

***Schindler's List's* Intermedia Influence: Exploring the Role of "Entertainment" in Media Agenda-Setting**

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Abstract: Intermedia and media-public opinion research has typically dealt with the political power of news-oriented media; this study suggests that entertainment-oriented media might be a useful addition to future analyses. It is further proposed that agenda-setting research methods can empirically demonstrate the intermedia influence of entertainment-oriented media. *Schindler's List* is used as an exploratory case, and citation indices are used to evaluate the movie's effects on the Canadian news media agenda. Interrupted time series analysis is used to quantitatively gauge the total impact of the film, followed by a more developed content analysis to measure changes related to issue framing. The findings provide some evidence of the film's ability to affect the news media agenda.

Résumé: La recherche sur les médias et l'opinion publique examine généralement le pouvoir politique des médias d'information. Cette étude suggère que les médias de divertissement pourraient eux aussi faire l'objet d'analyses futures. Elle propose en outre que les méthodes de recherche portant sur la sélection et la mise en valeur des nouvelles («agenda setting») peuvent démontrer de manière empirique l'influence des médias de divertissement. Une étude de cas portant sur *La Liste de Schindler* a recours à des index de citation pour évaluer l'effet de ce film sur la sélection des nouvelles dans les médias d'information canadiens. Une analyse de séries temporelles interrompues mesure quantitativement l'impact du film sur la sélection, tandis qu'une analyse de contenu plus détaillée évalue les changements dans le traitement des nouvelles («issue framing»). Ces analyses révèlent qu'un film possède en effet la capacité d'influencer la sélection des nouvelles dans les médias d'information.

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Political communications literature has often been concerned with the potential for media influence on public opinion. The influence discussed below, however, is largely antecedent to the media-public opinion relationship. Rather, a discussion of "intermedia" influence is primarily concerned with relationships between media—in this case, between *Schindler's List* and Canadian newspapers. The following analysis offers some evidence of how the release of *Schindler's List* during the winter of 1993-94 had an effect both on the number of Holocaust-related articles in Canadian newspapers and on the way in which these articles represented the Holocaust issue.

There are several ways to frame a discussion of media relations. There have been, for instance, a number of institutionally oriented studies concerned with how news gets created—the effects of phenomena such as newsroom organization, journalistic values, and news sourcing (e.g., Ericson, Baranek, & Chan, 1989; Gans, 1979). Other theorists have concentrated on what might be called "joint media effects"—instances in which various media are shown to act (and react) in unison. For these authors, there is only one media agenda, engendered through common ownership and control (e.g., Bagdikian, 1983; Herman & Chomsky, 1988).

While institutional variables certainly play a role in media agenda creation, there is also the possibility for larger, extra-institutional influences. This study searches for one such influence on the news media agenda. Unlike "joint media effects" theorists, the following quasi-experiment uses two relatively separate media (an American major motion picture and a variety of Canadian newspapers), suggesting the appropriateness of an analysis that recognizes two relatively separate agendas.

Intermedia relations are explored below using an agenda-setting framework. The framework offers two advantages: first, common empirical agenda-setting methodologies, as described below, offer a useful means with which to explore the relationship between entertainment-oriented media and news-oriented media, and secondly, the agenda-setting model provides a means through which the greater significance of intermedia influence can be recognized. Effects on the media agenda, after all, are more significant when the relationship between the media and public agendas are considered. While the present analysis is concerned with a media-media rather than a media-public relationship, an agenda-setting framework allows for the (ideal) future possibility that the two relationships can be linked.

The present study will make no claims about the public agenda. Rather, it demonstrates the use of the agenda-setting paradigm in understanding the intermedia influence of entertainment-oriented media and, by describing the impact of one motion picture on the news media agenda, it makes a case for the incorporation of entertainment-oriented media into what have typically been news-dominated political communications analyses of media influence.

In sum, the present paper seeks to address two related problems: (1) the lack of an empirical basis for claims about the political significance of entertainment-oriented media, and (2) the news-oriented bias in political communications operationalizations of the media agenda.

Entertainment-oriented media can have relatively clear intermedia agenda-setting influence, and the political ramifications of this influence have yet to be empirically explored. The inquiry below, a first step along this path, proceeds in several stages. First, a background in public and intermedia agenda-setting is offered. The summary of agenda-setting research begins with research on the media-public opinion relationship and then discusses the intermedia research that is more pertinent to the present analysis. It is hoped that this brief digression will allow the reader to place intermedia analysis in perspective—as previously mentioned, the potential importance of intermedia influence is, to a certain degree, dependent on the possibility that the media can affect public opinion. This literature review is followed by a description of the potential importance of entertainment-oriented media in general and *Schindler's List* in particular. This section follows a line of argument similar to the section preceding it, dealing first with the media-public relationships and then the media-media relationships. Then, the time series and detailed content analyses are described, and the results discussed as they pertain to the potential importance of entertainment-oriented media in studies of intermedia and media-public influence. The impact of *Schindler's List* is examined through two sets of observations: (1) changes in the number of Holocaust-related articles and (2) changes in the framing of the Holocaust issue.

Background: Public and intermedia agenda-setting research

While there have been detailed qualitative descriptions of the media's power to influence (e.g., Taras, 1990), empirical proof of the direct link between the mass media and public opinion has been difficult to find (Carrie & Ehrenberg, 1992). Most studies dealing with the direct impacts of news-oriented media or advertising have found only very modest results (e.g., Lukesch, 1992; McGuire, 1986; Sears & Chaffee, 1979).

The relatively recent successes in quantitatively demonstrating the news-public opinion link have less to do with improved research methods than they do with a change in the research topic itself. Recent media effects literature has often abandoned finding proof of newspapers' and television news programs' direct impact on public opinion. Rather, following from *Public Opinion* (Lippmann, 1922) and the Chapel Hill studies (McCombs & Shaw, 1972), analysts have concentrated on finding an empirical relationship between news media content and issue salience for the public. This "agenda-setting" research has found moderate success in quantitatively demonstrating that, while news may not actually change people's opinions on issues, it does affect what issues people think about. In agenda-setting terms, this body of

research has illustrated the potential political power of news media by identifying a connection between the media agenda and the public agenda (e.g., Behr & Iyengar, 1985; Iyengar & Kinder, 1987; Iyengar, Peters, & Kinder, 1983; Iyengar & Simon, 1993; Martin, 1976; Parlour & Schatzow, 1978). In the case of news-related research, therefore, proof of a direct impact on political opinion has been tenuous, but evidence of Lippmann-esque agenda-setting abilities has been more easily established.

