Issue-Specific Agenda-Setting The Whole as Less Than the Sum of the Parts

JAMES P. WINTER, Syracuse University CHAIM H. EYAL, Hebrew University ANN H. ROGERS, Syracuse University

The Agenda-Setting hypothesis of mass media effects posits a direct, causal link between the issues and personalities emphasized in the communication media and public salience of those issues and personalities. While this broad statement has been useful for making general assertions to the effect that the media "tell us what to think about," it remains a general statement which must be further delineated (McCombs, 1977).

A number of Agenda-Setting researchers have ignored the attempts at theory building in this area, choosing instead to test their own conceptual and operational parameters (c.f. Kaid, Hale and Williams, 1977; Sohn, 1978). However, some attempts have been made to refine the seemingly monolithic Agenda-Setting concept. Audience attributes such as the amount of media exposure, interpersonal discussion, and need for orientation have been examined (Weaver and McCombs, 1978; Weaver, 1977; Winter 1981a).

Less attention has been paid to stimulus attributes such as the nature of the issue and the medium. With respect to the former, in fact, issues have almost consistently been treated in the aggregate (Atwood, Sohn & Sohn, 1976; Hilker, 1976; Gormley, 1975; Palmgreen & Clarke, 1977; McCombs & Shaw, 1972). The wholesale rank-ordering of issues in the media has been compared to a wholesale rank-ordering of issues in the public domain. Recently McCombs (1981) outlined a typology of four approaches to agendasetting research: using either aggregate or individual public agenda data, in conjunction with either a set of issues or a single issue. But perhaps the variable nature of individual issues precludes treating them in the aggregate, a problem that may explain null findings. Logically, issues vary in the amount of time necessary to bring them

to a position of importance in public opinion. A gas shortage may suddenly thrust the issues of energy conservation and alternate energy sources onto public agendas, or a series of oil spills may make pollution rise to importance, whereas it may take years for the honesty-in-government issue to become prominent in public awareness.

Thus, the nature of individual issues and their histories of exposure in the media are important variables which have only recently been considered. Zucker (1978) for example found Agenda-Setting effects for "unobtrusive" issues with which, he argued, we have less first-hand experience, such as pollution, drug abuse and energy, but not for more "obtrusive" issues such as the cost of living, unemployment and crime. The argument is that personal experience filters and to some extent overrides media emphasis.

Similarly, in her correlations between Gallup data and magazine content, Stroman (1978) only found an Agenda-Setting effect for what she called "short-term" issues, such as campus unrest and race relations, compared to "long term" issues such as health, taxes and unemployment.

Eyal (1980) initially found no agenda-setting relationship between media content and public opinion on 11 aggregated issues during the 1976 presidential election. Further analysis revealed however that negative correlations for the obtrusive issues were cancelling out positive correlations for the unobtrusive issues. This lead to no overall agenda-setting effect.

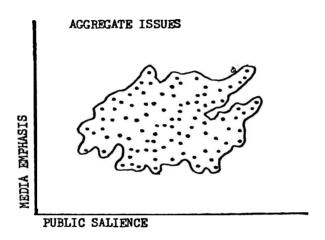
Despite this evidence suggesting that Agenda-Setting effects will vary with the nature of the issue, many researchers have continued to design studies in the following manner: the medium or media are analyzed to determine the salience of perhaps seven diverse issues at a single time period; these findings are then compared to an assessment of the public agenda. Because of the nature of the data that are gathered, nothing short of almost wholesale transferal of the salience of these diverse issues, from media to public, demonstrates agendasetting effects. With seven issues (or cases), a rank-order correlation of r plus .714 is required for statistical significance at conventional levels (p equals .05, 1-tail). If issues vary in Agenda-Setting effects, and if most studies use several issues, it is not realistic to expect an overall rank-order correlation of plus .714. Crosssectional, rank-order comparisons with issues as the unit of analysis are usually restricted to an N of about seven, given the limitations of human recall (Shaw & McCombs, 1977). By virtue of design, then, there is a severe restriction in the statistical power of these studies.¹

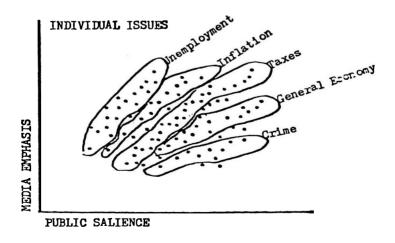
There is another very real methodological problem in failing to treat issues individually. As Eyal (1980) found, just as opposite effects may cancel each other out, so too may aggregate correlation of issues obscure individual relationships. As indicated in Figure 1,

the correlations between media and public agendas may be disguised when issues are treated *en masse*, rather than compared individually. Where avoidable, it no more makes sense to correlate aggregate issues than it does to compare media and public agendas without distinguishing between low and high media use groups.

