

True's Report - Dec. 6, 1991

No. CT-90/1

COMPETITION TRIBUNAL

IN THE MATTER OF an application by the Director of Investigation and Research for orders pursuant to section 92 of the Competition Act, R.S.C. 1985, c.C-34, as amended;

AND IN THE MATTER OF the direct and indirect acquisitions by Southam Inc. of equity interests in the business of publishing the Vancouver Courier, the North Shore News and the Real Estate Weekly

COMPETITION TRIBUNAL
TRIBUNAL DE LA CONCURRENCE
FILED
DEC 6 1991
REGISTRAR - REGISTRAIRE
OTTAWA, ONT. # 211(d)
DÉPOSÉ

BETWEEN:

THE DIRECTOR OF INVESTIGATION AND RESEARCH

Applicant

**COMPETITION TRIBUNAL
TRIBUNAL DE LA CONCURRENCE**

- and -

FILE NO. / Dossier: CT-90/1
N. / Southam v. SOUTHAM INC., LOWER MAINLAND PUBLISHING LTD., RIM PUBLISHING INC., YELLOW CEDAR PROPERTIES LTD., NORTH SHORE FREE PRESS LTD., SPECIALTY PUBLISHERS INC., ELTY PUBLICATIONS LTD.
et Southam

Exhibit No. / No. de la pièce: A-106
Filed on / Déposée le: January 15, 1992; 12:28
Registrar / Greffier: [Signature]

AFFIDAVIT

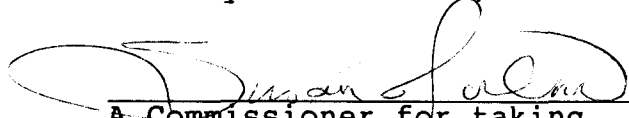
Respondents


I, **BERTRAM SCHONER**, of the District of Coquitlam, in the Province of British Columbia, MAKE OATH AND SAY AS FOLLOWS:

1. I am currently a Professor in the Faculty of Business Administration at Simon Fraser University, Burnaby, British Columbia. Attached as Exhibit "A" to this Affidavit is a true copy of my curriculum vitae.

2. I have been retained by the Director of Investigation and Research to prepare a report evaluating the Angus Reid Study which consists of two reports filed in this proceeding as Exhibits R-2 and R-46. Attached as Exhibit "B" to this Affidavit is a true copy of my report.

SWORN BEFORE ME at the City)
of Vancouver, in the Province)
of British Columbia, this)
6th day of December, 1991.)


A Commissioner for taking)
Affidavits for British)
Columbia.)


BERTRAM SCHONER

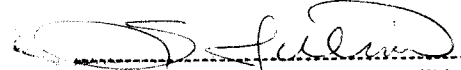
CURRICULUM VITAE OF BERTRAM SCHONER
NOVEMBER, 1991

OFFICE: Faculty of Business Administration
Simon Fraser University
Burnaby, BC, V5A 1S6

This is Exhibit "A" referred to in the
affidavit of Bertram Schoner
sworn before me at Vancouver, B.C.
this 6th day of Dec. 1991

BORN: January 25, 1933, Canadian Citizen

EDUCATION: B.Eng (Electrical), McGill, 1956
M.B.A., Western Ontario, 1960
Ph.D., Stanford, 1965


A Commissioner for taking Affidavits
for British Columbia

**ACADEMIC
POSITIONS:**

Simon Fraser University, Professor, 1973-
University of Iowa, Assistant/Associate Professor,
1965-73
Stanford University, Visiting Scholar, 1978-79
University of Bath, Visiting Professor, 1986-87
Helsinki School of Economics, International MBA
Program, Visiting Professor, (3 week periods),
1987, 1980, 1991.

**ADMINISTRATIVE
POSITIONS:**

Simon Fraser University
Director, Undergraduate Programs, Department of
Economics and Commerce, 1974-75
Chairman, Dept. of Economics and Commerce, 1975-78
Director, School of Business Administration and
Economics, 1979-81
Director of Graduate Programs, Faculty of Business
Administration, 1983-86
Chairman, Faculty Tenure Committee, 1987-89
Chairman, Appointments Committee, Faculty of
Business Administration, 1990-92.

**COURSES
TAUGHT:**

Research Methods (graduate and undergraduate)
Marketing Research (graduate and undergraduate)
Strategic Marketing (undergraduate)
Data Analysis (graduate and undergraduate)
Marketing Measurement (graduate)
Decision Analysis (graduate and undergraduate)
Statistics (graduate and undergraduate)

Courses taken relevant to survey research:

At the graduate level: 1 course in marketing research, 6 courses in statistics.

I have supervised the projects and theses of approximately 100 graduate students. The majority of these involve administering surveys.

PUBLICATIONS: Books:

Marketing Research: Information Systems and Decision-Making, Rev. ed., Wiley, 1975. Reprint ed., Krieger, 1981 (----and K.P. Uhl).