The majority of agenda-setting articles have studied the public agenda (McCombs & Shaw, 1993; Rogers & Dearing, 1988; Rogers, Dearing, & Bregman, 1993). Alongside—or perhaps in the background of—this public agenda-setting analysis, however, there has been a growing recognition of the importance of intermedia agenda-setting. In light of research that shows the potential for news media to set the public agenda, several authors have noted the potential for studies within the agenda-setting framework that deal specifically with the relationships between media, or the impact of particular media on the media agenda (e.g., Carragee, Rosenblatt, & Michaud, 1987; Kosicki, 1993).

In their description of the agenda-setting process, Rogers & Dearing (1988) point to the potential for media agenda-setting analysis. These authors note the possibility that, preceding the impact of the media agenda on the public agenda, “influential media” might affect the media agenda. This aspect of media agenda-setting has been investigated recently; in their examination of drug-related news stories, for instance, Reese & Danielian (1989) found that “the print media, and specifically the *New York Times*, set the agenda for the television networks” (p. 41, see also Danielian & Reese, 1989). It is this first link in the agenda-setting chain that is examined below.

The importance of entertainment-oriented media

Just as with news, there have been a number of analysts seeking to demonstrate relationships between entertainment-oriented media and public opinion. There have been some moderate achievements in this general area—Cumberbatch & Howitt’s (1989) review of the literature, for instance, found some evidence of a connection between television viewing and violence. While there have been a few successes in demonstrating the mass media’s ability to influence public opinion, proof of the power of entertainment-oriented media—television or otherwise—to directly affect political attitudes has been disappointing (Ball-Rokeach, Grube, & Rokeach, 1981; Brown & Cody, 1991; Hur & Robinson, 1983).

Wilson, Linz, Donnerstein, & Stipp’s (1992) study of a television movie about date rape, for example, yielded results consistent with preceding research: they found no empirical indication that the film had an impact on people’s opinions about rape. In their conclusions, however, the authors pointed to an interesting fact—a change in the number of people who perceived date rape

as a serious problem. While proof of a direct impact eluded them, then, Wilson, Linz, Donnerstein, & Stipp did find some proof which was "analogous to a mass media agenda-setting effect" (p. 201).

Similarly, Markovits & Hayden (1980) have identified an agenda-setting-style impact in their study of the airing of the NBC series *Holocaust* in West Germany and Austria. They wrote:

Long after the telecast, *Holocaust* remained a major subject for discussion in the West German press. It also became the center and starting point for an array of topics. . . . Various magazines ran series on aspects of the War and anti-Semitism, and the different Centers for Political Education were deluged with letters requesting material related to the show. This entire episode and experience came to be known as the "Holocaust Wave". . . . (p. 74)

While Wilson, Linz, Donnerstein, & Stipp noted the possibility of public agenda-setting by entertainment-oriented media, the impact that Markovits & Hayden indicate is more germane to the present analysis. These latter authors point to the possibility of intermedia agenda-setting by entertainment-oriented media.

Based on these precedents, it is surprising that theorists interested in proving the importance of entertainment-oriented media in political communications have not already taken advantage of agenda-setting analysis. Accordingly, one aim of the present article is to apply intermedia agenda-setting analysis to entertainment-oriented media. This does not preclude the possibility that films can directly affect the public agenda. The investigation that follows, however, concentrates on what may be the more measurable connection between *Schindler's List* and the media agenda. In this way, this study takes a circuitous yet empirical route towards demonstrating the potential power of entertainment media. A number of entertainment theorists have stated that movies can affect the way people interpret the world around them (Christensen, 1987; Combs, 1993; Jowett & Linton, 1989; Ryan & Kellner, 1988). The following investigation begins to look for quantitative proof of this phenomenon by asking the following question: Can agenda-setting research methods help to empirically support what has been a largely qualitative claim of the political importance of entertainment-oriented media?

What is also at issue in the present study is the news-oriented bias that has predominated in media and public agenda-setting analysis. The bulk of aforementioned intermedia and public agenda-setting literature has discussed and measured the media agenda almost exclusively in news-oriented terms. Political communications-related discussions of the media, and the empirical measurements that have accompanied them, have almost invariably been based on newspapers or television news programs only (Frith, 1996). This neglect of entertainment-oriented media is increasingly problematic, not only because of the importance of entertainment-oriented media in modern society but

because the division between news and entertainment is becoming increasingly vague.

Postman (1985), for example, has commented that “The nature of [our culture’s] discourse is changing as the demarcation line between what is show business and what is not becomes harder to see with each passing day” (p. 98). Accordingly, the division between news and entertainment must be made cautiously—the term “entertainment-oriented media” is used here to distinguish media aimed primarily at entertainment from media aimed primarily at conveying information (news). Admittedly, this division is not always clear, and while it will suffice for the present analysis, there is certainly an argument for making no division at all. Postman’s comments, for example, are supported by authors such as Altheide & Snow (1991) who also note that “it is becoming increasingly difficult to draw the line between entertainment and nonentertainment” (p. 15). This trend, coupled with the simple fact that entertainment-oriented media play a significant role in most people’s lives, makes the omission of non-news-oriented media in political communications studies especially questionable.

Motion pictures and *Schindler’s List* as “influential media”

The fundamental difference between this study and its predecessors is that it is not concerned with news-oriented media as intermedia agenda-setters, but rather with entertainment-oriented media. While authors such as Carragee, Rosenblatt, & Michaud (1987) and Reese & Danielian (1989) are concerned with newspapers and television network newscasts, the present analysis deals with a major motion picture. This is done with the assumption that major motion pictures, like the *New York Times*, are “influential media.”

