances from each other, the population density was less (etc.), than was the area around Colbourne. Because of this sparse population, advertisements had to be sent greater distances to the newspaper. Thus, these two towns, quite different in their environments, had quite different critical, maximum distances. In fact, the three northern-most of the 14 newspaper towns (Bobcaygeon, Lindsay, and Peterborough) all had maximum distances greater than their southerly counterparts.

Lastly, we may postulate that a post office grant was a spur
to the initial sending of advertisements out to a newspaper.

Fig. 20 shows the substantiation of such a postulate. It will be noted first of all, that the merchants of no town sent advertisements out before they have been granted a post office; they apparently did not even use a neighboring one. Yet after their towns received a post office, the merchants used it, often in the same year, to mail advertisements out. However, there was often a lag of 5, even 20 years before the first advertisement was sent out. The reason for the lapse of time was possibly the same reason as prompted the Brighton Ensign to print the following article: a reluctance on the part of small merchants to lay out the cost of advertising.

Do you realize that if you have articles that it must be known to make them pay - that advertising is the only way to make them known - that large fortunes have been and are being made over and over again, in the same way? (37)

Whatever the reason behind this 5-20 year time lapse, it is still apparent from fig. 20, that the granting of a post office was a major determinant in whether or not advertisements were sent from a particular town.
F. Functional Links.

The concept of functional links was introduced in section C. A functional link, it will be recalled, is a link between two towns in which information about one town's functions, fills a functional need in the other town. The necessarily imposed restrictions are that a functional link can only be derived from an information link between towns A - B₃ and C₁ - D₃.

There are several aspects of functional links which can be researched in particular: first, where do these functional links lie; second, through what type of function do they link the two towns; third, what is the strength of the link; and lastly, is there any regularity between the type of functional, and size of the town which is striving to create such a link. To facilitate this discussion somewhat, a categorization of functions was drawn up, which places all the functions advertised in the newspapers into one of two eventual groupings: goods or services. This categorization (fig. 21), will be used consistently throughout this forthcoming discussion of these functional links.

At the outset, our discussion must revolve around where the functional ties lay, or: which towns were functionally tied to each other. It can be seen from figs. 22-33 (book 2), that every newspaper town was at some time the object of such a link, save for Port Hope and Lindsay. Both of these towns, however, created or were the initiators of functional links (see for example, fig. 22). Thus, functional links between towns were by no means uncommon or rare.

But of what were these functional links composed? Did mer-
Fig. 21: CATAGORIZATION OF GOODS AND SERVICES

**GOODS**

Agricultural: implements (hand and mechanical), nursery.

Alcohol: distillery, brewery.

Foodstuffs: baker, butcher, wholesale and retail grocer.


Apparel: clothier, hatter, haberdasher, hair dresser, barber, jeweller, milliner, boots and shoes, tailor, fur buyer and seller, optician, cleaning works.

Building: bricklayer, building contractor, door maker, paint store, plasterer, house painter, carpenter, wallpaper store, marble works, furniture.

Conveyance Maker: carriage, sleigh and waggon maker, harness and saddle maker, tanner, livery stables.

Metals: blacksmith, foundry, ornamental iron works, tinshop, cooper, pump maker.

Mills: carding, grist, planing, saw, shingle, woollen mills.

Merchant: hardware, "general merchant", sports store, music store, tobacconist.

Financial: chartered bank, loan company, insurance company.

Legal: barrister, solicitor, lawyer, notary, attorney.

**SERVICES**

Hotels: hotels, restaurant, saloon.

Medical: doctor, dentist, coroner, mortician, druggist, chemist.

Personal Services: architect, auctioneer, surveyor, photographer, taxidermist, sail, tent and awning maker, business school.
chants advertise mainly goods or services, or both? Referring again to figs. 22-33 (book 2), it can be seen that well over 50% of the functional links between 1850 and 1900, were service links, while 30% were goods links, and 20% being links of both goods and services. It appears that merchants were more prone to advertise services than goods, and if the advertisement customer-response feedback operated, then customers were more prone to buy services from other towns, than to buy goods. It is logical, in any case, for it is easier to transport a service (lawyer service, doctor service) than it is to transport goods, no matter what size these goods are.