"Statistical and Experimental Designs" in Marketing-Handbook, Stewart Henderson-Britt and Norman F. Guess ed., Rev. ed., Dartnell, 1982 (---and H. Rodkin).

Journals:

The Questionable Dual Ladder, Personnel, Jan.-Feb., (Thomas Harrell and ----).

On the Decision Criteria of Farrar and Freund, a note in Management Science, Aug., 1967.

Decentralized Marketing Decisions Under Uncertainty, Mississippi Valley Journal of Business and Economics, Fall, 1967.

Marketing as a Science - Prospects for the Future, Iowa Business Digest, November, 1967

Quality of Decisions for Individuals and Two Types of Groups, Journal of Applied Psychology, No. 4, 1974 (----, G. Rose and G.C. Hoyt).

Probability Revision Under Act-Conditional States, Management Science, Vol. 24, No. 14, Nov 1978 (----and J. Mann).

Advertising, Direct Foreign Investment and Canadian National Identity, Canadian Review of Studies in Nationalism VII, No. 1, Spring, 1980 (----and Richard Schwindt).

A Comparison of Two Post Systems Under Applied Compression Shear Loads, Journal of Prosthetic Dentistry, Nov., 1988 (R.S. Greenfeld,

R.H. Royhouse, F.J. Marshall and -----).

Ambiguous Criteria Weights in AHP - Consequences and Solutions, Decision Sciences, Vol. 20, No. 3, Summer, 1989 (-----and W. Wedley).

A Rejoinder to Forman on AHP, with Emphasis on the Requirements of Ratio Scales, Decision Sciences, forthcoming, (-----, W. Wedley, and Eng Choo).

A Unified Approach to AHP with Linking Pins, European Journal of Operations Research, forthcoming, (_____, W. Wedley, and Eng Choo).

Generic Drugs: Public Acceptance and Satisfaction, Journal of Marketing and Public Policy, forthcoming, (K.W. Kendall, S. Ng, and -----).

Proceedings:

"The Selection of Research and Development Projects under Uncertainty", in Proceedings of the American Marketing Association, Peter D. Bennett, ed., 1965.

"Group vs. Individual Decisions: Some Implications with Respect to Rationality and Risk", Marketing and the New Science of Planning, Proceedings of the American Marketing Association, R.L. King, ed., 1968, (G.Rose, -----and G.C. Hoyt).

"A Simulation Experiment on Jackknifing the Logit", in Proceedings of the Annual Conference of the Administrative Sciences Association of Canada (ASAC) - Marketing Division, 1985.

"Prospect Theory and Automobile Insurance", in Proceedings of the Annual Conference of ASAC - Marketing Division, 1986.

"Pitfalls in Log-linear Models", in Proceedings of the Annual Conference of ASAC - Management Science Division, 1988.

"Alternative Scales in AHP" in Proceedings of the VIIIth International Conference on Multiple Criteria Decision Making, (MCDM), 1988 (----and W. Wedley).

"Consumer Response to Generic/Chemically Equivalent Drugs", in


Proceedings of the Annual Conference of ASAC - Marketing Division, 1989. (----K.W. Kendall, and S. Ng). Winner of best paper, Marketing Division.

Invited Paper:

"Relative Priority Shifts and Rank Reversals in AHP", International Symposium on the Analytic Hierarchy Process II (ISAHP-II), 1991.

This is Exhibit " B " referred to in the
affidavit of Bertram Schoner
sworn before me at Vancouver, B.C.

This 6th day of Dec. 19 91


A Commissioner for taking Affidavits
for British Columbia

Report of Bertram Schoner

December 6, 1991

1. In the preparation of this report, I have reviewed the following documents:
 - a. Amended Notice of Application, Amended Response and Amended Reply;
 - b. Report entitled "Retail Advertisers In Vancouver and the Lower Mainland: a Profile of Media Behaviour, Attitudes Towards Selected Media and Media Substitution Alternative which is Exhibit "A" to the Affidavit of Angus Reid sworn August 15, 1991 (Ex. R-2) (referred to as "Angus Reid Report");
 - c. Report entitled "Supplement to the Retail Advertisers Study" which is Exhibit "A" to the Affidavit of Angus Reid sworn October 9, 1991 (Ex. R-46) (referred to as "Angus Reid Supplementary Report");
 - d. the Evidence of Dr. Angus Reid (Transcript, Volumes 30, 31, and 32);
 - e. Exs. A-91, A-92, A-93, A-94, A-95 from the Evidence of Dr. Angus Reid;
 - f. Correspondence between Counsel for the Director of Investigation and Research and Dr. Angus Reid for the period October 29, 1991 to November 29, 1991;
 - g. Information supplied by Dr. Reid to Counsel for the Director of Investigation and Research after October 25, 1991.