The work of entertainment theorists suggests this role for motion pictures. A number have stated that, despite the growing importance of television, major motion pictures continue to occupy a central place in modern popular culture (Christensen, 1987; Combs, 1991). Jowett & Linton (1989), for example, state that “this central position of the movies in mass-mediated cultural life means that they are both the source for and the anticipated destination of many other forms of mass culture” (p. 19).

The movie chosen in this case is *Schindler’s List*, Steven Spielberg’s film on the Holocaust. The choice of this movie was largely subjective—in an effort to test the potential for agenda-setting analysis in entertainment studies, *Schindler’s List* was chosen by the author because it seemed to satisfy a number of requirements that suggested intermedia agenda-setting potential. Most importantly, the film was very popular and critically acclaimed. It was one of the top 10 films in Canada, based on weekly earnings, for the first five

months of 1993. It also received very good reviews; *The Motion Picture Guide* (1994), for instance, wrote that

The seven Academy Awards and virtually unanimous acclaim accorded to *Schindler's List* were entirely merited. Deftly wielding the dollar-driven apparatus of 1990s Hollywood, director Steven Spielberg has achieved something close to impossible—a morally serious, aesthetically stunning historical epic that is nonetheless readily accessible to a mass audience. (p. 283)

Schindler's List reached a large audience, and was acclaimed by other mass media outlets—two indicators that the film might fall into the category of “influential media.”

Furthermore, *Schindler's List* appeared to address a political topic which was not already salient, either for the media or the public. In order to have some visible effect on the media agenda, after all, a movie must address a topic that is not already very salient. The Holocaust is an issue that is addressed periodically by the news media, but not one that seems especially dominant over the past two decades. According to Downs' (1972) model of the “issue attention cycle,” for instance, it appeared that the Holocaust was in the “pre-problem” stage. *Schindler's List*, therefore, seemed to have the opportunity to have a visible effect on the news media agenda.

Effects of *Schindler's List*—Quantitative analysis

The research strategy in this case follows in two stages: (1) a time series analysis and (2) a more detailed content analysis. The first step is performed in an effort to discover if *Schindler's List* simply led to an increase in the number of Holocaust-related articles in Canadian newspapers. The second stage explores the possibility that *Schindler's List* affected not only the number, but the content of these articles.

It should be noted at the outset that it is difficult to separate the impact of a major motion picture from the impact of its advertisements. The following analysis, therefore, measures the impact, not of the film in isolation, but of the entire “movie phenomenon”—advertisements and all. This fact does not necessarily affect the agenda-setting hypothesis, although it should be kept in mind when interpreting the results.

The number of Holocaust-related articles

Following the structure of several previous studies into media agenda-setting (e.g., Behr & Iyengar, 1985; Gonzenbach, 1992; Shaw & Martin, 1992; Wanta & Hu, 1993), a time series analysis was conducted using data generated from a citation index—specifically, the *Canadian Business and Current Affairs* CD-ROM citation index (CBCA). Using CBCA, monthly totals were calculated for the number of articles in major Canadian newspapers on Holocaust-related topics.¹ These totals were used as a quantitative measurement of the Canadian news media agenda, with the assumption that a rise or fall in the

number of articles per month on a given subject would indicate a change in that issue's salience.

In these computer-assisted studies, a "catchword" was entered into the computer, along with limitations—in this case, "Holocaust" was the catchword. "Review" was used as a limitation in order to avoid book, theatre, or movie reviews, as *CBCA* does not provide a thorough index of reviews. Furthermore, there is no other thorough index for movie reviews in Canada, and the number of reviews counted would therefore not be accurate. More general articles interviewing Spielberg or discussing the making of *Schindler's List* were also excluded in the present analysis. Whether these film-related articles and reviews should be included is debatable. One argument is that the inclusion of these articles would bias the results by blurring the distinction between genuine intermedia influence and routine entertainment reporting. The agenda-setting argument, however, suggests that these articles might well be included. If one sees the end result of media agenda change as public agenda change, then mentions of the Holocaust—no matter the context—may be relevant. Regardless, leaving these articles out is the more conservative strategy.

Citations in each year were consulted directly following the CD-ROM searches to ensure that the interpretations of the index contents were appropriate, and print indexes (*Canadian News Index*, *Canadian Index*, and *CBCA*) were also consulted to verify that the trends identified in *CBCA* were correct. These steps were taken in an effort to ensure that the data was as accurate a reflection as possible of the trends in contents of major Canadian newspapers.

During the collection of data, citation indexes and newspaper articles were reviewed in order to identify any real-life occurrences that may have affected the experiment. In order to attribute intermedia agenda-setting to the motion picture, any real-life occurrences had to first be ruled out. Over the 15 years (1982-1996), a number of real-life Holocaust-related occurrences were identified. These were as follows:

1. the Zundel & Keegstra trials (1984-85);
2. the 50th anniversary of the Holocaust (November 1988);
3. the moving of a Catholic convent at Auschwitz (September 1989);
4. the discovery of Nazi diaries (July 1992);
5. the deportation of anti-Semitic author David Irving (September-October 1992);
6. the opening of the Holocaust Museum in Washington, on the 50th anniversary of the Warsaw Ghetto uprising (April 1993);
7. the 50th anniversary of the liberation of Auschwitz, Buchenwald, and Bergen-Belsen (January, March 1995);
8. the discovery of Nazi gold held in Swiss banks (April-May, September-November 1996).

