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MEDIA MEASUREMENT MODELS OF PROTEST EVENT DATA*

Carol Mueller

Growing interest in quantitative studies of social movements and protest cycles attests to the vigor of protest event analysis as a strategy for investigating the protopolitical processes of collective claimmaking in democratic states and emerging democracies. Increasing investments in protest events research has also led to growing concern about sources of measurement error that stem from reliance on media data sources. Using Blauek's conception of auxiliary measurement models, this article traces two alternative treatments of measurement bias in the literature on events analysis. The two approaches, characterized here as 'media theory' and 'representational,' differ in the degree to which they accept media data as an adequate representation of protest event reality. Recent work that attempts to establish empirically the relationship between media data and alternative data sources on protest events promises an empirical base for examining the assumption of stable media bias that underlies representational approaches. Finally, the conclusions suggest some weaknesses in the empirical base for theorizing from media-based event analyses.

The last ten years have shown growing interest in quantitative studies of social movements (McAdam 1982), protest cycles (Tarrow 1989), protest waves (Koopmans 1993), the history of protests within specific countries (Tilly 1995b, 1984), the ecological context of ethnic conflict (Olzak 1992), and the processes of democratic transition in Eastern Europe (Eckert, Kubik, and Szabo 1994) 1 The recency of this research and the fact that much of what is cited here is unpublished attests to the vigor of protest event analysis as a strategy for investigating protopolitical processes of collective claimmaking in democratic states and emerging democracies. At the same time, these projects demonstrate an increasing wariness about using research strategies embraced by the students of international conflict over thirty years ago. While there is a sense of excitement in working on the frontiers of an important field of discovery, this excitement is tempered by a growing sophistication in methodology that increases our understanding.

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1 The Protest Event Analysis Workshop sponsored by the Wissenschaftszentrum Berlin, June, 1995, marked the coming of age for two contemporary trends in the international study of protest and collective action: (1) the application of statistical techniques to analyze quantitative protest data between and within an expanding number of states over expanding periods of time; and (2) methodological issues associated with collecting, processing, and evaluating the these data. It is the latter which concerns us here (for papers from the workshop, see Rucht, Koopmans, and Neuhauser, forthcoming).

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† Carol Mueller is Associate Professor in the Department of Behavioral and Social Sciences at Arizona State University West, Phoenix, AZ 85067-7100. E-mail: ICCEM@ASUVM.INRE.ASU.EDU


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of the considerable measurement errors at risk. My concern is not to chronicle the growing number of studies on protest event analysis which the published papers from the various workshops will illustrate (see Rucht, Koopmans, and Neidhardt, forthcoming), but to differentiate two broad approaches to measurement error in media data which form the basis for these studies. In conclusion, I will suggest how differences in these approaches may influence social movement theorizing.2

Although any quantitative approach to media data sources faces philosophical arguments based on epistemological and ontological disagreements (Tudor 1995), the major methodological preoccupation within the field of social movements and collective action has been the question of how much bias or error exists in the enumeration of protest event listings from newspaper accounts (Franzosi 1987; Olbak 1989; Hocke 1995; McCarthy, McPhail, and Smith 1996; Mueller in press). It is here that we find two very different approaches to the role of the media in the production of protest data.

On the one hand, there is increasing recognition that the quantitative study of protest requires the specification of what methodologists such as Blalock would call "auxiliary measurement theories" (1968, 1982). These are based on comprehensive models of how the various media, particularly newspapers, select specific protest events for coverage, reporting, editing, publication, and indexing. From this perspective, the quantitative study of protest has become linked irrevocably with media studies. From a second—and older—perspective, studies in the event analysis of protests, internal wars, and other forms of domestic conflict take for granted the selective nature of newspaper data and look for broad trends and major comparisons in what is admittedly the "tip of the iceberg."3 These two perspectives are characterized respectively as "media theory" and "representational" approaches.

To the extent that investigators seek ever closer approximations to the "truth" or the reality of the variety of protest experiences, they are increasingly linked to media studies and theory. To the extent that newspaper records of protest events are taken at face value as valid indicators of a much broader process of dissent and confrontation, media representations of protest are treated as if they are identical to the reality of protest. The relationship between representation and reality is treated as peripheral to the study of protest.

Ultimately, we are concerned about the interdependence between the object of study and the instruments of measurement. While the overlap between the measurement model and substantive models can be described formally, their interdependence is of serious concern for theorists about protest, protest cycles and social movements. As we

2 It should be readily admitted that these studies do not as yet encompass emerging democracies in Latin America, Asia, and Africa (with the exception of South Africa, see Olbak and Olivier 1994). As one anonymous reviewer commented, the geographic distribution of event analysis studies corresponds to the geopolitical distribution of knowledge-producing resources. Outside the Euro-American context, there are scant resources to support such labor-intensive studies. With this caveat in mind, it should be recognized that the present critique points to weaknesses in the empirical base for theorizing about first world protests and protest cycles that are based on media event data.

3 There is a near analogy here to the "black box" of better established areas of inquiry. Namely, in several areas of investigation, an unknown intervening mechanism is designated a "black box" phenomenon when a correlation exists between input and output or independent and dependent variables. In such cases, however, measurement error is not the issue so much as the specification of relationships between levels of analysis such as the social-psychological mechanisms that account for correlations between structural variables. In the problem discussed here, it is the process of measurement itself that is poorly understood.

Media Measurement Models will see, entire classes of protest events are systematically omitted from measurement, and thus from the empirical base on which theory is built.

This article identifies these two separate perspectives in contemporary social movement research and suggests that there are serious theoretical implications in ignoring their mutual dependence. The differences between the two approaches hinge on the degree to which each attempts to address what has been historically the most problematic validity question in event analysis—creating a population of event listings and determining the degree of correspondence between a series of protest events and media representations. Both provide important data for the social scientist. The event listing, however, is not just an artifact of our methodology, it also describes the population of events deemed worthy of study.