2. The following represent generally recognized potential sources of error in sampling:
 - A. Target population misspecified
 - B. Frame error and Sample selection error
 - C. Non-response error
 - D. Questionnaire design error
 - E. Response error
 - F. Analysis error

3. My report will be organized following this schema. Where reference is made to "Angus Reid", I am referring to the corporate entity. In referring to the individual I employ "Dr. Reid". The Angus Reid Report and Angus Reid Supplementary Report are referred to collectively as the "Angus Reid Study".

A. Target population

4. The target population is determined by the objectives of the study. There appears to be some confusion in this instance as to whether the objective is to study "...retail advertisers' objectives and behaviour in the Vancouver area" (para. 1.0.1 of the Angus Reid Report), or the objectives and behaviour of retail advertisers in the areas serviced by the North Shore News and The Vancouver Courier (the only two community papers whose advertiser lists were employed and in whose geographic market areas the random walk procedure was undertaken). On page 4707, Volume 31 of the Transcript, Dr. Reid indicates that the target population is "...retail advertisers interested in reaching people in the circulation areas of the North Shore News and The Vancouver Courier".

B. Frame error and Sample selection error

5. The sample frame is the list or equivalent from which the actual sample will be selected. A sample frame must be carefully chosen to reflect the target population. Frame error occurs when the sample frame differs in a systematic manner from the target population and the researcher cannot or does not compensate for this difference. Typically, frame error occurs when a segment of the target population is not represented in the frame, although it may also

occur if the frame under represents or over represents a segment. Telephone directories, for example, are notoriously poor frames because of missing entries.

6. The sample frame in this study appears to have been a compromise between an appropriate frame if the target was the entire Lower Mainland, and an appropriate frame if the target was the geographical areas serviced by the North Shore News and The Vancouver Courier. In making this compromise, I believe an error is introduced regardless of the actual target population.

7. Angus Reid employed four sources in generating the frame:

- a. a list of retail advertisers in The Vancouver Sun and The Province for the calendar year 1990;
- b. a list of retail advertisers in the North Shore News for the calendar year 1990;
- c. a list of retail advertisers in The Vancouver Courier for the calendar year 1990;
- d. all retailers in the circulation areas of the North Shore News and The Vancouver Courier with clusters of city blocks representing primary sampling units, supplemented with a reverse telephone directory.

8. If the objective is to study the entire Lower Mainland, there are omissions from the frame. The following two categories of advertisers are precluded from being members of the frame:

- a. advertisers who do not employ newspapers at all and who are not located

in the areas of the random walk; and

- b. advertisers who advertise only in community newspapers other than the North Shore News and The Vancouver Courier and who do not advertise in the dailies.

9. If the objective was to study retailers interested in consumers in the geographical areas serviced by the North Shore News and The Vancouver Courier, a mechanism for eliminating other retailers from the frame should have been employed. The easiest way to have accomplished this would have been to use a screening question. This was not done. Thus, the "daily only" newspaper list includes advertisers who may use community papers other than the North Shore News or The Vancouver Courier. Similarly, the "community only" and "both" newspaper lists may include advertisers who employ community newspapers other than the North Shore News and The Vancouver Courier. In responding to questions about advertising in daily and community newspapers (use, objectives, cost effectiveness and response to price increases) such advertisers will presumably respond in terms of the community papers they use. This response may or may not be representative of responses of advertisers who use the North Shore News or The Vancouver Courier. At best, such advertisers are surrogates for advertisers in the North Shore News and The Vancouver Courier, and their responses are valid for this study only if they are truly representative of advertisers in the two community newspapers of interest.

Stratification of newspaper advertisers

10. Three strata were created - firms who advertised only in dailies, firms who advertised only in one or both community papers, and firms who advertised in both daily and community

papers. If indeed the target population is all retail advertisers in the Lower Mainland, in my opinion a list of retail advertisers in community papers other than the North Shore News and The Vancouver Courier should also have been included; or if such a list could not be obtained, some attempt should have been made to find retailers who would have been on that list. Employing that list would have been beneficial on a number of counts.

11. First, delineation of the strata in the sample frame would have been much sharper. The principle reason for stratification of a sample frame is to create relatively homogeneous strata from which to sample, thereby decreasing sampling error. But as it stands, the "daily only" list is not really daily only, but includes some unknown number of retailers who advertise both in dailies and in community papers other than the North Shore News and The Vancouver Courier. In estimating advertising behaviour of this stratum from a sample we now have three concerns - first; that the sample adequately represents those firms that are truly daily only; second, that the sample adequately represents those firms that actually advertise in both dailies and community papers (other than the North Shore News or The Vancouver Courier); and third, that the relative proportion of these two types in the sample is close to the relative proportion in the stratum. These concerns would have been addressed by separating out the truly daily only advertisers from the others.