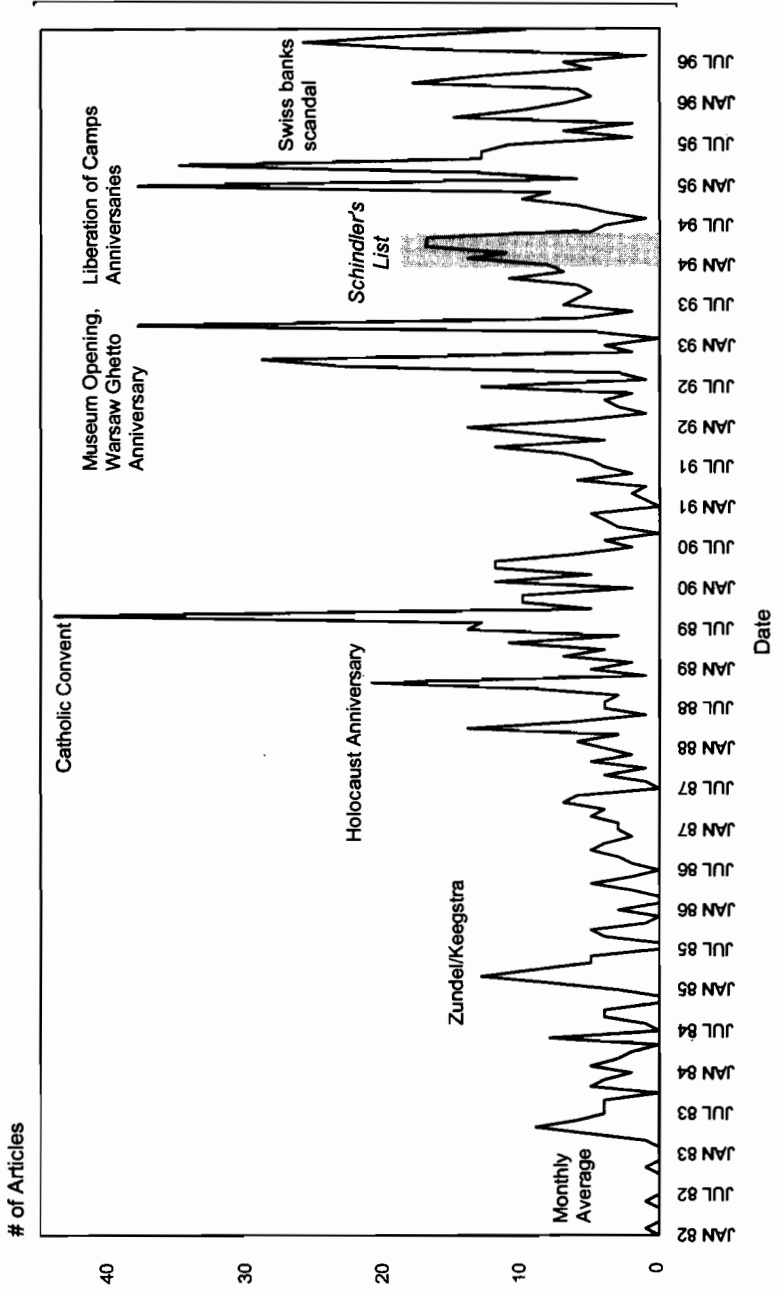
Several of these events require some explanation. The Zundel and Keegstra trials, for example, were important trials of anti-Semites in Canada. Zundel was a Toronto resident accused of being a major international publisher of anti-Semitic literature, including a booklet describing why the Holocaust never happened, and Keegstra was an Albertan school teacher, politician, and Holocaust denier. In September 1989, a Catholic convent at Auschwitz was pressured into moving further away by Jews who were uncomfortable with the church's presence. This move provoked a heated discussion regarding the role of the Catholic church in remembering the Holocaust, as well as in the Holocaust itself. British anti-Semitic author David Irving's deportation involved a month-long trial process that garnered considerable press coverage. The Holocaust Museum in Washington was a considerable memorial, opened with a large ceremony on the 50th anniversary of the Warsaw ghetto uprising. Articles which involved these events, and which included the catchword "Holocaust," were not separated from the monthly totals, although these events were noted as possible real-life media agenda influences.

Figure 1 illustrates the number of Holocaust-related articles in seven major Canadian newspapers from 1982 to 1996. The data do seem to provide a moderate illustration of the intermedia agenda-setting effects of *Schindler's List*. At the film's release, for instance, there is a distinct rise in the number of Holocaust-related articles in Canadian periodicals, and the level of media interest in the subject seems to remain for the months that *Schindler's List* attracted a large audience.

Figure 1 also indicates, however, that the monthly total of Holocaust-related articles was far from its highest during the release of *Schindler's List*. There are, in fact, a significant number of other monthly totals which are higher than any one during the film's release. These high totals are all attributable to the real-life events described above, and indicated in Figure 1. As Figure 1 demonstrates, the moving of the Catholic convent, Irving's deportation, the opening of the Museum in Washington, the liberation anniversaries, and the Swiss banks scandal led to significant increases in Holocaust-related articles. The Zundel and Keegstra trails are indicated on the graph in 1985—although these two trials crop up again in later months, the bulk of their impact appears to be at the indicated time.

The fact that there are significant rises in the number of Holocaust-related articles outside the months of the film's release suggests that a rise in salience for Holocaust-related issues in the early 1990s cannot be attributed entirely to *Schindler's List*. A subjective analysis of Figure 1 suggests that *Schindler's List* may have been part of a more general rise in Holocaust salience, surrounding the 50th anniversaries of the beginning and end of the Holocaust. Nevertheless, the months of *Schindler's List* do seem to show an above-average number of Holocaust-related articles, separate from the impact of the anniversaries.

Figure 1
Holocaust-Related Articles in Canadian Newspapers, 1982-96



In sum, it appears from Figure 1 as though *Schindler's List* had a separate and moderate effect on the number of Holocaust-related articles in Canadian newspapers, although it clearly led to fewer articles per month than a number of real-life events.

The potential for prolonged effects

Despite the fact that the monthly totals for Holocaust-related articles during the period *Schindler's List* was playing are not the highest totals in the 15-year period, it is important to note that *Schindler's List* seems to mark a more prolonged period of issue salience for the Holocaust than any other given time. The Holocaust Museum, for instance, creates a sudden and massive rise in articles, followed by an abrupt return to normal levels. When *Schindler's List's* prolonged issue salience is taken into account, however, the film seems to have a more powerful effect on the media agenda. The cumulative effect of *Schindler's List* on the media agenda might therefore be higher than a cursory look at Figure 1 suggests. Interrupted time series analysis using ARIMA modelling was used to gauge this cumulative impact. This kind of developed statistical analysis may also lead to more objective and comparable agenda-setting measurements. Gonzenbach (1992) has previously used ARIMA modelling in agenda-setting analysis; his results demonstrated the usefulness of this statistical method in agenda-setting research.