The background for contemporary discussions on validity and measurement error originated in the critical literature associated with international and domestic studies of conflict in the 1960s and 1970s. Concern centered on the comprehensiveness of international event listings in the World Handbook of Political and Social Indicators (Russet 1964; Taylor and Hudson 1972; Taylor and Jodice 1983). It then moved to the data sources used for the quantitative studies of violent and nonviolent protests by African-Americans in the U.S. during the 1960s (Danzer 1975; Snyder and Kelly 1977).

These critiques paved the way for a second round of questioning in contemporary work. Four examples of recent research addressing these issues are discussed here. The first work is a paper by Koopmans (1995) discussing the methodological assumptions that underlie the comparison of recent protest history in four European countries by Krisi, Koopmans, Duyvendak, and Giugni (1995). His is a spirited defense of the "representational" approach. The second group of studies illustrate the increasing precision with which measurement error in event listings has been specified. This has been achieved through more careful study of media selection biases in the reporting of protests. The studies discussed here include: (1) the work of McCarthy, McPhail, Smith, and their associates on police permit records as a potential alternative to media representations of protest event listings (McCarthy, McPhail, and Smith 1994; McCarthy, McPhail, and Crist 1995; McCarthy, McPhail, and Smith 1996); (2) the studies of media selection bias by scholars associated with Wissenschaftszentrum Berlin’s PRODAT project on the dynamics of protest in West Germany since World War II (Rucht and Ohlemacher 1992; Hocke 1995); and (3) Mueller's research comparing the press representations of the 1989 East German protest events in West Germany, England, and the United States (in press). The last three sets of studies are discussed in terms of their identification of measurement error in overlapping models of media protest coverage.

AUXILIARY MEASUREMENT MODELS

One of the most basic assumptions in contemporary social science is that when a theory is tested most of its key theoretical constructs or concepts of which it is comprised must be measured by indicators that directly or indirectly reflect what those constructs mean.4 To the degree that the relationship between a theoretical construct and

4 One extreme version of this relationship, operationalism, was a major source of controversy early in the century as both sociology and psychology attempted to emulate the success of the physical sciences. The "operational" point of view, stated most forcefully by the physicists Percy Bridgman (1927, 1938), argued that a concept is defined in terms of measurement operations, not its conceptual properties. This position serves to reinforce the emerging behaviorist position in psychology, associated with the work of John B. Watson.
its indicator(s) is consensually accepted as satisfactory, the validity of the measurement is established. Following Blalock (1968), figure 1 represents these assumptions in the form of a simple causal model:

**Figure 1. The Generic Media Measurement Model**

![Diagram](image)

Source: Blalock (1968: 19)

X represents the unmeasured true value or meaning of a construct such as inequality, discrimination, or collective action events, and X' the value as measured by some indicator by which numbers can be attached through physical operations. The side arrows represent possible sources of error that influence whether X' represents the true value of X. If the sources of error are systematic rather than random, they may have confounding effects on tests of the theory. The most typically specified errors are those of sampling bias, and the most critical sampling problem in event analysis is media selection bias. The measurement model can become increasingly complex to the degree that additional sources of bias are specified.

In several papers on the relationship between theory and measurement, Blalock (1968, 1982) has argued that an "auxiliary measurement theory" should accompany any substantive theory. It should be "specific to the research design, population studied, and measuring instruments used" (1968: 25). The auxiliary theory should make explicit the sources of measurement error. Without such a theory, one might confound quantitative differences that are substantively meaningful with those that are due to the measurement process. However, there will be times in the development of an auxiliary theory when untestable assumptions about measurement error will be necessary.

In the present situation, the measurement process includes the structuring of news gathering and publication or telecast through which the media select protest events and filter information. These actions by media personnel may eventually be followed by scholarly classification and measurement. Thus, a theory or theories of media selection biases should accompany those substantive theories of collective action that are tested with quantitative data from media sources. There are obvious instances where the two types of theory overlap as when media censorship is relaxed in the wake of a collapsing authoritarian regime and previously unreported protests are suddenly acceptable as newsworthy media events. There may be less obvious sources of bias, however, which are equally important in their impact on what is considered the empirical data base for the quantitative analysis of protest.

The indirectness of measurement in a field like protest event analysis is hardly unique. Elaborate work on scaling, factor analysis, index construction, etc. indicates the difficulties faced by other substantive areas in finding valid indicators of underlying, theoretically meaningful, constructs. Three differences between the measurement of protest events and other sociological constructs may explain why the development of more precise measurement theories has taken longer in this field: (1) the difficulty of replicating the relationships between theoretical constructs like protest cycles and their indicator(s); (2) the researcher's lack of control over the process by which the media create the raw data of protest event analysis; and (3) the absence of an independent criterion variable against which media data can be evaluated. In the face of these obstacles, it has been very difficult to specify with any precision how well media data actually represent protest events. Historically, they have also made a "representational" approach an efficient measurement strategy.

While the first two factors will always make replication problematic, the recent use of an external criterion, the issuing of police permits, has increased the chances of developing an auxiliary measurement theory for protest data. Even in the absence of such a criterion measure, other contemporary work has triangulated data from multiple media sources to suggest the most comprehensive sources of media data in several specific protest contexts. These developing media measurement models as well as the more familiar representational approach have their origins in the earliest attempts to measure protest events.