12. Second, the extent to which the North Shore News and The Vancouver Courier advertisers may be different from advertisers in other community papers is problematic in the Angus Reid study. The mix of retailers and their advertising objectives may be different. In

addition, the extent to which the North Shore News and The Vancouver Courier may be perceived differently from other community papers with respect to reach, audience, reader interest or other relevant dimensions is also problematic. Unfortunately, the design employed in the Angus Reid study does not permit either one of these questions to be pursued. If a list of retailers whose newspaper advertising was in community papers other than the North Shore News or The Vancouver Courier was obtained, two new strata could have been generated in the frame. One would consist of firms who advertise only in community papers other than the North Shore News and The Vancouver Courier, and the other would consist of firms who advertise both in dailies and in community papers, but not in either the North Shore News or The Vancouver Courier. This would have permitted a check as to whether or not these two areas of concern are problems, and would have provided the information by which the analysis could address the issue if they were problems.

13. I have only one further concern with respect to the stratification derived from the three lists, but it is a major concern. Dr. Reid testified that the bulk of the advertising dollars come from a minority of advertisers. He cited an eighty-twenty division - i.e., eighty percent of the dollars are generated by twenty percent of the advertisers: Vol. 32, p. 5047. Thus, a decision by Southam with regard to a price change would be largely governed by the anticipated reaction of the minority population of major advertisers, and not by the reaction of the much larger population of minor advertisers.

14. In situations like this it is imperative to obtain a very accurate estimate for the minority

population. Indeed, it would not be at all unusual for the entire minority population to be included in a sample. Since the lists provided by Southam could easily have included information on dollars spent on newspaper advertising, each of the strata could have (should have) been further divided into sub-strata according to advertising expenditure.

The random walk

15. Angus Reid considered it important to also sample firms who advertised in other media, but not in newspapers, and to determine the relative sizes of the newspaper and non-newspaper advertising markets. The procedure for generating the appropriate frame for this part of the study, which they termed a "random walk" (not the random walk process as defined in statistics), was as follows. The market areas of the North Shore News and The Vancouver Courier were subdivided into contiguous area clusters such that each cluster included an equal number of blocks zoned retail/commercial. These clusters comprised the primary sample units. A random sample of clusters was selected, and then within the selected clusters a random sample of blocks (secondary sampling units) were selected. Interviewers were then sent out to canvass each commercial operation on a selected block in order to determine whether or not the firms engaged in advertising or promotion during the previous 2 years and, if so, the nature of the advertising purchased. Thus a firm which employed any form of promotion (e.g. match books, a sign in the window), would be included.

16. This procedure comes under the rubric of cluster sampling. Cluster samples are generally selected under conditions where other sampling techniques are relatively expensive.

A cluster sample does not generally give as reliable an estimate as a simple random sample of equal size, but will generally give a more reliable estimate than a simple random sample of equal cost. Thus, the sample of size 456 in the current survey is unlikely to be as reliable as a simple random sample of equal size would have been. (Dr. Reid has now confirmed that 456 interviews and not 500 interviews were conducted: Ex. A-92 and letter dated November 27, 1991 from Dr. Angus Reid to counsel for the Director of Investigation and Research).

17. The random walk survey in the Angus Reid study is an Area Cluster Sample. Personal interviewing becomes very expensive when a sample is very spread out geographically inasmuch as interviewers can spend more time travelling than actually interviewing - hence the advantage in intensively interviewing a relatively small number of blocks. But because adjacent respondents tend to be more like each other than like the rest of the population, grouping them tends to lose information.

18. In order to minimize the effects of the problems described above, one should attempt to make each cluster as representative of the population as possible. The design employed in this instance is problematic in this regard. In fairness, this is generally the case in area cluster sampling. But there are ways in which the cluster sample used by Angus Reid differs from what I would consider to be a more typical and effective approach.

19. First, since the unit of concern is ultimately the individual retailer, it would be normal to select clusters so that they contain roughly equal numbers of retailers. Angus Reid selected

clusters on the basis of an equal number of commercial/retail blocks in each cluster. Since the density of retail firms varies greatly on such blocks, with higher concentrations tending to be themselves geographically concentrated in shopping streets (e.g., Lonsdale Avenue in North Vancouver) or shopping centres, it would be virtually certain that the clusters in the Angus Reid study do not contain roughly equal numbers of retail establishments. The consequence of this is that estimates become unusually sensitive to the actual clusters which enter into the sample. For example, stores in Park Royal may advertise very differently from stores in general. If they are not in the random walk, such stores are under represented. But if they are in the random walk, they may be over represented.