An interesting point to note is the length of time some of these towns were functionally tied to other towns. For instance, in the case of Bobcaygeon; from the birth of its newspaper (1870) it was functionally tied to either Lindsay alone, or to both Lindsay and Peterborough (fig. 23), with Peterborough supplying the goods and Lindsay, the services. Cobourg also, for the span of 15 years (fig. 25) was tied to Port Hope, with a goods functional link. Bowmanville and Peterborough were tied only for the first few years of the time period, and soon after, became self-sufficient (figs. 32, 33 respectively), in terms of supplying their own goods and services, and not being dependant on another town for them.

Figs. 34 to 45 (book 2) give a breakdown of the previous graphs which dealt only with the two categories: goods and services. There are several notable aspects to these graphs. First of all, they give the exact type of functional link between towns, and, as
can be seen from the several graphs, many of these links were quite substantial; that is, towns were not linked through just one or two items. For example, in 1865, Omemee (fig. 34) was linked to three other towns by no less than six items; Bobcaygeon in 1870 (fig. 35) by 10 items, and Norwood in 1875 (fig. 39) by 6 items.

Not only were the links many, they were also varied. The Omemee ties in 1865 (fig. 34) were made up of: books, metals, merchants, and financial, legal and medical services. The link types between the two classes of towns can be considered to be the larger towns (Cobourg, Belleville, Lindsay, Port Hope, and Peterborough), and smaller towns (all the rest). It is noteworthy that when the merchant of a larger town advertised in the newspaper of another large town, they advertised only apparel and personal services. When the merchants of a small town advertised in the newspaper of another small town, they advertised very few goods; only once were each of these items advertised: agricultural goods, apparel, and merchants. The greater proportion of the advertisements between the "small" class of towns, lay in services; all five services. A possible reason for this may have been that whatever goods were available in one small town, were also available in another, while not all services were as ubiquitous. When the merchants of a large town advertised in the newspaper of a smaller town, however, the story was somewhat different. All the different types of links were represented. However, there were more of some types of links than others. For instance, apparel, building, metals, mills and merchants made up by far the majority of
functional links between large and small towns. Of the services, financial and personal service links were the greater proportions. Most of these advertisements were made up of items or services which were generally not available in the smaller towns, thus creating a link that was difficult to break until such time as the smaller town could "afford" (in terms of threshold population) to build its own establishment of that function.

As a further refinement to the above discussion, the advertisement receivers have been broken down into seven classes according to their populations, in an attempt to find what sort of functional links exist between towns of a specified size, and any larger town sending advertisements to it. According to fig. 46, it appears that the major functional links, no matter what the size of the smaller town, were: apparel, financial, legal, medical and personal services. These various functions find their maximum proportions in the newspaper of different sized towns, however. For instance, apparel advertisements were more common in the newspapers of towns of less than 3000 people, while being much less common in the newspapers of towns with more than 3000 people.

Lastly, it is noteworthy that only 4 out of the 12 towns which had functional links during this period, were tied to only one town (and two of these were Bowmanville and Peterborough, the links of which ceased after 1855). The other 8 towns were tied to 2 and sometimes 5 other towns. The reason for this phenomenon is that the merchants of each of these 2 (5) other towns undertook
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Fig. 46: Type of functional link between a town of a certain size, and any larger town sending advertisements to it. The numbers indicate the proportion of certain functions as a percentage of all such functions from larger towns being advertised in the newspaper of a town of specified size.
to find clients where they could. It would seem that that town which had the most advertisements in the newspaper of another town, was tied the most strongly to that other town, for the more often the name of the former town was seen in the newspaper, the more prone the inhabitants of the latter town would be to go there. Any shopping trip to this former town, could then be a multi-purpose trip, for the inhabitants of the latter town would know much more about what was actually available in the former town, the town from which the advertisements emanated.

For that reason, figs. 47-58 (book 2) were drawn up: to show the link strenghts between different towns, based on the number of advertisements coming from that town.

For instance, as shown in fig. 53, in 1865, Omemee was tied more strongly to Lindsay than it was to Port Hope. The reason for this would probably have been one of distance; Lindsay was closer to Omemee than was Port Hope. A similar phenomenon occurred with Bobcaygeon's links. That town was, throughout the years 1870 to 1900 (fig. 47) more strongly tied to Lindsay than to Peterborough. The reason was essentially similar to that above: distance and accessibility. And so it was with most towns. Each was more closely tied to one specific town or city than to any other (eg.: Campbellford to Peterborough at the end of the century, fig. 55), and upon this relatively stronger tie, lay the ultimate functional link for that town.
G. Central Place Study

There were two important aspects of newspapers and newspaper advertising that allow for central place studies.