**EARLY STUDIES OF MEDIA SELECTION BIAS**

Tilly has indicated (1995a) that recognition of the selectivity in event reporting began almost simultaneously with the use of newspapers for the enumeration of conflict events in the early 1960s. It began with two projects at Princeton's Center of International Studies: Ted Gurr's doctoral and postdoctoral research, published as Why Men Rebel (1970); and Tilly's work on violent conflicts in France, resulting first in Tilly and Russett's Measuring Political Upheaval (1965). Russett began publishing The Handbook of Political and Social Indicators in 1964 and a year later Rummel was enumerating worldwide conflict events from the New York Times. Tilly notes that "... all the early publications mention the problem of media selectivity, but without resolving it" (1995a). In the aftermath of urban rioting, discussions of the problem continued at Brandeis's Lemberg Center, in the Eisenhower Commission on the Causes and Prevention of Violence, and at Project Camelot. Ten years after the conflict studies began, debates on
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Media selectivity began to enter the scholarly literature (Azar, Cohen, Jakub, and McCormick 1972). These criticisms informed two partially independent literatures in the study of international and domestic conflict. The former provided the model of "representational" approaches while the latter began the search for "media models" of event enumeration.


Most of the criticism of international conflict data has focused on the three editions of the World Handbook of Political and Social Indicators and their use of the New York Times as the exclusive source of enumeration for violent as well as nonviolent conflict events and internal war (Russet 1964; Taylor and Hudson 1972; Taylor and Jodice 1983, 2 vols.). Because the international data handbooks are so widely used (see critical descriptions of use for the first two editions in Jodice 1980), reliance on the New York Times as the news index for creating events listings has been criticized for over twenty years. Although an additional local or regional source has always been used by editors of the Handbook to supplement the New York Times' listings, early critics (Azar, Cohen, Jakub, and McCormick 1972; Hayes 1973; Weede 1973) have argued that initial use of the New York Times as the basis of event enumeration results in regionally biased listings of world protest events from the vantage point of U.S. geopolitical interests.

The authors of the Handbook (Jodice 1980; Taylor and Jodice 1983) and other scholars (Jackman and Boyd 1979) have defended the use of the New York Times by insisting that its listings are checked for accuracy, consistency, and reporting against a variety of regional and international sources (Jodice 1980: 188). In defense of using the New York Times for the Handbook's third edition, Taylor and Jodice (1983) present data showing the proportion of unique events contributed by seven international news compendia for 1968-1977. The vast majority (78.8 percent) were contributed by the New York Times Index; the contribution of these sources was the second highest with 12.2 percent. The Middle East Journal, the Asian Record, and African Diary, generally regarded as the best of the regional news compendia, offered only 3.4, 2.3, and 2.2 percent respectively.

Current Digest and Archiv der Gegenwart contributed less than one percent each.

These findings, like those by Jackman and Boyd (1979), supported the use of the New York Times as the most comprehensive international listing of world protest events available. Its use was further supported by more in-depth studies which compared its coverage with one or more local sources. Paige (1975) found, for instance, that the New York Times (and the London Times) were as good as local news sources on insurrections in Peru and Angola (but not Vietnam) where the geographic distribution of events rather than their enumeration or frequency were the most theoretically relevant data. Similarly, Olsak (1982) concluded that the New York Times was actually superior in its coverage of ethnic conflict in Montreal to either the Montreal Gazette or La Presse, the key English and French language newspapers in that city. Despite this support for the New York Times regarding international listings, wide discrepancies have been found with local sources in the number of events cited. For instance, in a study of Israeli protests from 1960-1967, Lehman-Wilzig and Ungar (1985) found 228 protest events in the Jerusalem Post while the World Handbook (1972) reported only 25.

What is interesting about these early critiques for present purposes is the absence of any serious concern about media selection processes. There is a taken-for-granted assumption that the New York Times treats conflict, internal wars, and less violent protests from the perspective of the U.S. or Western elite presses. The event distributions provided measures of dependent variables and aggregated political, social, and economic data served as measures of explanatory variables based on theories of modernization and/or development. There was a pragmatic decision to take the best data available from the various media for representing conflict/protest/internal war. This decision was reflected in the comparison of the New York Times with other news compendia cited above (Taylor and Jodice 1983). With the exception of regional biases reflecting the shifting geopolitical interests of the U.S., the actual process by which elite presses select events was not considered problematic.

Figure 2 represents a measurement model where X indicates the unmeasured construct, for instance, of "internal war" and X* represents the numerical indicators of various types of domestic strife listed in the World Handbook such as indexes created through factor analysis.

Figure 2. Media Measurement Model for Early Critiques of the World Handbook

![Diagram](https://via.placeholder.com/150)

The side arrow for "regional bias" is given with a broken line to indicate the lack of consensus on this source of measurement bias. Despite some misgivings about the enumeration of events, there is no attempt to measure the extent or consistency of bias introduced by heavy reliance on the New York Times.


The second major critique of enumeration bias in newspaper protest reporting stems from two important articles by U.S. sociologists which appeared in the mid-seventies. These articles focused primarily on the adequacy of newspaper enumerations of both violent (riots) and nonviolent (demonstrations) protests by African-Americans in the 1960s. Danziger's study (1975) was the first sophisticated treatment of the enumeration bias problem in print. It was also the first to propose a media model of how protest data are generated from the journalistic routines of newsmaking.
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Danzer's concern began with an anomalous finding. In his study of primarily nonviolent conflict events between blacks and whites from 1953-1965, he found that nonviolent conflict events were explained by essentially the same factors as Spilerman's (1970) analysis of acts of "Negro aggression" by thirty or more individuals. The number of nonwhite participants and region where the event occurred (South or non-South) were the key explanatory variables in both studies with both critical mass and ceiling effects (p. 571). For both Danzer and Spilerman, the analytic strategy was to predict the cities in which either nonviolent (Danzer) or violent (Spilerman) racial conflict occurred from a set of ecological variables for all continental U.S. cities over 25,000 in the 1960 census. Given the dissimilarity in the dependent conflict variables, Danzer found the similarity in predictor variables remarkable. He then turned to an alternative explanatory model based on the patterns of media coverage and reporting of protest events.