Figure 1

Aggregate and Individual Issue Salience: Alternate Interpretations of a Hypothetical Distribution





Recently, a number of single issue studies have assumed differential agenda-setting effects for individual issues (Winter & Eyal, forthcoming; Neuman, 1980; Erbring, Goldenberg & Miller, 1980). However, aside from the somewhat serendipitous findings by Eyal (1980), no studies have compared the results obtained with aggregate and individual isues analysis. The single issue studies are providing important information, however. Contrary to several inconclusive "aggregate issue" studies, Winter and Eyal (forthcoming), for example, found strong Agenda-Setting effects by examining an individual issue over an extended time frame. This impact was found despite the fact that such a broad general indicator of media coverage as the *New York Times* was used.

A second important finding was that contrary to previous research (c.f. Stone, 1974), the peak association between media emphasis and public salience was 0-2 months, compared to the 3-5 months that has been generally assumed (McCombs & Masel-Walters, 1976). This question of the time frame for Agenda-Setting and time frame components has only recently been elaborated and is thought to be issue-specific (Eyal, 1980; Eyal, Winter & DeGeorge, 1981).

In light of the above, the authors planned a replication and extension in the Canadian context. The primary purpose of the research was to conduct a preliminary comparison between the traditional 'aggregated issue' approach, and the recent notion of individual issue analysis. Four hypotheses were formulated:

- 1. There will be differing Agenda-Setting relationships depending on the nature of individual issues.
- 2. Constructed aggregate issue agendas will not correlate as highly as individual issue agendas.
- 3. The peak association between media emphasis and public perception will be closer to 0-2 months than to 3-5 months.
- 4. A cumulative Agenda-Setting effect will peak at a period closer to 0-2 months than to 3-5 months prior to the interviewing period.

Method

Inflation, Unemployment, and National Unity, the three issues ranked as most important in recent Canadian Gallup polls were selected. The four most recent Gallup polls on the "most important issue" were included in the study. Exact polling dates were obtained from Gallup headquarters in Toronto.² The number of front page, Toronto Star stories on each of the above issues in the six months immediately preceding each poll was compared with the percentage of respondents in the polls who cited each of the issues as "the most important." The percentage of respondents citing any of the three issues were summed to provide an aggregate index which was then compared to the total number of stories on all three issues, in each of the six months preceding interviewing dates.

While there are limitations on our ability to generalize from Toronto Star content to the Canadian media at large, there are a number of reasons why it was selected as a national media indicator. It is the largest circulation daily newspaper, and vies with the Toronto Globe & Mail for most prestigious daily in the country. Evidence provided by research in the U.S. indicates that some form of news consensus exists among the elite newspapers, and possibly for the rest of the press as well (Breen, 1968). Furthermore, the Star and other elite newspapers are imitated by other newspapers in what Breed (1955) termed the "arterial effect", in which news flows downward from the elite newspapers to smaller dailies, as if the editor is employing the editors of the larger newspapers in absentia to help make up his front page, in an inter-media form of agenda-setting.

The process of news flow from larger elite newspapers down to smaller ones has been enhanced by the ever-increasing role of the wire services (McCombs & Shaw, 1976). In the U.S., a number of observers have described the influence of the New York Times on television network news operations, and while perhaps no single Canadian daily wields an influence comparable to the *Times*, it is probable that the broadcast media reliance on the press is relatively comparable in the two countries (c.f. Gans, 1979; Crouse, 1972; Brown, 1971; Talese, 1969). Finally, research using diverse media has shown high intercorrelations in their emphasis of major issues, and a number of studies using either the Times, newsmagazines, or network news content, have demonstrated agenda-setting effects (c.f. Winter & Eval, forthcoming: Winter, 1981b; Zucker, 1978; Stroman, 1978; Funkhouser, 1973; Stone, 1974). Either these effects are spurious, or these sources are generally representative of the broader national media emphasis.