20. Second, since the primary purpose of the random walk is described as being to provide the weights for the strata, the frame for the random walk should contain the firms in the three strata as well as firms who do not employ newspaper advertising. In fact, the frame for the random walk is problematic in this regard. If the target population is the entire Lower Mainland, the geographical areas of the random walk is clearly inadequate. If the target population is advertisers who seek the patronage of households served by the North Shore News and The Vancouver Courier, some unknown number of firms are excluded. These are firms physically located outside the areas of the random walk, but who seek the patronage of households inside the areas of the random walk. In my opinion, the net effect is to bias upward the 47% estimate of advertisers who do not engage in newspaper advertising.

21. Of greater concern is the disparity between the distribution of advertisers in the three

strata: 38%, 11%, and 3% for "daily only", "community only", and "both" as derived from the newspaper lists; and the corresponding percentages of 5%, 30% and 17% derived from the random walk. From the telephone survey, we know that the "daily only" stratum from the newspaper lists actually includes many community newspaper advertisers (other than the North Shore News or The Vancouver Courier), and thus the true "daily only" stratum should be smaller, and the "both" stratum correspondingly larger. And the 5% figure for "daily only" from the random walk is biased downward in that large advertisers without retail outlets in the areas of the random walk may not be picked up in the random walk. Can the newspaper list estimates and the random walk estimates be reconciled?

22. The proportion for "daily only" is likely somewhere between the 5% from the random walk and the 38% from the newspaper lists. Suppose we accept the 14% figure for the ex post category "mainly daily" estimated by Dr. Reid, and pick a figure like 20% for the a priori category "daily only". Where have the other 18% from the original 38% in the newspaper list gone? Unless the newspaper lists were seriously flawed, and there is no reason to believe that this was the case, these must all represent advertisers who used both daily and community papers, but not the North Shore News or The Vancouver Courier. If we choose to keep these in the sample frame, as Dr. Reid has done, they must all be assigned to the "both" category, thereby moving this category from 3% to 21%. And if we accept the 52% estimate of non-newspaper advertisers, this leaves only 7% for "community only" advertisers. The estimates for "daily only", "community only" and "both" are now 20%, 7% and 21% respectively. This would be consistent with the 17% figure for "both" in the random walk, inasmuch as large

advertisers are less likely to be picked up on the random walk.

23. This analysis would suggest that the "both" category is the largest of the three, and would certainly suggest significant market power for an organization that controlled the two types of papers. But I am not seriously proposing these numbers. Both the random walk and telephone survey were based on recall over two years while the newspaper lists reflected actual behaviour in the past year, and the problems with the sample frame for the random walk have been discussed. I do not know what the actual numbers should be; nor do I have confidence in the corresponding numbers appearing in the Angus Reid Study.

C. Non-response error

24. Non-response to a survey is always a concern. A quotation from The Survey Research Handbook, (Alrich, P.M. and Settle, R.B., Richard D. Irwin Inc., 1985, pp. 76-77) explains the issue:

"If people decide to respond to a survey or not to respond purely on a random basis, then the non-response will be independent of the survey content and there will be no non-response bias...Unfortunately, non-response is almost never completely independent of the survey issues...It is almost impossible to avoid non-response bias entirely, and some such bias must usually be tolerated. It is the researcher's responsibility to assess the degree of direct and indirect interaction that may exist between the survey issues and topics, on the one hand, and the propensity to respond on the other."

25. There are two matters of concern here - the size of the response rate, and the possibility of a bias in that respondents differ systematically (not randomly) from the frame. The response rates (completed interviews over contacts) are 24% for "dailies only", 21% for community

papers, 29% for "both", and 27% for "neither" (Ex. A-92). Clearly, if non-response is not a random phenomenon, there can be considerable bias in the results.

26. The largest category of non-respondents is "refusals". Two approaches can be undertaken to look at refusals. The first is to undertake extraordinary efforts to sample non-respondents (e.g., personal interviews, offering incentives to complete, etc.), and to look for systematic differences between this group and respondents. The second is more indirect. Refusals could be compared to respondents on objective characteristics such as firm size, amount of newspaper advertising, type of firm (grocery, department store, etc.). Responses would then be weighted accordingly. For example, if a disproportionate number of jewellers refused, the responses of jewellers who did respond would be weighted more heavily. Apparently, neither of these steps were taken in the Angus Reid study.

27. The second largest category of non-respondents is "other", comprising (in unspecified proportions) language, don't qualify (DQ), and Head Office. On language, we are left with the speculative assumption that the advertising propensity of those who do not speak English is the same as those that do. The second listed reason for inclusion in this category is DQ. I assume this consists of firms who, in spite of objective evidence to the contrary for those on the newspaper lists, claim not to have undertaken advertising or promotion over the past two years. One would hope that this group would be small in number.

28. The final sub-category is Head Office which refers to head offices located outside the

Lower Mainland. Considering that firms with advertising decisions made in head offices, particularly if those head offices are out of town, are likely to be relatively large and to advertise relatively heavily, a conscious decision should have been made to complete interviews of advertisers with head offices located outside of the Lower Mainland. With the exception of the "both" category, little or no effort was made to complete head office interviews: Volume 31, pp. 4803-4806. With respect to the "both" category, sufficient head office interviews were completed for the purpose of filling the quota of interviews from this category. As it stands, "head office" firms may be under represented in the sample.