First, newspaper editors often had agents soliciting for advertisements in towns and townships around the home town of the newspaper. Names and areas of these agents were found in the pages of the Port Hope, Cobourg, Lindsay and Peterborough newspapers. Mention of these agents were also found in the newspapers of the smaller towns. The notices were often worded as follows:

Notice to readers: Mr. Walter Walsh is an authorized agent for soliciting advertisements and subscribers for the weekly edition of the (Peterborough) Review. (40).

These agents seldom worked solely for a newspaper, however, and often held other jobs also; for instance: "S. Peck, Esq., Reeve of "nowden, has consented to act as agent for the Review in his neighbourhood..." 41.

Thus, with these several agents knocking upon their doors, merchants of a small town were often given a choice as to which newspaper of which town they wished to advertise in. Logically, they would advertise in the newspaper of that town with which they had the most intercourse; or, that town to which the inhabitants of their own town were already oriented.

Secondly, it will be noted from figs. 9 - 14 (book 2) that merchants of the several larger towns seldom advertised in the newspapers of the other larger towns. For instance, the merchants of Cobourg seldom advertised in Peterborough's newspaper, and vice versa. These larger towns were then somewhat self-sufficient,
or at least, functionally autonomous from each other. Thus, for these larger towns, maps could be drawn up, illustrating the inter-relationships of the interstitial towns to one or other of the large towns.

Therefore, because of these two factors, inter-relationships of the larger towns to the smaller ones can be examined, and also of the smaller towns to their surrounding hamlets. For even as interstitial small towns are tributary (functionally) to either one large town or another, so the interstitial hamlets are related to one small (or large) town or another.

For these reasons, the central place hierarchy, as proposed by J. U. Marshall, has been modified somewhat. While Marshall based his system largely on numbers of functions and establishments and client origins in the various cities, towns and hamlets, and on the bases of these criteria, developed a classification including tributary and peripheral towns (see pg. 3), the classification proposed in this present study will deal more concretely with the linkages between a town and its tributary area. On the basis of these linkages, towns can be classified according to their relationship to the central city.

These steps will be followed in this discussion. First, the full classification will be set out, then an explanation and discussion of each facet of the classification will be carried out, followed by an explanation of the model, using examples.

The full classification is set out in fig. 59, which also acts as a legend for the examples (figs. 60 - 73, book 2).
Fig. 59: Classification of Centres by Linkages
(also legend for figs. 60 - 73).

A. Centres Classification

1. Central City (CC)
   - the focus or central point of any system, no matter how large or small.

2. Non - Competitive Centre (NC)
   - a larger town which has a newspaper.
   - there is no advertisement interaction between NC and CC, emanating from either centre.

3. Dependant Competitive Centre (DC)
   - a larger town which has a newspaper.
   - dependant on CC for one or more functions.
   - is functionally tied to CC (as determined in figs. 34-45, book 2).

4. Major Competitive Centre (MC)
   - a larger town which has a newspaper.
   - a town which is not dependant on CC.
   - in terms of goods/services advertised, MC has made an attempt at functionally tying CC to itself (thus MC does advertise in CC's newspaper).
   - CC may be tied to MC (to be shown by link type, see below).

5. Primary Tributary Centre (PT)
   - a small town having no newspaper.
   - tied to CC by a mere one-way orientation.

6. Secondary Tributary Centre (ST)
   - a small town, having no newspaper.
   - a town oriented to both CC and some other centre.

7. Peripheral Centre (PC)
   - a small town, having no newspaper.
   - oriented solely to a town sending advertisements to CC.

B. Linkage Classification

1. - - - - - - - - : an orientation, or information link.
2. - - - - - - - - : no functional tie between MC and CC.
3. - - - - - - - - - : CC is functionally tied to MC.
4. - - - - - - - - - : functional dependance on CC.
The central city is that city or town upon which any particular examination is focused. It may be as large as Peterborough (fig. 73), or as small as Norwood (fig. 60). In the case of a large central city, there are few major competitive centres to which it is tied; in the case of a smaller central city, it may be tied to several centres. Again, in the case of a large central city, the system around it will generally be large; for a smaller central city, its surrounding system will probably be smaller. An important fact to note however, is that in this study, a central city can only be one which has a newspaper, for its linkages are restricted in part, to the advertisements flowing into that centre. The selection of the central city will determine the classification of all the centres around it into one, and only one of the remaining categories in the classification (fig. 59), depending on their linkage relationship to the central city.