Interrupted time series analysis is a statistical method used to gauge the impact of a given event on a time series—in this case, the impact of *Schindler's List* on the number of Holocaust-related articles. McDowall, McCleary, Meddinger, & Hay's (1980) impact assessment model clearly illustrates the theory behind the method pursued below. These authors portray an impact assessment model as follows: $Y_t = N_t + I_t$, where Y_t is the time series observation, N_t is the "noise" component, and I_t is the intervention component. The goal of the following ARIMA analysis was to identify N_t , and then—by using Y_t —find the value of I_t (the impact of *Schindler's List*).

The analysis, therefore, proceeded in two stages. The first was to model the relationship between monthly totals of Holocaust-related articles (N_t) using ARIMA analysis. Following data collection, ARIMA models were tested on the entire time series. The results indicated that an AR(1) (first order autoregressive process) was most accurate, suggesting that the number of Holocaust-related articles in a given month is partly dependent on the number of these articles in the preceding month (consistent with Gonzenbach's [1992] findings for the media agenda).²

This AR(1) model, then, accounts for the noise component (N_t)—it explains the typical relationship between monthly totals of Holocaust-related articles. Once this model has been established, the impact of *Schindler's List* (I_t) can be measured by adding a dummy variable to the model, creating a pulse function identifying *Schindler's List*. The duration of this pulse function

was six months, from December 1993 to May 1994; this period was based on the fact that the film was released in mid-December, and then remained one of the top 10 films in Canada until early June.³ The dummy variable was equal to one for these six months, and equal to zero for all other months. The value for this dummy variable can serve as a useful, although admittedly crude, estimate of the impact of the film on the news media agenda.

The results of this modelling procedure are listed in the first section of Table 1. The value for AR(1) shows the extent to which any given monthly value is related to that which preceded it, and can be used to gauge the rate at which a given impact dies out. A value of one indicates that the impact is permanent; values that are increasingly closer to zero indicate more temporary impacts. The AR(1) value in this case is statistically significant and indicates that there is a notable, although temporary, connection between this issue's salience in any given month and its salience in the preceding month.

Table 1
AR(1) Regression Analysis of *Schindler's List's* Impact on
Canadian Newspaper Content, Including Other
Holocaust-Related Variables

Variable	<i>B</i>	<i>SE B</i>
Including only <i>Schindler's List</i> dummy variable:		
AR (1)	.577***	.061
Dummy variable:		
<i>Schindler's List</i>	7.147	5.092
Including other Holocaust-related variables:		
AR(1)	.704***	.054
Dummy variables:		
<i>Schindler's List</i>	5.991*	3.265
50th anniversary	16.292***	3.711
Catholic convent	21.763***	2.624
Irving deportation	23.776***	3.607
Liberation anniversaries	26.848***	2.624
Museum opening &		
Warsaw anniversary	32.821***	3.711
Swiss banks scandal	12.209***	2.516

* $p < .10$. ** $p < .05$. *** $p < .01$.

The dummy variable for *Schindler's List* indicates that the film's impact on the media agenda may have been noteworthy—it suggests that about seven

articles were attributable to the release of the film in each of the six months during which it played in major cinemas. This variable, however, lacks statistical significance at the $p < .10$ level. It was hypothesized that this was due in part to the other high monthly totals resulting from the real-life events described above. Dummy variables, therefore, were created for a number of the real-life events and added to the model.

The results of this second model are also listed in Table 1. The dummy variables in this case are all statistically significant ($p < .01$) and indicate the varying impact of the different events. The results for these variables are as expected, based on a subjective analysis of Figure 1—based on the monthly average, for instance, it seems intuitively obvious that the 50th anniversary of the Holocaust sparked about 16 articles in late 1988. The Museum opening and Warsaw Ghetto anniversary has the largest single value, indicating that it may have led to 34 Holocaust-related articles in April 1993. The power of the *Schindler's List* variable is lessened somewhat—the measure suggests that about six articles are attributable to *Schindler's List* in each of the six months of its release. As expected, however, the statistical significance of the *Schindler's List* variable did improve with the addition of these other dummy variables.

An event's total impact can be estimated in this case by multiplying the number of months for which the dummy variable was equal to one (the duration of the impact) by the value for that variable. Based on this calculation, *Schindler's List* seems to have had a significant impact—about 36 articles over the six month period. (The Irving deportation and the Swiss banks scandal are the other dummy variables that lasted for more than one month. The total impact of these variables, then, is greater than that of *Schindler's List*.) When the number of months is taken into account, the results indicate not only that the film had a marked impact on the media agenda where the number of Holocaust-related articles is concerned, but one that may have been more powerful than that of a number of the real-life Holocaust-related events.

The content of Holocaust-related articles

The simple agenda-setting paradigm seems to preclude the need for anything other than a simple content analysis. Insofar as the agenda-setting hypothesis rests on salience, simple frequency of coverage statistics are often all that is presented. Recently, however, there have been several agenda-setting-oriented studies that have looked beyond just the number of articles on a given subject. These authors have suggested that the agenda-setting capabilities and effects of articles may be related to their content, including the particular issues addressed, and to the way in which these issues are framed. Wanta & Hu (1993), for instance, identify stories with conflict as having a larger public agenda-setting impact than others, and present evidence of the Yagade & Dozier (1990) thesis that abstract issues have a smaller agenda-setting effect than more concrete

issues. In Iyengar's (1991) analysis of issues in the mass media, he distinguishes between thematic and episodic formats in television newscasts and suggests that the way in which news events are framed can affect "how individuals assign responsibility for political issues" (p. 15). Neuman, Just, & Crigler's (1992) "constructionist" model stands as another instance in which the character of an issue has been identified as an important indicator of the potential for public agenda or opinion change.