In this case, Danzer's auxiliary measurement model was destined to replace the substantive theoretical model. His measurement model indicated that both his and Spilerman's substantive findings were spurious when the presence or absence of an AP/UPJ wire service was introduced into regression equations. This led him to ask the perennial question of those who work with media models: "Are we simply analyzing patterns of news reporting? If so, what if anything, may be considered valid data in the study of conflict?" (p. 574)

Danzer's findings and his conclusion had such potentially negative implications for the quantitative study of protest events that his major purpose has been largely ignored. Namely, he sought to examine the existing media literature on sources of newspaper bias with the goals of evaluating the variable quality of conflict data and preserving as much of it as possible. His measurement model was based on three arenas for addressing selectivity in coverage of protest events: (1) structural arrangements that safeguard accuracy in reporting; (2) the distinction between "hard" and "soft" news (Tuchman 1978) which, Danzer felt, protects against bias in reporting and editing when coupled with (1) above; and (3) the temporal variability in media accessibility over the course of what would now be called a "protest cycle" (Tarrow 1988).

Key to the model is Danzer's assumption that the print media are essentially self-correcting in terms of accuracy, bias, and protest event suppression, provided that researchers take precautions in using newspaper stories as data. The self-correcting mechanisms are based on patterned behaviors in the transmission of news stories from reporters to wire services/media outlets and to editors. In most cases, he argues, stories are checked and rechecked for accuracy. Reporters from different presses, for instance, frequently share the same news beat or story assignment and compare notes and information while correcting obvious inaccuracies in their respective stories. It is also the practice of media to read, watch, and listen to each other's accounts of a story. Through these practices, obvious errors (that is, those errors that are not unwittingly shared) are eliminated as a story develops over several days. These reporting practices suggested to Danzer that data on a single event should be based on coding from a sequence of stories rather than a select sample. He also argues that news accounts will be more accurate for events that are planned and announced such as demonstrations and marches than for spontaneous events such as riots. Error is most likely where these self-correcting mechanisms are not possible such as when considerable danger or dispersion of reporters makes access and/or multiple observations difficult.

Danzer argues that Tuchman's (1973) distinction between "hard" and "soft" news resolves the problem of media bias. Namely, he argues that numbers used in broad categories of participants such as police, students, clergy; the presence or absence of

**Figure 3. Danzer's Media Measurement Model**

![Diagram](image)

 unrevealed "hard" news. Researchers have "hard" news if there are a series of stories on a particular event and if they are coded into sufficiently broad categories. Although
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Danzger presents a plausible argument, his evidence supports only the critical importance of media accessibility (wire service offices) in the reporting of conflict until frequency of events reaches extraordinary levels (ten) in a given city. The last two characteristics are clearly related in his model.

Although Danzger's measurement model was quite sophisticated at the time, the scholarly response to it focused primarily on its implications for a generation of riot studies which, he argued, had produced findings that were artifacts of media reporting practices. The model of media coverage in Snyder and Kelly's (1977) response is considerably more complex than Danzger's in terms of the protest stimuli and expands some aspects of his model of media coverage. It also had the advantage of restoring the validity of substantive findings from riot studies such as Spierman's (1970, 1971) and Kelly and Snyder's (1980).

Figure 4. The Snyder-Kelly Media Measurement Model

The Snyder-Kelly model of event-reporting probabilities recognizes that the characteristics of a protest event have a significant influence on whether it is covered by the media, indicating for the first time the inextricable connection between the object of study and the tools of measurement. They identify the key characteristics of event intensity as size (number of participants), violence, and duration—in decreasing order of influence on reporting probabilities. They also expand Danzger's identification of media accessibility (presence of an AP/UPi office) into a broader concept of media sensitivity that incorporates two additional factors: political climate (governmental censorship) and the context of the event (frequency of events, political significance of participants, and locational proximity of conflict to the media). Their auxiliary measurement model includes theoretical constructs regarding protest events that could easily serve as components of substantive theories. Such theories would predict the political influence of riots where "event intensity" is considered an independent variable.

Although empirical support was mixed, the Snyder-Kelly model challenged Danzger's assertion that quantitative studies of the 1960s ghetto riots were flawed by invalid data produced by varying accessibility to wire service offices. Both studies shared a commitment to unearthing the "real" distribution of protest events by more carefully specifying the mechanism of data collection—the media selection process. Snyder and Kelly's ties to media studies were not as explicit as Danzger's, but their model expanded his conception of media sensitivity and added the most salient characteristic of protest events, their intensity. By including a construct so closely linked to substantive theories, however, they made it increasingly difficult to separate the substantive from the auxiliary theory, as Blalock anticipated.

CONTEMPORARY STUDIES OF MEDIA SELECTION BIAS

In the dozen years after the publication of Snyder and Kelly (1977), the study of both international and domestic conflict and disorder was transformed into the study of social movements, collective action, protests, protest cycles, and protest campaigns. Focus shifted from conflict to claims-making activities as the institutionalization of protest progressed in the Western democracies (Tarrow 1994), and the spread of quantitative event analysis grew space (Rucht et al. forthcoming). With the elaboration of event analysis and an increasing interest in protest dynamics, codes for evaluating newspaper data grew ever more intricate and the cutting points for size or minimum number of participants necessary to define a protest event dropped lower and lower (O'lak 1989: 126-27). Danzger's defense of "hard" news à la Tuchman served as a rationale.