29. In summary, this survey may or may not have a severe problem of non-response bias. No test of bias was conducted. If there was severe non-response bias, there is no way to determine a priori the direction it would take.

D. Questionnaire design error

30. In this section I will be confining my remarks to the adequacy of the questionnaire to address the four objectives of the study as defined in section 1.0.2 of the Angus Reid Report.

(a) *To measure the current media purchase behaviour of retail advertisers*

31. This objective receives little attention in the survey inasmuch as purchasing behaviour questions appear to be largely retrospective or speculative concerning possible future behaviour. Question 3, "What proportion of your advertising and promotions are primarily aimed at ---",

with a list of advertising objectives following, is the exception. No information is provided in either the Angus Reid Report or Angus Reid Supplementary Report to indicate how Angus Reid compiled this list of objectives. One would expect that either some expert in advertising compiled the list, or the appropriate literature on retail advertising was reviewed, or a survey of retail advertisers was employed to generate the list.

(b) *To ascertain the reasons for purchasing different types of media in Vancouver*

32. In section 1.1.6 of the Report, Angus Reid states "The reasons why they choose one advertising vehicle over another are not dealt with in detail in this study...the primary purpose of the present assignment is to describe what behaviour is occurring and would likely occur in relation to various changes in the marketplace". Nevertheless, sections 4.0 - 4.12 of the Report appear to be largely devoted to ascribing objectives to the four ex post groupings of advertisers. The responses to Question 3 of the telephone questionnaire are employed in this regard.

(c) *To determine perceptions of retail advertisers concerning the relative cost effectiveness of selected media*

33. Two questions were asked in this regard - whether a particular vehicle is regarded as effective in meeting the objectives in Question 3 (not measured on a scale), and the relative cost effectiveness of the media for their business.

(d) *To measure the likely response of retail advertisers to changes in media pricing, and in particular to examine what retail advertisers see as their alternatives or substitutions if prices for a selected advertising vehicle increase*

34. Economists typically measure the degree of substitutability by examining the effect on

demand of one product when there is a price change in another product. Ideally, one would observe actual behaviour as prices were experimentally varied. Alternatively, if one could obtain actual historical data concerning prices and quantities, one could employ econometric techniques to investigate the cross elasticity between the two products. If neither of these approaches is possible, "would you" questions can be asked, as in this instance.

35. The limitations of "would you" questioning should be recognized. First, if respondents are to respond to a scenario, the scenario should be accurate and complete. Actual prices of the various alternative media vehicles, their readership, etc. should be specified. This was not done. Second, other than rough indications of the direction of responses, little confidence can be attached to what is said (see section E below). Further, in my opinion, one should examine price changes in both positive and negative directions. Prices can be moved downward in order to increase market share, but this is an unlikely strategy if the increase in market share is at the expense of a vehicle or vehicles also owned by the firm introducing the price change (a phenomenon commonly termed "cannibalization"). These problems make the cash flow analysis in the Angus Reid Supplementary Report which is based on the switching behaviour analysis of questionable value.

E. Response error

36. In social science research, questions requiring recall and "would you?" type questions are particularly subject to response error. The former are subject to selective recall, forgetting, or outright lying. The latter are by their nature speculative, requiring respondents to project

themselves into scenarios and to imagine what their behaviour might be. It is always preferable to deal with people's actual behaviour than with their recalled behaviour or speculative behaviour.

37. One other potential source of response error was uncontrolled. A chain may permit each outlet a small advertising budget, while allocating major advertising expenditures from head office. If an outlet was surveyed, a respondent would likely provide answers with respect to this small budget, with no provision in the questionnaire to require the interviewer to follow up with a head office interview.

F. Analysis error

38. As has been pointed out above, Angus Reid preferred questioning respondents selected from the three newspaper lists concerning their advertising purchasing behaviour to accepting the actual 1990 behaviour from the lists. In addition, respondents from the random walk, supplemented by a reverse telephone directory, were employed to create a sample of retail advertisers who did not use newspapers. Based on their responses, firms were moved to new categories of "mainly daily", "mainly community", "both" and "neither", with 70% selected as a criterion for firms to be assigned to the "mainly" categories. The analysis was performed with respect to these categories, with weights assigned to project to the original categories.

39. Most of the detailed findings are given in terms of the analytical categories, and these will be discussed here first. Statements in italics summarizes the analytical conclusions in the

Angus Reid Report.

40. In section 2 the Angus Reid Report analyzes current advertising behaviour of the firms in each of the four groups. My reservations concerning reported advertising behaviour when actual behaviour is available have already been expressed, and I will ignore this issue in my remarks in this section. The Report concludes:

14% of retail advertisers in Vancouver are "mainly daily", 19% "mainly community", 14% "both", and 52% "neither".