These preceding studies are important to the present analysis because they indicate the importance of issue framing in public agenda-setting. It follows that, where intermedia agenda-setting is concerned, a film's effects on the news media agenda include not only changing the salience of an issue, but changing the way in which that issue is framed. Having determined that the number of articles increased significantly during the *Schindler's List* period, therefore, it follows that one must determine exactly what kind of Holocaust-related articles increased. Was the increase in articles, for instance, entirely due to entertainment-centred interviews with the director, or were there changes in the number of articles dealing with the Holocaust itself? Did the balance between issue- and event-oriented Holocaust articles change during the release of *Schindler's List*?

In an effort to answer these questions, the time series analysis was accompanied by a more developed content analysis to identify any changes in the way in which the Holocaust was presented in the news media. Articles were identified, based on title and content, as either "issue-oriented" or "event-oriented." The latter category refers to those articles in which the concentration was on a particular incident, such as a court case or an official comment. Issue-oriented articles, on the other hand, deal with the wider "Holocaust issue"—they offer an historical or personal history of the Holocaust, presenting the issue without any emphasis on a particular news event. An issue-oriented article from *The Globe and Mail*, for instance, finishes as follows: "When they were dead they were hauled into the crematoriums or burned in open pits. The ashes were dumped into the river Vistula, and eventually flowed north to the sea. It was efficient" (Gray, 1989, p. A10).

This article, on the efficiency at Auschwitz, concentrates on the horrors of the Holocaust, with no mention of current events. In this way, it is a perfect example of an issue-oriented story. Clearly, not all articles were as easy to categorize—a large number included both event- and issue-oriented sections. These articles were categorized based on their emphasis, judged by their title and the proportion of the article given to the issue or the event.

This content analysis was performed for three periods in the 13-year study: (1) 1990-1991, during which there were no major Holocaust-related events; (2) the month of the Catholic convent scandal; and (3) the *Schindler's List* period. These three periods were chosen in an effort to compare "normal"

coverage, unaffected by Holocaust-related events, to coverage during one major news event and during the film. While the film centred around the story of an individual, its emphasis was on the Holocaust in general—the Holocaust as a greater issue of anti-Semitism and racism. It was hypothesized, therefore, that, if the film had a framing-related effect on the media, there would be a rise in the proportion of issue-oriented articles during the *Schindler's List* period.

The results of the content analysis are illustrated in Table 2. The data are displayed both as real numbers of articles and as proportions of the total number of articles counted in a given period. The first row, for instance, indicates that of the 57 articles counted during the *Schindler's List* period, 66.6% were event-oriented and 33.3% were issue-oriented. Note that this is highest proportion of issue-oriented articles in any of the observed time periods.

Table 2
Content Analysis of Holocaust-Related Articles during Selected Periods

Time period observed	Event-oriented % of total (# of articles)	Issue-oriented % of total (# of articles)
<i>Schindler's List</i> period		
December 1993 to May 1994	66.7%	33.3%
6 months—57 articles	(38)	(19)
Catholic convent scandal period		
September 1989	93.3%	6.7%
1 month—44 articles	(42)	(3)
Selected years		
1990-91	83.3%	16.7%
24 months—120 articles	(100)	(20)

In contrast, Holocaust-related articles in the month of the convent scandal are dominated by those pertaining to this event—only 6.7% of the articles in this month were issue-oriented. In fact, the convent scandal period has a smaller proportion of issue-related articles than the 1990-91 (control) period, suggesting the possibility that a major news event can dominate the media agenda at the expense of more issue-related articles.

The fact that large news events dominate the news agenda seems intuitively obvious—it follows that a film such as *Schindler's List* could lead to more issue-related articles than the convent scandal event, as Table 2 demonstrates.

The fact that the *Schindler's List* period shows a higher proportion of issue-related articles than the 1990-91 period, however, seems to more strongly indicate the possibility of a framing-related agenda-setting effect by the film.

These results have several implications. The first of these is related to the applicability of agenda-setting analysis to the case at hand—the above findings support the supposition that what we are observing here is indeed intermedia agenda-setting, rather than some sort of “joint media event.” In a joint media event, there would be no change in the usual ratio of event and issue-oriented articles. The predominance of issue-oriented articles during the *Schindler's List* period, however, suggests a decidedly different dynamic and justifies the intermedia agenda-setting framework of the present analysis.

As far as framing-related effects are concerned, interpretation of the above results must rest on a hypothesis regarding the effects of issue- versus event-oriented articles on the public agenda. In his study of various news stories, Iyengar (1991) found some evidence that episodic newscasts can lead audience members to attribute blame for certain issues to individuals, while thematic newscasts can lead audience members to see the issue in a more society-centred way. Following from this conclusion, it may be plausible to suggest that issue-oriented stories may lead audience members to see the Holocaust as a larger, societal issue, rather than an issue pertaining only to an individual court case or anniversary. Clearly, however, conclusions along these lines must rest on a more thorough analysis of the public agenda-setting impact of various news frames.

Conclusions

It is most likely that *Schindler's List* was only one part of a larger Holocaust awareness movement surrounding the 50th anniversary of the Holocaust. This fact, however, does not preclude the possibility that the film could have its own independent impact on Holocaust salience—an impact which the present study has tried to measure quantitatively. And while the quantitative evidence as presented above is not absolute (the size and statistical significance of the *Schindler's List* dummy variable, for instance, was rather modest), it does suggest that *Schindler's List* led both to a moderate increase in the number of Holocaust-related articles and to an increase in the proportion of issue-oriented as opposed to event-oriented articles in Canadian newspapers. The foregoing results, therefore, may illustrate one example of intermedia agenda-setting by a motion picture, and seem to demonstrate the use of ARIMA modelling and content analysis in assessing this impact. This quasi-experiment, however, is only an initial test of the importance of entertainment-oriented media in agenda-setting analysis. There are a number of further questions which must be addressed. What, for instance, are the defining features of an agenda-setting film? How popular must a film be to have agenda-setting potential? What is the nature of an effective agenda-setting issue?