A non-competitive centre, in relation to the CC, is one from which no advertisements flow to the CC, and no advertisements flow from the CC to that non-competitive centre. There are then, no commercial information flows between the two towns (c.f. fig. 61, with its several NC's), and thus plays no part in the commercial life of the CC. While the NC may be a central city in its own right, it is not linked to the focus of a particular investigation: the CC of that system. It is non-competitive in that,
According to the newspaper advertisements, the populus of the CC have no idea of the functions available in that town. It is thus non-competitive in both the functional sense and in the client origin sense. 43

A dependant competitive centre, is a town with a newspaper (therefore a larger town), which has been found to be functionally tied to the CC, according to figs. 22-33 (book 2). The inhabitants of this DC, must then travel to the CC to fill their needs.

A major competitive centre is somewhat similar to a non-competitive centre, save that the inhabitants of the CC have some knowledge of the goods or services available in the MC. The reason for this is that the merchants of the MC have sent advertisements in to the newspaper of the CC, and have thus told the inhabitants there what is available in the MC. Thus, this town becomes competition for the central city. In some cases however, not only competition may exist, but an outright dependance of the CC upon the MC, for in some cases (as shown by the linkage type above), there is a functional tie involved.

A primary tributary centre is a small town which is oriented towards the CC (as determined by figs. 9-14). It is the author's contention that these towns, since they are oriented towards one specific large town, are also functionally tied to the larger one; this tie being the logical manifestation and culmination of an orientation. That is, since the smaller towns cannot hold all the functions that the larger towns do, the inhabitants of these smaller towns must go somewhere to buy that which their own town
lacks. What would be more logical than for those inhabitants to shop in that town to which they are oriented. Thus they have been classified as tributary towns or centres, as they make up part of the tributary area of the central city. They are primary tributary centres since they are oriented in only one direction: towards the CC.

A secondary tributary centre is basically similar to its primary counterpart, save that according to the newspaper advertisements, it is oriented towards two larger centres, one of which is the CC. Since it is oriented in two directions, it is also functionally tied to two larger towns.

A peripheral centre in relation to the central city, is one which is tied solely to some other town which sends advertisements to (and thus has some relationship with) the CC. Only in this indirect way is the peripheral centre related to the central city.

There are basically two types of linkages which can be derived from newspaper advertisements: a functional link, and a mere information link. These two different types must be subdivided however, to fit into the model as it has been laid out above. First of all, there is the pure, defined functional link, which may lie between two different sets of towns. The link of the one set is the functional dependance of a DC upon a CC (as discovered in figs. 34-45). The link of the other set is the functional dependance of the CC on an MC. The difference between these two types of links is that in one, the CC is functionally independant, while in the other, the CC is functionally dependant. Second, is the
orientation or information link which, as suggested above, is the surrogate of a functional link (but this suggestion cannot be proven). Last, is the pure, non-functional information link between two competitive centres, one of which is the central city. Since both centres have establishments of the same functions, they are competitors, in that information flows from both of them.

Each system of each town, according to the limitations and restrictions outlined above, can only contain five types of centres within its boundaries: the central city, the dependant centre, the primary tributary centre, the secondary tributary centre, and the peripheral centres, provided they are tied to a dependant centre. Any system may lack any one, two, or all of the last four of the town types.

From this point, the conclusions drawn by Marshall in his study's theoretical framework, are similar to those of the present author. To that extent, a quote from his work is appropriate.

In this fashion, the central place system of any centre, large or small, may be isolated for further study. The boundary of the system serves to delimit the umland of the central city, and this approach thus makes it possible to delimit umlands in a manner which is not subject to the arbitrary selection of a set of mutually competitive towns. It should be noted in this connection, that the umland boundary shown in ...[Figs. 60-73] is derived from the central city's central place system, rather than vice versa. (44)

The approach as laid out above, precludes the necessity of personal interviews, which are in the first place impossible in older historical work; they are also time consuming. The present author suggests that the systems displayed on figs. 60-73, were complete systems, with each of the inter-relationships between
the various towns, exactly as they were in 1850-1900, for the systems are defined in "terms of relationships among the objects to be studied". 45

Figs. 60-73 (book 2) were drawn for several reasons. First of all, they allow the reader to see exactly the practical application of the above model 46. The reader can also see the changes which occurred in any of these central place systems (c. f., fig. 73, the way the Peterborough central place system grew over the 50 years of the study period). There is also the fervent hope on the part of this present author, that any or all of the systems displayed upon these pages will be used or tested in the future.
II. Summary and Conclusions

This study has used newspaper advertisements as indicators of functional and non-functional relationships between towns. As such, it has shown that the area from which advertisements are drawn, is an important aspect of newspaper advertisements, too often forgotten.