41. The analysis leading to these figures is, in my opinion, incorrect. A number of factors make the conclusion suspect.

42. In section B of my report I indicate that various frame and sampling errors, as well as the very large difference between the relative proportions of "daily only", "community only", and "both" as between newspaper lists and the random walk make the original proportions suspect. This is reinforced by the large potential for non-response error.

43. One other source of error was present in the creation of the analysis categories. The manner of assignment to categories permitted known newspaper advertisers to be shifted to the "neither" category on the basis of their self reporting. It appears from the description of the survey design that there was no corresponding mechanism in the design to permit retailers not appearing on newspaper advertiser lists to shift into one of the three newspaper categories, also on the basis of self reporting. The net effect is to overstate the "neither" category - in this

instance, to increase the 47% estimate from the random walk (which itself is biased upward because of non-inclusion of relevant firms, such as Ikea, located outside the random walk area) to 52%.

44. In summary, the various sources of uncontrolled error make the proportion estimates in the analytical categories suspect.

45. The Angus Reid Report also concludes:

Retailers in the "mainly daily" category spend, on average, about 35% of their advertising budget on dailies (\$18,408), and only 1% on community papers (\$630); retailers in the "mainly community" category spend 41% of their advertising budget on community papers (\$8,796) and 3.7% (\$796) on dailies; retailers in the "both" category spend about 18% (\$16,344) on each; retailers in the "neither" category spend an average of \$4,581 on advertising.

46. These figures, even allowing for considerable non-response error, make it clear that the "neither" market is largely irrelevant on a per capita basis. The cost of display or insert advertising in dailies, and even in community papers, likely precludes their shifting advertising in the direction of newspapers.

47. The Angus Reid Report also states "An additional 34% of the market in Vancouver does not appear to be constrained by 'newspaper dependence' between daily and community newspapers because they are either mainly using daily or mainly using community newspapers, and are using little or none of the alternative form of newspaper. It would appear on the basis of current behaviour that they place very little, if any, emphasis on the other vehicle" (para.

2.0.6 of the Angus Reid Report).

48. I disagree with this statement in three respects. First, I have already stated my doubt as to the accuracy of the estimates of the relative sizes of the categories. Second, current behaviour is based on current relative prices. A shift in relative prices could change current behaviour. Third, current behaviour includes the behaviour of those who use community newspapers other than the North Shore Shore and The Vancouver Courier.

49. In section 3 the Angus Reid Report analyses the perceived cost effectiveness of selected advertising and promotional vehicles:

57 % of retailers in the "mainly daily" category rate display ads in The Vancouver Sun or The Province as extremely or very cost effective, but only 26 % rate display ads in the community papers as extremely or very cost effective. The corresponding figures for the "mainly community" category are 20% for The Vancouver Sun or The Province and 44% for community papers, while the figures for the both category are 36% dailies and 33% community.

50. I do not find these figures surprising. The percentages are somewhat understated relative to other media in that the corresponding percentages for inserts were not added in. But one would be greatly surprised to discover that advertisers who employed a particular medium or vehicle more than some other vehicle or medium did not rate the former as more cost effective than the latter. Nevertheless, the fact that 26% of "mainly daily" advertisers find community papers cost effective suggests considerable switching potential, especially if these turn out to be large advertisers. Of course, cost effectiveness would change with a change in costs.

51. In section 4 the cost effectiveness of advertising vehicles is assessed in relation to the specific reasons or goals for advertising asked in Question 4 of the telephone questionnaire. Two questions are asked. First, respondents indicate the extent to which all or most of their advertising is primarily aimed at a specific goal. Those who respond "all" or "most" are then asked if the various vehicles are cost effective at achieving that goal.

The significant findings are:

- a. *That only a small percentage of "mainly daily" advertisers and those in the "both" category are trying to reach a specific community, while approximately half of the "mainly community" advertisers are; and that most "mainly community" advertisers find display ads in community paper cost effective, but do not find display ads in The Vancouver Sun or The Province cost effective for this purpose. This phenomenon is repeated to a lesser degree where the objective is to reach a geographically defined target.*
- b. *The converse is true for reaching residents of Vancouver and the Lower Mainland. Only 36% of "mainly community" advertisers say all or most of their advertising is for this purpose, compared to 81% of "mainly daily" advertisers and 62% of the "both" category. Only in the "both" category do a significant number (47%) view "display ad in community newspaper" cost effective for this purpose, while 83% of the "mainly daily" and 69% of the "both" category view dailies as cost effective for this purpose.*

52. It may well be the case that community papers can be or are cost effective in reaching the Lower Mainland if one advertises in a number of such papers, rather than only one, particularly if group discounts are available. Certainly there would be economies in production costs, even without discounts. And a group of community papers can reach every household, whereas dailies do not. Then how does one account for the low regard in which community papers appear to be held for this purpose?