A Contemporary "Representational Approach": Cross-National Protest Event Research

Most of the contemporary studies of protest enumeration to be discussed here involve media selectivity in regard to events within a single country. Increasingly, however, event studies have compared several countries within the same conceptual framework. A project led by Hanspeter Kriesi of Switzerland compares a wide range of protest events in four western European countries (the Netherlands, Switzerland, France, and the Federal Republic of Germany) from 1975 until 1988 (Kriesi, Koopmans, Duyvendak, and Giugni, 1995). In addition, a four country study under the direction of Grzegorz Eckert of Harvard and Jan Kubik of Rutgers examines the role of protest in the democratic transitions of Poland, Hungary, Slovakia, and East Germany for 1989 through 1994 (Wissenschaftszentrum Berlin, 1995). Finally, Susan O'lak and Johan Olivier compare the dynamics of ethnic collective action in South Africa and the U.S. (1994).

Of the several comparative studies, the Kriesi et al. project (1995) most explicitly defends a "representational" approach. The strategy is to cast a wide net in the

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5 To save space, visual representations of the remaining measurement models are not presented.
sense that protest events are followed for several countries over a considerable period of time. The goal is to efficiently maximize the data to be gained from a limited number of sources. Thus, one paper was selected for each of the four countries for 1975-1989, and data were sampled from the Monday issue only: 1965-1974 data from Germany and the Netherlands were coded from only the first Monday of each month.

The "representational" approach for this project gets its most elaborate defense from Koopmans (1995). It is based on an explicit assumption about the relationship between the media and protest event representations. Namely, a high level of media selection bias is taken for granted. Given this assumption (which is strongly supported by the research cited below), he asks how much will be gained by more than doubling the expenses of research with a second national paper or with intensive coding of every issue of a paper. He advises: "It seems more realistic to admit that newspaper data are and always will be biased and to give up the quest for 'true' numbers" (p. 9).

Koopmans's rationale is carefully considered and based on the goals of a comparative research project. Namely, he argues that it is not precise numbers that are important but trends over time and comparisons within and between countries (between types of protest, types of movements, and levels of intensity) which can be gleaned from admittedly biased sources, "provided that the bias is more or less constant." He argues that data based on a press with a known and stable bias can be the source of interesting substantive findings if his admonition about the quixotic nature of the search for "truth" is taken seriously. The validity task of the representational approach is narrowed to defining "comparable and stable" biases among and between presses and locating criterion data if and where such data exist.

Contemporary Examples of Media Theory Models

Several critiques of protest event analysis in the late 1980s commented on the still unresolved issues associated with validity questions of enumeration bias or media selectivity. These critiques advised researchers to collect parallel "control" data to validate their newspaper sources (Franzosi 1987; Olzak 1989). At a workshop on "Methodological Issues in the Study of Political Activism" held at Ruhr University, Bochum in April, 1990, Rucht and Ohlemacher (1992) gave a paper evaluating issues of validity and representativeness in five sets of studies. The studies included the World Handbook data, the work of Charles Tilly, mobilization events in Switzerland, the comparison of four European countries initiated by Kriesi, and Tarrow's work on recent protest cycles in Italy. Although these analyses draw on sources as diverse as police records, trial records, archives of political events, documents from protest organizations, daily newspapers, TV news, or news agency reports, Rucht and Ohlemacher observe that "it is the daily newspaper that best fulfills the criteria of continuity over time, of steady interest in the units of analysis, of coverage for the full range of protest events, and of easy accessibility" (pp. 88-89). From these investigations they derived the guidelines for their own study.

The PRODAT Project. Rucht and Ohlemacher (with others) have proposed an extensive study of protest over the life of the Federal Republic of Germany (FRG) from 1949 through 1989, the Wissenschaftszentrum Berlin PRODAT Project. PRODAT I is the core project based on coding of samples from the Süddeutsche Zeitung and the Frankfurter Rundschau for the full forty years. To respond to the recommendations of Franzosi and Olzak that alternative sources be examined to validate the two national newspapers, they created a second data set, PRODAT 2, which included comparisons with an alternative press, the Tagezeitung (from its origins in 1979 through 1989); a

local press, the Badische Zeitung of Freiburg (1965-1989); protest organization publications; the archives of public-issue groups across the left-right political continuum; and local police archives. To follow Olzak's advice on coding for the smallest size event, the unit of analysis is defined as three or more persons outside of government in public, action-oriented protest events with reference to a political problem.

The design for the PRODAT study is the most sophisticated to date in the case that has been taken to provide alternative data sources for validating the core media data. Although the final results of these investigations are not yet completed, an initial report on enumeration bias is available that compares local newspaper protest coverage for Freiburg with local police permit data and the core national coverage (Hocke 1995).

At this point Hocke proposes a media model in the PRODAT study that is similar to the models proposed by Danzger and Snyder and Kelly, although neither of the U.S. studies appears to have influenced the PRODAT model. Hocke identifies three possible models for explaining media selectivity in enumerating protests: the "gatekeeper," "news bias," and "news value" approaches. The first he discards because it focuses exclusively on the role of specific individuals in the newsmaking process, particularly the reporter. The second is flawed, he argues, by assuming an extraordinary level of consensus among a large number of journalists. The third, based on news value theory, has the advantage of connecting media decisions with the characteristics of events (the Snyder-Kelly approach). Media selectivity is seen as a reflection of collectively shared societal values. Thus, if news value is high enough, a protest event becomes "a story" and passes through the first filter, "primary selection," to the second filter, "secondary selection" in which placement, size, and layout of the story is determined. In this model, news is "not the reality, it is always a fragment of reality" (p. 2). The selection of fragments is explained by a set of news factors which are causally connected with events. Factors include items such as time, dynamics, relevance, and proximity. Events with a high number of news factors are more likely to be reported.

Although news value theory gives a comprehensive picture of the media selection process, Hocke's endorsement is qualified on several counts. First, he argues that it fails to differentiate between types of events such as riots and peaceful demonstrations. In addition, its supporters identify a great variety of news factors but fail to provide criteria for choosing between them. Thus, the type of explanatory factors invoked and the meanings of those factors differ from study to study.