This study has introduced and defined such terms and concepts as "information links" and "information regions". These information regions and links yield data on the extent to which the town with the newspaper is perceived by the merchants in the towns around it, to be a focal point for their advertisements, and therefore, an integral part of their businesses.

This study also offers some suggestions as to town orientations. Where there is an information link, there is also some sort of an orientation, whether it be a smaller town looking towards a larger town, or vice versa.

Functional links and ties are another concrete result of a study such as this. When used in conjunction with directories, advertisements give data which lead to the determination and definition of ties between towns. Not only does such a study yield functional links, but it also yields both types of functional links in terms of goods or services, and the types of goods and/or services upon which the functional link is hinged. The strengths and duration of these links are also determined, through the use of newspaper advertisements.

Finally, newspaper advertisements can be used for historical central place work, since this study is based on the functional
inter-relationships between towns. When the framework proposed by Marshall is modified somewhat, it can be used in conjunction with the information and functional links which have been previously defined, to determine systems of central places.

However, the use of newspaper advertisements is not without its drawbacks, each of which must be realized before and while this type of study is undertaken.

First of all, the researcher must be aware that not all the merchants of any one town advertised. This can be determined by an examination of any directory listing for any town. This is not considered by this author to be a great handicap for such a study, however, for those merchants that did advertise in the newspapers of other towns generally did so on a very consistent basis: i.e. they often used the newspaper of one town, and one town alone (see figs. 9-14, Bowmanville), or more than one town, if they felt the orientation of their own town was shifting (see figs. 9-14, Peterborough).

Second, the researcher must remain unsure of the response to the advertisements. Because of this, functional links can only be assumed to have been present. It is felt by this author, however, that this is a tenable assumption, in that, if a consumer had need of a good or service which was not available in his home town, what could be easier than to look in his newspaper to discover where he could purchase such an item (the other information link, that of word of mouth, cannot be proven).

Third, the researcher cannot be sure of the circulation areas of the newspapers. If these circulation areas were known,
then it would be a simple logical matter to change the classification of a merely oriented town, to a tributary town (knowing its functional make-up). For if an oriented town lay within the circulation area of a newspaper, then, for the same reason as above, what could be simpler for the consumer in that small town, to refer to the advertisements in the newspapers (advertisements emanating from the merchants of the newspapers' home town) to discover the location of a function.

Fourth, in terms of the newspaper advertisements themselves, what could be done with mail order advertisements? Though none were found which had their origins inside these four counties, several were discovered, which had as their origins New York, Atlanta, or Philadelphia. Since the response to these advertisements is not known, this present author considered it to tenable to simply ignore them.

Fifth, not all the towns in the four counties had newspapers, a fact which made the central place study somewhat difficult, in that the smaller towns which did not have a newspaper, could not be used as the focus of an examination. However, in using the framework set out above, it is the considered opinion of this writer that this last problem has been minimized.

Finally, there is the ever-present danger of making glorious assumptions. One of these assumptions is that a merchant advertises in the newspaper of another town, because there are not enough people in his own area to support him; he needs more clients. An assumption such as this is fallacious, however, for where would that leave the Peterborough grocer who advertised in
the Bobcaygeon Independant? Another such fallacious assumption is one such as this: as a town's (and perhaps surrounding township and even county's) population increases, outside advertisements might decrease (at least, for the "lower order" function advertisements). Such a suggestion has been proven incorrect by figs. 9-14 (for example Bowmanville and Bobcaygeon).

There are several aspects of a study of newspaper advertisements which could be researched in greater detail.

First of all, the idea presented in the section on the central place study could be studied more minutely. Using figs. 60-73 as a basis, a researcher could attempt to explore the reasons for the modifications over time and space of the several central place systems.

A further suggestion might be to use the methodology presented above, in a study of present day central place systems, for example, around Hamilton or Brantford. Then, using Marshall's methods (as set out in his book, The Location of Service Towns pp. 80-103), draw up a complementary set of central place system diagrams, and compare and contrast the results of the two different methods.

Lastly, one could include in the theoretical framework as laid out in section C, a factor to take account of the different sizes of advertisements as they are found in the newspapers; it appears as though a basic belief in advertising is, the larger the ad, the more prone people will be at least able to read it, and perhaps act upon it.