In light of the above evidence, the *Star* is an adequate estimate of national media coverage. The total population of newspapers for the four six month periods was 628, including overlapping dates. The authors obtained 505, for a completion rate of 80.4 per cent.

Results

The number of front page stories in each of the six months preceeding the Gallup polls was compared with the results of the polls, for each of the issues, using zero-order Pearson Product Moment correlations. As can be seen in Table 1, both the strength and the "timing" of the Agenda-Setting relationships varied with individual issues.

Inflation was the least stable issue, perhaps owing to its obtrusiveness. A near perfect correlation with the first month prior to interviewing (r equals .998) was followed by insignificant negative

Table 1
Front Page Content and Gallup Polls
By Issue, and Month Prior to Polls
Zero Order Pearson Correlations

MONTH PRIOR ISSUE Fifth First Second Third Fourth Sixth .998* -.233 .278 -.374 -.786 .644 Inflation .788 .665 .763 .852 .968* .792 Unemployment National Unity .962* .918* .978* .874* -.599 .470 Aggregate Issues .182 .693 .677 .783 -.167 .261

and positive correlations in the preceding months, showing no stable linear pattern.

For the Unemployment and National Unity issues, however, a consistently high, if not monotonic, increase in correlations stretched back to a peak at five months prior to polling for Unemployment, and four months prior for the National Unity issue.

Issues were aggregated by taking the total number of stories on all three issues on the *Star's* front page in each month, and comparing this total with the total percentage of respondents citing any of the three issues as most important when polled.³ For the individual issues at least one, and as many as four months' media content was significantly correlated with the public agenda measure. When aggregated, the issues were not significantly associated with the public measure.

Comparing individual and aggregate issues for each of the prior months, at least two of the three individual issues are more highly correlated with the public agenda measure than is the aggregate measure, in every case.

The cumulative impact of media content was measured by constructing cumulatively increasing media content variables stretching from a single month to a full six month model, each of which was compared with individual and aggregate issue agendas for the public. The results support those indicated by the simple correlations in Table 1.

The media content/public agenda correlations build monotonically right back to six months prior to interviewing for the National Unity issue, and except for an aberration in the first month prior to interviewing, the same is true for the Unemployment issue (Table 2).

^{*}As individual Gallup polls provided the unit of analysis, our effective N for statistical purposes is 4. Thus, the less conservative significance level of .10 was selected.

Table 2
Front Page Content and Gallup Polls
By Issue for Cumulative Months Prior

ISSUE MONTH(S) PRIOR

	One	Two	Three	Four	Five	Six
Inflation	.998*	.087	100	127	268	109
Unemployment	.788	.676	.717	.797	.839*	.928*
National Unity	.470	.891*	.901*	.947*	.951*	.969*
Aggregate	.182	.680	.693	.715	.603	.728

Again, for these cumulative periods, the aggregate measures donot match up as well as the individual measures. With a single exception (r equals .676 versus r equals .680) the Unemployment and National Unity issues are more highly correlated with media content on their own than when combined with the Inflation issue, and compared in the aggregate.

Discussion

Hypothesis 1, that there will be differing Agenda-Setting relationships depending on the nature of the issue, is supported. While the Unemployment and National Unity issues were relatively similar, the correlations were somewhat different, and the peak relationships occurred in different months (the fourth for Unemployment and fifth for National Unity). The Inflation issue is another matter altogether. Here, the correlations are insignificant with the exception of the first month. Inflation is a more obtrusive issue than either Unemployment or National Unity. Everyone is affected by Inflation, whereas Unemployment primarily effects only the unemployed, and National Unity had generally, at the time of the study, primarily affected Quebec. With respect to the obtrusiveness dimension then, one would expect greater effects for the less obtrusive issues of National Unity and Unemployment, and indeed the correlations are more consistent for these issues (Zucker, 1978). These findings support those of Eval (1980) and Zucker (1978).

Hypothesis 2, that constructed aggregate agendas will not correlate as highly as individual issue agendas, is supported. This provides further evidence against the continued treatment of issues in the aggregate in Agenda-Setting research, and is an important qualification for most research to date.