Despite these limitations, Hocke finds the model salvageable for the study of enumeration bias by asking which events with what characteristics pass the first filter of primary selection. These characteristics must be separable from the news-making process itself. He argues that only "extra media data," like police permits or demonstrators' records, offer the chance to say something about the filters of selection, although they are rarely available in an acceptable form. Given two different protest events, the selection process will filter out of press coverage different numbers and types of protest characteristics. For the Freiburg study, nine news factors were chosen that reflect the nature of the action, its message, and its location.

To control for as many of these factors as possible required close attention to the selection of an appropriate local community. In Freiburg, PRODAT found an FRG city with a strong history of protest, continuous coverage by a single newspaper, the Badische Zeitung, and an acceptable extra-media source, the local police archives, which had extensive documentation of both "permitted" and "unpermitted" protest events for the period 1983 through 1989. Initial calculations for comparable time periods on event coverage for police, local newspapers and national newspapers are 228, 128, and 11 respectively. That is, the two national newspapers combined reported only five
percent of the events recorded by the Freiburg police for the seven year period and only
nine percent of those covered by the local paper. The data analysis is ongoing and by
comparison with events recorded by police will establish which news factors account for
patterns of media selection by both the local and the national press.

By carefully examining alternative data sources, the PRODAT project pursues
an approach that tries to come as close as possible to the reality of protest. One advantage
is that Rucht and Ohlemacher's research provides empirical guidelines for estimating the
risks involved in using national newspaper reports at varying levels of protest intensity.
Such a measurement model becomes increasingly complex and, like that of Snyder and
Kelly, encompasses the protest characteristics of the substantive theory. It combines
features from each of the next two studies, a measure for a criterion variable (police
permitting data) and the triangulation of alternative media sources.

Public Order Management Systems Project (POMS). The POMS project initiated
by McCarthy, McPhail, Smith (1996) and their associates has developed a unique data set
based on permit application records for Washington D.C. by potential demonstrators
who seek access to public spaces in the U.S. capital. Although their data are important
in providing criterion measures for auxiliary measurement models, their research goals
are quite different. Their primary interest is in describing the continuing institutionalization
of protest in U.S. political life. To study the processing of protests is
one way of assessing the barriers that protestors face when they try to reach the public
with their message. Their tests of media selection bias are based on the records of the
National Park Service (NPS), the U.S. Capital Police (USCP), and the Metropolitan
Police of the District of Columbia (MPDC) for 1982 and 1991. Through these permit
records, the POMS project has assembled the most comprehensive set of protest event
data yet available, and one that is independent of media coverage of the same protest
events. The project has been meticulous in checking for protests without permits (small),
permitted projects that do not actually take place (tiny), and possible discrepancies
between the size estimates of policing agencies and "reality" (insignificant). Although
protests in the U.S. capital may be unique because of the location's symbolic and political
importance for domestic and global interests, the data provide an excellent opportunity
for studying media selection bias because of the large number of protests each year
(several thousand) and the thoroughness of the multiple agencies that make up its policing
system.

Four interrelated perspectives on media selection guide their empirical
investigation: news gathering routines, newsworthy pegs, corporate hegemony, and media
attention cycles. By "news gathering routines," they refer to the "deadlines, lead times,
staffing, and the relative flow of information" such as proximity to reporters' beats during
the week. "News pegs" refer to qualities of actors or actions involved in protests that are
"notorious," "consequential," "extraordinary," or "culturally resonant." The third
perspective is based on Herman and Chomsky's (1988) propaganda model that they term
"corporate hegemony," and assumes that media will be less likely to cover events that
threaten corporate interests such as labor or environmental protests. The media
attention cycle draws on the work of Downs (1972) and others, who point to temporal
flux rather than continuity in media attention to issues and the increased likelihood that
a protest will be covered if it fits a rising attention cycle. The four perspectives are
operationalized by examining three protest characteristics: the event's form (capital, march,
vigil, etc.), the context in which it occurs (weekend or weekday, ongoing campaign,
presence of counterdemonstrators), and its goal, purpose, or issue. The relative influence
of each characteristic is tested by comparing the police permitting data for 1982 and 1991

with protest event coverage by the New York Times, the Washington Post, and the nightly
news telecasts by ABC, CBS, and NBC.

In extensive tests, they found that press attention for the New York Times and the
Washington Post was relatively stable between 1982 and 1991. Demonstration size and
optimal association with a media attention cycle were the keys to coverage for permitted
protests during both years. This stability in the print media contrasted sharply with that
of national network newscasts. Size was a significant predictor in 1982 but not in 1991
when the attention cycle focused on the Gulf War and swept in smaller protests. Their
conclusions about the print media are reassuring for supporters of the representational
approach: "... the national print media provides an amazingly stable portrait of a
churning mix of protest forms, purposes, and contexts for Washington, D.C., during 1982
and 1991" (p. 31). Their results on the importance of size as a major factor in media
selection bias to some extent replicate Hocke's findings for Freiburg, Germany. For the
smallest size category, over 95 percent of protests never appear in any of the five media.
For the D.C. protests, the number of demonstrators reaches 10,000 before the majority
of events are covered for either year. The ratios of permitted to reported protests for
different size categories might be very different if research were conducted in other sites
or for different time periods. There is currently research underway to provide such
comparisons in Minsk, Belarus (cited in McCarthy, McPhail, and Smith 1996); and
Madison, Wisconsin (Olive and Myers 1996). Similar attempts to find extramedia protest
listings are also underway in France (Fillieule 1995) and in South Africa (Oliveur
and Louw 1995). Most of these projects are inspired by the work of McCarthy, McPhail, and
Smith. They promise to improve the knowledge base on which protest event analysts
select data sources and set thresholds for size criteria in defining protest events. The
spread of police permitting systems throughout the democracies should also make these
protest listings much more widely available.