There are certainly a number of possibilities for the further analysis of entertainment-oriented media within the agenda-setting paradigm. Entertainment-oriented analyses are also well situated to address a number of topics introduced in past agenda-setting research. Zucker (1978), for instance, has noted that unobtrusive issues may be more susceptible to media manipulation than obtrusive issues. Behr & Iyengar (1985) have echoed this belief, and Yagade & Dozier (1990) have noted a distinction between more and less abstract issues, and suggested that the abstractness of an issue might affect its sensitivity to agenda-setting. Carragee, Rosenblatt, & Michaud (1987) have stated that television news' non-substantive emphasis restricts its agenda-setting power. Volgy & Schwartz (1980) have suggested that viewers might be less guarded when watching entertainment programming than when they are watching news programs and therefore be more susceptible to agenda manipulation. Finally, Hill (1985) found that viewing habits were better predictors of agenda-setting than quantity of exposure and that one of the more significant viewing habits was whether viewers gave their full attention to programs. Substantiating these hypotheses is clearly beyond the scope of the above analysis, but further research on entertainment-oriented media may offer some important insights.

In the meantime, the preceding results offer some evidence of *Schindler's List's* effects on the Canadian news media agenda. It follows that the potential political power of motion pictures that film analysts have examined qualitatively may also be demonstrated quantitatively. Furthermore, the preceding analysis points to the potential importance of entertainment-oriented media in considerations of the "media agenda." *Schindler's List* stands as one example of how entertainment-oriented media can play an important role in intermedia agenda-setting.

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Notes

- 1 The *CBCA* includes seven major daily papers: *The Globe and Mail*, *The Toronto Star*, *The Halifax Chronicle-Herald*, *Winnipeg Free Press*, *Calgary Herald*, *Vancouver Sun*, and *The Montreal Gazette*.
- 2 For the sake of clarity, ARIMA modelling details are excluded from the text. In short, an ARIMA time series model allows for three different parameters: (1) an autoregressive process (AR), (2) differencing (I), and (3) moving average (MA). Differencing is used when there is a general upward or downward trend in the data; despite what seemed to be a gradual increase in the yearly totals, ARIMA identification did not indicate that differencing was necessary when using the monthly totals. An MA process can account for seasonal differences, such as an increase in the number of articles every spring; this was also unnecessary

for the present data. First-, second-, and third-order autoregressive processes were tested, and the latter two were found superfluous. The resulting model, then, included a relatively simple first-order autoregressive process (AR[1]), as described in the text. In equation form, the model appears as follows: $Y_t = \beta Y_{t-1} + \alpha_t$, where Y_t is the time series observation, β is the coefficient for the preceding observation (Y_{t-1}), and α_t is a random shock (McDowall, McCleary, Meddinger, & Hay, 1980). ARIMA modelling was based on the three-step process described first by Box & Jenkins (1976). For a full description of ARIMA models used in interrupted time series analysis, see McDowall, McCleary, Meddinger, & Hay (1980).

- 3 A measurement of the performance of *Schindler's List* was based on box office reports in *Variety* (New York), a weekly newspaper aimed at the entertainment industry.

References

- Altheide, David L., & Snow, Robert P. (1991). *Media worlds in the postjournalism era*. New York: Aldine De Gruyter.
- Bagdikian, Ben. (1983). *The media monopoly*. Boston: Beacon.
- Ball-Rokeach, Sandra J., Grube, Joel W., & Rokeach, Milton. (1981). "Roots: The next generation"—Who watched and why. *Public Opinion Quarterly*, 45(1), 58-68.
- Behr, Roy L., & Iyengar, Shanto. (1985). Television news, real-world cues, and changes in the public agenda. *Public Opinion Quarterly*, 49(1), 38-57.
- Box, G. E. P., & Jenkins, G. M. (1976). *Time series analysis: Forecasting and control*. San Francisco: Holden-Day.
- Brown, William J., & Cody, Michael J. (1991). Effects of a pro-social television soap opera in promoting women's status. *Human Communication Research*, 18(2), 114-142.
- Canadian Business and Current Affairs* [Monthly]. Toronto: Micromedia.
- Canadian Index* [Annual]. Toronto: Micromedia.
- Canadian News Index* [Monthly with annual cumulations]. Toronto: Micromedia.
- Carragee, Kevin, Rosenblatt, Mark, & Michaud, Gene. (1987). Agenda-setting research: A critique and theoretical alternative. In Sari Thomas (Ed.), *Culture and communication: Methodology, behavior, artifacts, and institutions* (Vol. 3, pp. 35-49). Norwood, NJ: Ablex.
- Carrie, Douglas G., & Ehrenberg, A. S. C. (1992). Is television all that important? *Intermedia*, 20(4-5), 18-20.
- Christensen, Terry. (1987). *Reel politics: American political movies from Birth of a Nation to Platoon*. New York: Basil Blackwell.
- Combs, James. (1991). *Polpop 2: Politics and popular culture in America today*. Bowling Green, OH: Bowling Green State University Popular Press.
- Combs, James. (1993). *Movies and politics: The dynamic relationship*. New York: Garland.
- Cumberbatch, Guy, & Howitt, Dennis. (1989). *A measure of uncertainty: The effects of the mass media*. In Broadcasting Standards Council research monograph series (1st ed.). London: John Libbey.
- Danielian, Lucig H., & Reese, Stephen D. (1989). A closer look at intermedia influences on agenda setting: The cocaine issue of 1986. In Pamela J. Shoemaker (Ed.), *Communication campaigns about drugs: Government, media, and the public* (pp. 47-66). Hillsdale, NJ: Lawrence Erlbaum Associates.