In conclusion, this present author feels that the concept of functional links, and the consequent central place work which is
based upon that concept, is an advance in historical geographical research. Since a method of defining central places and central place systems has been derived herein, which precludes the necessity of much of the time-consuming (and often impossible) methods suggested by Marshall, subsequent research can delve into the problems of the reasons behind the inter-relationships as discovered in this paper.
Footnotes


2. It has been subsequently discovered that both Grimsby and Burlington have become re-oriented, much to the chagrin of most Hamiltonians: Grimsby towards St. Catharines, and has therefore been included in that Regional Municipality; and Burlington towards itself and to points north and east, and has therefore been left out of the recently-proposed Hamilton Region.


12. Ibid., p. 158.

13. Ibid., p. 224.


15. Ibid., p. 9.


19. Ibid., pp. 128-135.

20. Ibid., pp. 10-11.


22. The distinctions made above were for the sake of clarity. Yet any town can be looked upon in both ways, i.e., in terms of incoming and outgoing advertisements. For example, if one looks at the advertisements in terms of outgoing only, then town A sends to town B1. But if one looks at these same towns in terms of incoming, then town C2 sends to town D. The reason for these different letters at the outset is to differentiate between incoming and outgoing advertisements in the remainder of this section (C).

23. This statement is of course, the corollary of the previous note on functional ties. See footnote 22, and fig. 4.

24. If one knows the circulation area, then the region can be determined also; if not, then only the focal point is known.

25. The ever-present danger in this study is to make more of the advertisements than they allow. This is the pitfall into which La Rose fell in his Vermont study. The fact that information links exist between towns A and B1,2 may well intimate that other inter-relationships exist also, which are not manifested in advertisements. Personal, social or functional links are suggested by information linkages and orientation, for if town A is oriented towards town B1 or 2, it may be possible that there are in fact functional ties as well, but this cannot be proved conclusively using newspaper advertisements.


27. A surprising amount of newspapers and newspaper copies have survived from the date of their printing. Where they have, the Provincial Archives of Ontario have microfilmed some of them; others have been acquired whole, and are available to the researcher, complete with their fragile pages and tattered edges.

29. Unfortunately, since no circulation lists have survived, the efficacy of the method outlined above cannot be tested.


31. *The Canadian Statesman*, Vol. 31, No. 19, Friday, May 8, 1885, (the underlining of "local" in the quote is this present author's)

32. There had long been a rivalry between Port Hope and Cobourg to decide which of the two towns would serve the area to the north. This rivalry, and the eventual solution of it, is evidenced in the newspapers. From 1850 through 1870, both towns were sending advertisements into Peterborough, but by 1880, only Port Hope sent advertisements, for Port Hope had become the outlet for Peterborough's goods, due in part to the railroad which connected the two towns. The railroad was completed in 1858 (from: Ronald Borg (ed.), *Peterborough, Land of Shining Waters, A Centennial Volume*, University of Toronto Press, 1967, facing p. 296). After this railroad connection was completed, Port Hope served the Peterborough region, as illustrated in figs. 9-14 (from: Jacob Spelt, *The Urban Development in South Central Ontario*, Van Gorcum and Comp., Assen, 1955, p. 89).


36. Several of the directories used for this section were the various Lovell directories (1857, 1871, 1882), Might's directory for 1892, and Mitchell's directory for 1864. The method used to attempt to find these critical population levels, was to note when a town first sent any advertisements out, and then look in the respective directory for that town's population level.


38. The term "advertisement customer-response feedback" means that a customer will read an advertisement and respond to it in one of two ways: he will either buy the advertised item or not. If enough customers respond favourably to that advertisement, this would be a positive feedback, and the merchant
would leave the advertisement in the newspaper. If a negative feedback occurred, then the merchant might take the advertisement out of the newspaper. This negative feedback, it is suggested here, was in operation to lessen the number of "goods" advertisements.

39. The types of goods advertised were such things as: "a recent arrival of the newest tweeds from Toronto", or an advertisement for a foundry or a shingle mill. The types of services advertised were for example: a branch of a loan company (or life insurance company) with assets in the millions.


42. Marshall, pp. 72-79.

43. Meaning that the clients (inhabitants) of CC will not travel to the NC to fill their needs, as they have no newspaper advertisement knowledge of what is available to them there.

44. Marshall, pp. 78-79.


46. As this paper is a methodological one, very little time or space has been devoted to the discussion of these maps.