Cross-National Press Coverage of Protest Events. Although the police permitting
studies provide criterion measures for evaluation of press coverage of protest events for
(currendy) the U.S. capital; Freiburg, Germany (in process), and several other cities;
there have been few attempts to compare the relative biases of international press
coverage of nationwide protests in the context of massive mobilizations. Mueller's work
on the international press coverage of the 1989 East German mobilization offers a unique
comparison of two quality papers in West Germany, Britain and the United States. The
papers in each country differ in terms of ideological bias and, between countries,
dependence on distance from protest events. Her validity study (forthcoming) is based on

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8 Despite the obvious advantages of the POMS approach in providing close approximations to the "reality"
of protest event listings, there are practical disadvantages as well. The most obvious difficulty is in tracking
down and coding non-archival data in police departments even if they exist (as they were for Hocke's
work in Freiburg, 1995). However, the police permitting records were not covered by the
Freedom of Information Act. The archiving problem aside, students of earlier periods of history will
still have to turn to newspaper records. In addition, the police permitting systems are not uniformly
local (France is an exception, see Fillieule 1995) and the resources required for covering the police departments
throughout a region or a country would generally be far greater than what is required to access local, regional,
and national newspapers. Also, as McCarthy et al. acknowledge, the "Public Forum" law governs most public space in
the United States, which automatically permits peaceful protests as long as they do not interfere with pedestrian or
vehicular traffic. For the MPDC, 61% of protests in 1982 and 68% in 1991 neither applied for nor received
permits. Luckily for the study, the MPDC desk sergeant for demonstrations kept a log book that noted
unpermitted demonstrations. Even with the spread of permitting systems, however, it is unclear how much
reliable such logbooks will be. For these reasons, it seems likely that the police permitting studies will provide a
valuable and much needed tool for evaluating measurement error in media reporting, but not the same
widespread use of newspaper data (see also Koopmans 1995).
the Snyder-Kelly model in which media selection bias is associated with the characteristics of events (labeled "event intensity") and selected contextual characteristics related to the media and its political environment ("media sensitivity").

Media sensitivity is represented by locational proximity to protest events and the political orientation of the six press. The Snyder-Kelly distinction between local, regional, and national press as a measure of "locational proximity" is omitted in favor of international comparisons of "quality" papers (see Merrill 1968) from countries at increasing distance from protest events. Outright press censorship is assumed to be constant at a low level in the three democracies. Among the six papers, centrist political positions are represented by the Frankfurter Allgemeiner, the London Times, and the New York Times. More left-leaning quality papers are the Suddeutche Zeitung, the Guardian, and the Washington Post. It is assumed that the two papers within each country are at the same locational proximity to East German events but vary in terms of increasing distance from East Germany to the east coast of the U.S. In the absence of a criterion list of events such as police permits, a master list of non-redundant events was created from the six papers. Indicators of event intensity are size (number of participants recorded), violence (presence or absence), and duration (one day or more). Because initial analyses identified a high level of missing data for intensity measures on events occurring outside the three major cities of Leipzig, Dresden, and East Berlin, data for only these three cities were used as the basis for the media selection analyses evaluating the intensity measures for each of the six papers. Logistic regression results indicate that intensity factors were increasingly significant with greater distance from East Germany. Number of participants was by far the most important predictor of the intensity measures. The same pattern is found when arrests are substituted for violence.

In comparing the six papers, the results show the influence of both media sensitivity and event intensity. For the German papers, the FAZ and the SZ cover most of the incidents without respect to crowd size. For the English-language papers, however, neither the U.S. nor the British papers reach fifty percent coverage until crowd sizes reach 10,000, at which point the London Times reports about two-thirds of all events. At the upper end of the range for crowd size, greater consistency is found across the six papers. In looking at the lower end of the size range, only two events are covered by any of the papers for crowds of less than one hundred, although first-hand accounts indicate that many small, unreported demonstrations took place before the massive protests of the fall (see Philipson 1993). Thus, at the extremes for crowd size, there is strong evidence to suggest that press proximity has little importance for protest event coverage among the international quality press. Consistent with the POMS findings, most of the small demonstration will be missed; most of the large events will be covered by all papers.

Coverage of intermediate size protests is most likely to be influenced by press proximity and a common language.7

Although these data are based on a unique sequence of historical events in 1989, they confirm the level of risk associated with different magnitudes of crowd size indicated in the POMS study.8 Like the POMS data for Washington, D.C., the international press coverage of the 1989 mass mobilizations in the GDR indicate that there are increasing validity risks in setting cutting points below 10,000 unless (quality) newspapers are in close proximity to events. Even then, events that have less political importance might expect less coverage even though the size of the groups are the same. Under the repressive press conditions prevailing in the GDR early in the protest cycle, events that occur outside major cities are likely to receive irregular coverage at best.

CONCLUSIONS

I have suggested that past work on validity issues of media selection bias has followed two approaches. They differ in terms of whether the relationship to the media data source is considered problematic or the media coverage is taken as an adequate—if imperfect—representation of the social reality of protest events. Whatever the misgivings of the first decade’s researchers, their focus was on sketching the broad outlines of a new field of study, and exploring quantitatively the international patterns of domestic conflict. They sought to encompass a broad range of conflict types with the new statistical tools of data reduction and to explain variations in international patterns of domestic conflict with ecological factors. Thus, their dependence on media data was limited to the event listings. The current generation of researchers is now preoccupied with a different substantive agenda. The comparative study of protest and protest cycles is more centrally concerned with the dynamics of collective action and seeks the maximum exploitation of newspaper data sources, not just event listings.