53. One explanation lies in the manner in which the question is posed (Question 5). The respondent is not asked to indicate the cost effectiveness of community papers (plural) or a group of community papers, but is asked to indicate "How effective is display ad in community paper" (singular). If the respondent takes the question literally, one would expect the response to be negative. It may also be the case that without group discounts, even if the respondent does interpret "community paper" to be plural, that advertising in a group of community papers may not be viewed as cost effective at present. This could change with a change in prices.

54. Angus Reid concludes that the "mainly daily" advertisers are largely interested in reaching the entire Lower Mainland, that they do not perceive community papers as cost effective for this purpose, and thus community papers are not in competition with dailies for this category of advertiser. The evidence appears to me to be far from conclusive. A single community newspaper cannot reach the entire Lower Mainland. But a group of community papers can.

55. Finally, it would be of interest to know the nature of the firms who responded one way or the other, beyond which category they are in. In particular, breakdowns by dollars of advertising would be useful. For example, consider the 47% in the "both" category who view community papers as cost effective in reaching residents of the Lower Mainland. Are these heavy advertisers, light advertisers or average advertisers as compared to the remaining 53% in the category?

56. Section 5 was analysis of switching behaviour in response to a price increase of 10% in a media vehicle. The major finding was that if the price increase was for dailies, only 22% of those in the "mainly daily" category would switch, 51% of those in the community mainly category, and 38% of the "both" category. If the price of community papers were to increase, a very small percentage in each category would switch.

57. There is a definite order bias in that switching is mentioned last on the list of possible alternative courses of action which a firm might take in response to a price increase. Thus a respondent would have had to say "no" to three other alternative courses of action before being presented with the alternative of switching. In situations like this the order of presentation is generally rotated, as was actually done in Question 5. The direction of the bias is to understate the number of switchers.

58. It is not clear why the list of possible vehicles to switch to was not read.

59. As I indicated earlier, presenting price decreases may have yielded different results, and the implicit assumption that other community papers are viewed similarly to the North Shore News and The Vancouver Courier is critical. Finally, I again think it was important to determine if switchers were the large, average or medium advertisers in their category; and if the vehicle they would switch to is related to amount of advertising. Although I believe that the direction of the responses is correct - e.g., more advertisers in the "both" category than advertisers in the "mainly daily" category would switch with a price increase for

dailies, I believe the magnitude estimates are subject to considerable error.

60. Furthermore, one cannot place great reliance on responses to "would you" type questions especially where a respondent is expected to give a reasoned answer to a very complicated hypothetical question in the minute or so taken up by this portion of the interview.

Cash Flow Analysis

61. I have a number of reservations with respect to the cash flow analysis. First, the weights depend upon the estimates of the original strata proportions, and I have already indicated my reservations there. Secondly, the switching behaviour responses estimates can be considerably off. Thirdly, there was no consideration of a decrease in price. Fourthly and most importantly, there was no systematic effort to adequately sample the major advertisers including the possibility of sampling the entire group. Even if this were not done, the actual anticipated switching and advertising of individual firms should have been employed in estimating the effect of price changes, rather than working with averages.

62. Any estimate of community paper advertising is immediately suspect in view of the fact that the sample frame did not include those advertisers whose only newspaper advertising was in community papers other than the North Shore News or The Vancouver Courier.

Summary

63. In my opinion little weight can be ascribed to the major conclusions of the Angus Reid Study. The major problem areas are:

- a. ambiguity in defining the target population;
- b. problems in the sample frame
 - i. including some advertisers using community newspapers other than the North Shore News and The Vancouver Courier, while excluding others,
 - ii. the random walk being inconsistent with the remainder of the sample frame and the clustering procedure being problematic,
 - iii. not carefully designing the study to ensure that major advertisers were adequately sampled;
- c. potentially major problem of non-response error with little apparent effort to systematically test whether or not there was a non-response bias and in particular, an under-representation of head office advertisers;
- d. problems in questionnaire design, in particular,
 - i. a wording problem in the question on effectiveness of "community paper", where the singular is employed,
 - ii. an order bias in outlining the courses of action a firm might employ in response to an increase in price of advertising,
 - iii. an inadequate specification of the price-increase scenario;
- e. potential response errors because

- i. firms responding to questions concerning community newspapers were not instructed to have only the North Shore News and The Vancouver Courier in their evaluation (an exception would be to have a set of community newspapers in mind when considering community newspapers as an alternative in reaching the entire Lower Mainland),
- ii. responses to complex "would you?" questions on switching behaviour are unreliable.

64. The Angus Reid study does not provide reliability estimates (e.g. confidence intervals). In my view, the many sources of error would, in any event, obviate the usefulness of such estimates.