Hypothesis 3, that the peak association between media emphasis and public salience will be closer to 0-2 months than to 3-5 months, was not supported. The "best fit" was in fact with media content from 4-6 months prior to interviewing for two of the three issues.

This supports Stone's (1974) findings and differs from findings reported by Winter and Eyal (forthcoming). An important qualification is that *different issues* have been used in each of these studies. What we may be discovering is that time frames are indeed issue-specific.

Hypothesis 4, that the cumulative Agenda-Setting effect will peak closer to the 0-2 month interval prior to the interviewing period, is not supported. As shown in Table 2, two of the three issues (Unemployment and National Unity) as well as the aggregate measure, achieve their maximal cumulative effect when the entire sixmonth period is correlated with the public measure.

It appears from the results of this study and those summarized above that the strength and timing of Agenda-Setting relationships will vary with the nature of individual issues. We view as most important, from a methodological standpoint, the finding of significant associations between the media and public agendas on independent, singular, issues, while the aggregate measure combining the three issues examined produced no significant correlations. Had this study been conducted in the traditional manner typical of past Agenda-Setting research, the results would have indicated no significant relationship between media content and public issue salience. In other words, the analysis of grouped issues produces only a measure of "central tendency", or an average, which may not reflect any of the individual issues under analysis.

Thus, this study provides evidence against the continued treatment of issues in the aggregate. This suggests that it is no longer adequate in Agenda-Setting research to treat issues *en masse*, any more than it is adequate to lump respondents together, independent of media use patterns and other contingent conditions.

It is left for future research to replicate and extend this study over a longer period of time, including more time points in the analysis. The purpose here has been to compare, in a preliminary fashion, the aggregate issue approach used in the research to date, with the recent idea of individual issue analysis.

Endnotes

1. The observant reader will note that statistical power is also a limitation of the present research, with an effective N of 4. However, the authors wish to stress the preliminary nature of this research, and point out that this is the reason for the small sample, rather than a design limitation. With adequate resources, the current design with the time point as the unit analysis could be extended indefinitely. Indeed, it was extended to 27 time points by Winter & Eyal (forthcoming) and to 23 time points by Winter (1981b). These extensions do represent an improvement in statistical power over the aggregate issue approach.

- 2. Interviewing dates were: September 14-16, 1978; May 4-6, 1978; January 5-7, 1978; and June 2-4, 1977.
- 3. Strictly speaking, because of the different methods used, this aggregation is not identical to the rank order aggregations used to date in agenda-setting research. It is not possible to use the traditional rank order method to examine a single issue, without restricting the sample to an N of 1. The comparison between this and previous aggregate measures, thus, is an approximation.

References

- ATWOOD, L.E., SOHN, A. and SOHN, H. 1976. Community Discussion and Newspaper Content. Paper presented at the Annual Convention of the Association for Education in Journalism. University of Maryland.
- BREED, W. 1955. Newspaper Opinion Leaders and the Process of Standardization, *Journalism Quarterly*, 32:3, pp. 277-284, 328.
- BREEN, M.A. 1968. Ten Leading Newspapers Rated for Coverage of 1967 Detroit Riots, *Journalism Quarterly*, 45:3, pp. 544-546.
- BROWN, L. 1971. *Television*. New York: Harcourt Brace Jovanovich, Inc. CROUSE, T. 1972. *The Boys on the Bus*. New York: Random House.
- ERBRING, L., GOLDENBERG, E.N. and MILLER, A.H. 1980. Front-Page News and Real-World Cues: A New Look at Agenda-Setting by the Media, *American Journal of Political Science*, 24 (February 1980), pp. 16-49.
- EYAL, C. H. 1980. Time Frame in Agenda-Setting Research: A Study of the Conceptual and Methodological Factors Affecting the Time Frame Context of the Agenda-Setting Process. Unpublished doctoral dissertation, Syracuse University.
- EYAL, C.H., WINTER, J.P. and DeGEORGE, W.F. 1981. The Concept of Time Frame in Agenda-Setting, in G. Cleveland Wilhoit and Maxwell McCombs (eds). *Mass Communication Review Yearbook*, Vol. II. Beverly Hills, CA: Sage Publications.
- FUNKHOUSER, G.R. 1973. The Issues of the Sixties: An Exploratory Study in the Dynamics of Public Opinion, *Public Opinion quarterly*, 37 (Spring), pp. 62-75.
- GANS, H.J. 1979. Deciding What's News. New York: Random House.
- GORMLEY, W.T. 1975. Newspaper Agendas and Political Elites, Journalism Ouarterly, 52:2 (Summer), pp. 304-308.
- HILKER, A.K. 1976. Agenda-Setting Influence in an Off-Year Election, American Newspaper Publishers Association News Research Bulletin, No. 4 (November 10), pp. 7-10.
- KAID, L.L., HALE, K. and WILLIAMS, J. 1977. Media Agenda-Setting of a Specific Political Event, *Journalism Quarterly*, 54:3 (Autumn), pp. 584-587.
- McCOMBS, M.E. 1981. The Agenda-Setting Approach, in Dan D. Nimmo and Keith R. Sanders (eds), *The Handbook of Political Communication*. Beverly Hills, CA: Sage Publications.