The "representational" approach to the comparative analysis of protest, ably defended by Koopmans, follows in the tradition of the original international studies of conflict. The focus is still on the big picture, the major comparisons, the shifts in political alignments and the corresponding role of protests and protest cycles. The selection bias of newspaper data is taken for granted as a universal limitation on resources, that are available for research. The basic assumption that permits the use of newspaper data, that there is consistency in media selection biases across the political units and data sources is increasingly acknowledged. To require such stability in press bias limits the generalizability of this methodology to those countries where political conditions do not vary substantially over long periods of time, a requirement that may reinforce heavy reliance on Euro-American data during relatively quiet periods. During periods of upheaval, these conditions may not obtain in the established democracies. The U.S. in the 1960s would probably fail these standards for a stable selection bias (see, for instance, Gitlin 1980; Small 1994).

Within the second tradition of research investigators look for sources of media selection bias and have documented patterns of these biases in selected locations. An insistence on describing and understanding the process by which the media filter and ultimately create the data of protest event analysis will support auxiliary measurement

7. From these data, one can approximate the risk levels of choosing various cutting points in crowd size for operational definitions of events to be selected for coding from press at varying proximity to events. There is a very high risk in including events of less than 1,000 if the researcher is dependent on non-local coverage. Even with local coverage, however, operational criteria cannot rely primarily on crowd size for events below 100 participants where size is unlikely to be reported. Most of these events appear as "data missing" in terms of participation. Finally, variability in coverage of the largest protest events by the English-language press points to the importance of using more than one paper to cover non-local events regardless of size.

8. It could be argued, for instance, that the important influence here of proximity on protest event reporting coincides with the salience of the protests to the national interests of each of the three countries in which the protests are located. For these particular events, the stakes were far greater for West Germany on the brink of unification than for either Great Britain or the United States (Pond 1993). Yet, despite these differences in national interests, it could be anticipated that the mass protests bringing down the Honecker regime would have major implications throughout the Western alliance and, thus, warrant extensive coverage by all parties to the post World War II settlement in Europe.
Mobilization models that specify potential sources of error. By focusing on the microprocesses through which our theoretical understanding of protest and protest cycles interact with media representations, these studies should enable us to identify the sources and patterns of media selectivity. These studies should provide data for evaluating the conditions in which the assumption of media bias consistency is warranted.

From the emerging patterns already found in the work of PRODAT and McCarthy et al., however, the conclusion is inescapable that the majority of protests are not covered by the national media, even when they occur in the nation's capital. More specifically, the majority of protests with fewer participants are not considered national news. McCarthy et al. and Mueller also indicate that most local protests are not covered by most representatives of the national media until the number of participants is very large, about 10,000. The implications are considerable for the theoretical models of protest based on these data. Namely, theories based on this data will systematically fail to consider the role of protest events that are resource-poor in terms of participants.

Studies based on representational measurement models fail to acknowledge that they consider only events which have already passed a major filtering criteria. Namely, the fact of their coverage by the national media is already a measure of political influence. And what of those protest events that are not covered? What constituencies do they represent? What are their grievances? Where are they most frequent in protest cycles. What do we learn of them in the new wave of quantitative protest studies?

A more formal way of concluding is to note that the auxiliary measurement models of media selection bias have increasingly indicated that the nature of protest is as important as media routines and practices in determining protest event coverage. Such findings indicate, as Blalock anticipated, that media selection studies are not exclusively concerned with questions of measurement error, but with general theories of protest.

REFERENCES


Mobilization

The relationship between political agenda building and media agenda building is examined with reference to mobilization of the Spanish antimilitarist movement between 1976-1993. Three models of media-state relations are discussed in terms of possible media outcomes of social protest. These models are used to examine political and media agenda building in relation to movement challenges. An analysis of the coverage of the antimiliitary movement by three national dailies demonstrates that political opportunity structures shape media opportunity structures. There are, however, small windows of opportunity when the causal effect works in the other direction. Media structures can help a movement open, reset, and sometimes block official policies. Various opportunities, however, do not remain favorable in the long run because government elites can bureaucratize and trivialize movement challenges, thereby reducing their newsworthiness. Institutionalized media abide by journalistic rules that tend to validate the political class and, in the long run, dilute social protest.

Many social movements aim to influence official policy agendas by naming and defining new social problems through media strategy. The mass media are used by movements to challenge official policy and make their demands more widely known. Put another way, these movements seek to influence official policy agendas by influencing the news agendas of major national media. Indeed, the effectiveness of social movements might be assessed by measuring their impact on these two realms of agenda setting: (1) how political elites set policy agendas that either reflect or ignore social movement demands; and (2) how media agendas governing news coverage are either shaped by or unresponsive to social movement tactics (Klandermans 1989: 387-389).

This study examines the interdependence of policy agendas, media agendas, and social movement mobilization as they apply to a major yet underreported European social movement: the antimilitarist movement in Spain. This movement had two distinct phases. The first, beginning in the late 1970s and lasting until 1988, embraced a campaign that

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† Victor Sampedro teaches Public Opinion and Mass Communications at the University of Salamanca. Please address correspondence to the author at Departamento de Sociologia, Campus Unamuno, Edificio FES, Universidad de Salamanca, 37007 Salamanca, Spain. E-mail: sampedro@guu.usal.es

† I refer to the social movement, broadly defined, as the antimilitarist movement. The first phase will be labeled the CO conscientious objector movement, as a reflection of efforts to win legal recognition of conscientious objection to Spain's military draft. The second phase is called the insurrection movement, the term used throughout Spain to refer to the campaign of total rejection of the military draft, including the conscientious objection option, based on the principle of antimilitarism. Insurrección might be translated as "insubordination" or "refusal to submit."