- Downs, Anthony. (1972). Up and down with ecology: The "issue attention cycle." *The Public Interest*, 28, 38-50.
- Ericson, Richard V., Baranek, Patricia M., & Chan, Janet B. L. (1989). *Negotiating control: A study of news sources*. Toronto: University of Toronto Press.
- Frith, Simon. (1996). Entertainment. In James Curran & Michael Gurevitch (Eds.), *Mass media and society* (2nd ed., pp. 160-176). London: Arnold.
- Gans, Herbert J. (1979). *Deciding what's news: A study of CBS Evening News, NBC Nightly News, Newsweek, and Time*. New York: Pantheon.
- Gonzenbach, William J. (1992). A time-series analysis of the drug issue, 1985-1990: The press, the President and public opinion. *International Journal of Public Opinion Research*, 4(2), 126-147.
- Gray, John. (1989, September 1). Sheer efficacy of Auschwitz became symbol for war. *The Globe and Mail*, pp. A1, A10.
- Herman, Edward S., & Chomsky, Noam. (1988). *Manufacturing consent: The political economy of the mass media*. New York: Pantheon.
- Hill, David B. (1985). Viewer characteristics and agenda setting by television news. *Public Opinion Quarterly*, 49(3), 340-350.
- Hur, Kenneth K., & Robinson, John P. (1983). The social impact of "Roots." In *Mass communication review yearbook* (Vol. 4, pp. 77-87). Beverly Hills: Sage.
- Iyengar, Shanto. (1991). *Is anyone responsible? How television frames political issues*. Chicago: University of Chicago Press.
- Iyengar, Shanto, & Kinder, Donald R. (1987). *News that matters*. Chicago: University of Chicago Press.
- Iyengar, Shanto, Peters, Mark D., & Kinder, Donald R. (1983). Experimental demonstrations of the "not-so-minimal" consequences of television news programs. In *Mass communication review yearbook* (Vol. 4, pp. 77-87). Beverly Hills: Sage.
- Iyengar, Shanto, & Simon, Adam. (1993). News coverage of the Gulf Crisis and public opinion: A study of agenda-setting, priming, and framing. *Communication Research*, 20(3), 365-383.
- Jowett, Garth, & Linton, James M. (1989). *Movies as mass communication* (2nd ed.). London: Sage.
- Kosicki, Gerald M. (1993). Problems and opportunities in agenda-setting research. *Journal of Communication*, 43(2), 100-127.
- Lippmann, Walter. (1922). *Public opinion*. New York: Macmillan.
- Lukesch, Helmut. (1992). TV learning: Incidental or systematic process. *Communications*, 17(2), 205-213.
- Markovits, Andrei S., & Hayden, Rebecca S. (1980). "Holocaust" before and after the event: Reactions in West Germany and Austria. *New German Critique*, 19, 53-80.
- Martin, John L. (1976). Recent theory on mass media potential in political campaigns. *Annals of the American Academy of Political Science*, 427, 125-133.
- McCombs, Maxwell, & Shaw, Donald. (1972). The agenda-setting function of the mass media. *Public Opinion Quarterly*, 36(2), 176-185.
- McCombs, Maxwell E., & Shaw, Donald L. (1993). The evolution of agenda-setting research: Twenty-five years in the marketplace of ideas. *Journal of Communication*, 43(2), 58-67.

- McDowall, David, McCleary, Richard, Meddinger, Errol E., & Hay, Richard A., Jr. (1980). *Interrupted time series analysis*. Beverly Hills: Sage.
- McGuire, William J. (1986). The myth of massive media impact: Savagings and salvagings. In George Comstock (Ed.), *Political communication and behavior* (Vol. 1, pp. 173-257). New York: Academic Press.
- Neuman, W. Russell, Just, Marion R., & Crigler, Ann N. (1992). *Common knowledge: News and the construction of political meaning*. Chicago: University of Chicago Press.
- Parlour, J. W., & Schatzow, S. (1978, November). The mass media and public concern for environmental problems in Canada, 1960-1972. *International Journal of Environmental Studies*, 13, 9-17.
- Postman, Neil. (1985). *Amusing ourselves to death*. Harmondsworth: Penguin Books.
- Reese, Stephen, & Danielian, Lucig H. (1989). Intermedia influence and the drug issue: Converging on cocaine. In Pamela J. Shoemaker (Ed.), *Communication campaigns about drugs: Government, media, and the public* (pp. 29-46). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Rogers, Everett M., & Dearing, James W. (1988). Agenda-setting research: Where has it been, where is it going? In James A. Anderson (Ed.), *Communication yearbook* (Vol. 11, pp. 555-594). London: Sage.
- Rogers, Everett M., Dearing, James W., & Bregman, Dorine. (1993). The anatomy of agenda-setting research. *Journal of Communication*, 43(2), 68-84.
- Ryan, Michael, & Kellner, Douglas. (1988). *Camera politica: The politics and ideology of contemporary Hollywood film*. Bloomington & Indianapolis: Indiana University Press.
- Sears, D. O., & Chaffee, S. H. (1979). Uses and effect of the 1976 debates: An overview of empirical studies. In Sidney Kraus (Ed.), *The great debates, 1976: Ford vs. Carter* (pp. 223-261). Bloomington & Indianapolis: Indiana University Press.
- Shaw, Donald L., & Martin, Shannon E. (1992, Winter). The function of mass media agenda setting. *Journalism Quarterly*, 69(4), 902-920.
- Taras, David. (1990). *The newsmakers: The media's influence on Canadian politics*. Scarborough: Nelson Canada.
- The motion picture guide* [Annual]. (1994). Chicago: Cinebooks.
- Volgy, Thomas J., & Schwarz, John E. (1980, Spring). TV entertainment programming and sociopolitical attitudes. *Journalism Quarterly*, 57(1), 150-155.
- Wanta, Wayne, & Hu, Yu-Wei. (1993). The agenda-setting effects of international news coverage: An examination of differing news frames. *International Journal of Public Opinion Research*, 5(3), 250-264.
- Wilson, Barbara J., Linz, Daniel, Donnerstein, Edward, & Stipp, Horst. (1992). The impact of social issue television programming on attitudes toward rape. *Human Communication Research*, 19(2), 179-208.
- Yagade, Aileen, & Dozier, David M. (1990). The media agenda-setting effect of concrete versus abstract issues. *Journalism Quarterly*, 67(1), 3-10.
- Zucker, Harold G. (1978). The variable nature of news media influence. In B. D. Ruben (Ed.), *Communications yearbook* (Vol. 2, pp. 225-245). New Brunswick, NJ: Transaction.