- McCOMBS, M.E. 1977. Expanding the Domain of Agenda-Setting Research. Strategies for Theoretical Development. Paper presented at the Annual Convention of the Speech Communication Association, Washington, D.C. (December).
- McCOMBS, M.E. and Masel-Walters, L. 1976. Agenda-Setting: A New Perspective on Mass Communication, Mass Communication Review, 3:2 (Spring), pp. 3-7.
- McCOMBS, M.E. and SHAW, D.L. 1976. Setting the Political Agenda-Structuring the 'Unseen Environment,' *Journal of Communication*, 26:2 (Spring) pp. 18-22.
- McCOMBS, M.E. and SHAW, D.L. 1972. The Agenda-Setting Function of the Mass Media, Public Opinion Quarterly, 36 (Summer), pp.176-187.
- NEUMAN, W.R. 1980. Agenda-Setting in American Presidential Politics.

 Paper presented at the Annual Convention of the American

 Association for Public Opinion Research, Kings Island, Ohio.
- PALMGREEN, P. and CLARKE, P. 1977. Agenda-Setting With Local and National Issues, Communication Research, 4, pp.435-452.
- SHAW, D.L. and McCOMBS, M.E. 1977. The Emergence of American Political Issues: The Agenda-Setting Function of the Press. St. Paul, Minnesota: West Publishing Co.
- SOHN, A.B. 1978. A Longitudinal Analysis of Local Non-Political Agenda Setting Effects, *Journalism Quarterly*, 55:2 (Summer), pp. 325-333.
- STONE, G. 1974. Cumulative Effects of the Media. Paper presented at the Syracuse University Conference on Agenda-Setting, Syracuse, NY. (Fall).
- STROMAN, C. 1978. Race, Public Opinion, and Print Media Coverage, Unpublished doctoral dissertation, Syracuse University.
- TALESE, G. 1969. The Kingdom and the Power. New York: Bantam Books. WEAVER, D.H. 1977. Political Issues and Voter Need for Orientation in D.L. Shaw and M.E. McCombs (eds.), The Emergence of American Political Issues: The Agenda-Setting Functions of the Press. St. Paul, Minnesota: West Publishing Co.
- WEAVER, D.H. and McCOMBS, M.E. 1978. Voters' Needs for Orientation and Choice of Candidates: Mass Media and Electoral Decision Making. Paper presented at the 33rd Annual Conference of the American Association for Public Opinion Research, Roanoke, Virginia (June).
- WINTER, J.P. 1981a. Contingent Conditions in the Agenda-Setting Process, in G.C. Wilhoit (ed), Mass Communication Review Yearbook, Vol. II Beverely Hills, CA: Sage Publications.
- WINTER, J.P. 1981b. Differential Media-Public Agenda-Setting Effects for Selected Issues, 1948-1976. Unpublished doctoral dissertation. Syracuse University.
- WINTER, J.P. and EYAL, C.H. Forthcoming. Agenda-Setting for the Civil Rights Issue, *Public Opinion Quarterly*.
- ZÜCKER, H.G. 1978. The Variable Nature of New Media Influence, in B.D. Ruben (ed), Communication Yearbook 2, New Brunswick, NJ: Transaction Books.