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NEWSPAPER CONFLICT AND COOPERATION CONTENT
AFTER DISASTER: AN EXPLORATORY ANALYSIS

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In the immediate aftermath of a flood, tornado, hurricane, or other natural disaster, it has been observed that there is a heightened enactment of mechanical solidarity and shared sentiment in the impacted community. Turner (1967) has argued that this enactment of solidarity is crucial in order to recreate the continued assurance of agreement on the priority of community values. Once this assurance is given, then a new and more effective division of labour can emerge in order to cope with the tasks created by the impact. Dynes and Quarantelli (1975) have identified seven factors associated with this apparent absence of conflict in the early stages of a disaster situation. These include the development of an emergency consensus, the levelling of social distinctions, and the strengthening of community identity.

Weller (1971) has suggested that, in such a situation, newspaper content focuses upon community identification and similarity of experience among members of the community. Based upon Weller's hypothesis, one would expect to find in the early post-disaster newspapers a high amount and prominence of content treating the disaster agent as the common enemy, dealing with matters of human interest with which individuals can identify, and stressing the sense of community cooperation. On the other hand, controversial, potentially divisive conflict content could be expected to be minimal. As Janowitz (1967) has observed in relation to the local neighbourhood press, the avoidance of such content under certain conditions is seen as functional in terms of promoting and maintaining local solidarity. Community life in non-disaster times is largely based on a more organic form of cohesiveness, and conflict reporting in daily papers is vital and needed; in a time of community disruption, however, it is thought that such items will jeopardize the more tenuous and temporarily enacted solidarity.

According to this model, as the disaster impact fades in time, the solidarity based on functional interdependence reappears and so also does the divergence of interests typical of everyday community life. At the same time, disaster related coverage shifts from the common fate of the community and the human response in the wake of disaster to the politics of reconstruction and the interorganizational conflicts which usually characterize this rehabilitation phase. Dynes and Quarantelli (1975) suggest that this period is often characterized by competition among local agencies for the suddenly shrinking assistance from external sources, by the reappearance of formerly existing political rivalries and ideological differences, and by newly created cleavages between old established organizations and new or extended groups in the disaster community.

While the emergency period is usually over within a week of the impact, it is reasonable to assume that the ensuing rehabilitation period will not exhibit uniform levels of conflict and cooperation but, rather, will show identifiable patterns. For example, conflict might be expected to increase dramatically upon the initial appearance of the "new normalcy," then decline somewhat, and finally begin to rise again as more long-range issues such as urban redevelopment come into the public eye.

1. Description of the Study

To test the general model discussed above, a coding schedule was formulated for use in content analyzing the major daily newspaper of a disaster impacted community.

Three basic types of news stories were coded: 1) all items relating explicitly to the focal disaster and to any other subsequent disasters; 2) all items having as their major thrust group cooperation; 3) all items having as their major thrust group conflict.¹ Stories involving cooperation or conflict were classified as to whether they were disaster related or non-disaster related. It was thought that this would provide some measure of whether all conflict items tended to be suppressed in the immediate post disaster period (and cooperation items stressed), or whether this was true only of disaster related news (which would indicate more a "state of the community" than a newspaper initiated attempt to promote mechanical solidarity).

All relevant conflict related or cooperation related items were coded on two other dimensions: 1) locus of the action and 2) order of conflict or cooperation. Six classifications were developed for the first dimension: 1) intra-impact area, 2) impact fringe, 3) impact region, 4) impact area versus outside (for conflict items), 5) other domestic, 6) international. Five orders of conflict were visualized according to the "intensity" of the action: 1) competitive opposing effort, 2) complaints and criticisms, 3) verbal threats and confrontations, 4) arbitrary actions (such as withdrawing fiscal support or withdrawing one's foreign ambassador), 5) violent action (injury to persons and property).² Similarly, five orders of cooperation were developed, based on the relative intensity of joining action: 1) negotiated agreements, 2) complimentary efforts, 3) verbal support, 4) aid to others, 5) joint efforts. These categories were in part adapted from the six orders of cooperation used by Edward Cony (1953) in his content analysis of five American dailies during 1953, although Cony did not suggest any relationship between the orders in terms of a continuum.

"Disaster-neutral" items (that is, those pertaining to the disaster, but not involving either group conflict or explicit group cooperation) were sub-classified on the basis of subject. Drawing on a 13 category classification used by Moore (1958), in his research on the aftermath of the Waco, Texas tornado, a 22 category code was developed (see Table 8).

The basic unit of measurement was the column inch, with fractions taken to the nearest half inch.

This coding schedule was pre-tested using a three-month sample of the Wilkes-Barre Times Leader, beginning with the first edition after the June, 1972, flood. The sample used in this exploratory study was drawn from six months of the Xenia (Ohio) Daily Gazette. Starting with the second paper following the April 3, 1975 tornado, every fourth day was chosen for inclusion in the sample. When the fourth day was a Sunday, and thus no edition was published, the next day's paper was selected. Separate totals were kept for textual and pictorial stories, although the figures were combined for the main part of the analysis.

By way of summary, then, five basic types of stories may be identified for coding purposes: 1) non-disaster conflict, 2) non-disaster cooperation, 3) disaster conflict, 4) disaster cooperation, 5) disaster-neutral.

2. Findings

Earlier, it was suggested that conflict in a disaster impacted community could be expected to fluctuate according to a particular pattern. Thus, conflict, especially that which was disaster related, would decline significantly in the emergency period, rise upon the return of normalcy, level off, and then peak again as long-range issues related to rebuilding the community became salient. This pattern was generally upheld in our analysis. That is, disaster related conflict for the month in which the tornado impact occurred (April) averaged 6 column inches, fifth lowest of the six months sampled. In the following month (May), this suddenly doubled to an average of 14 column inches, and then began a slow decline (June: 8 inches, July: 5 inches) until September, when it suddenly climbed to 15.5 inches (Table 1).

Due to the sampling technique used, daily figures for April are not available. However, it appears that disaster related conflict stories were minimal until April 16th, approximately two weeks after the tornado impact. During the ensuing week, the disaster conflict content rose to 30 column inches (April 20th), before declining. Conflict at this time particularly concerned the demands of a group of business, professional, and industrial "leaders" that City Hall establish a set of priorities for economic recovery (clearly the enacted agreement on the priority of community values that Turner [1967] attributes to the emergency period was no longer operative), that government agencies show more flexibility in assisting disaster stricken businesses, and that local educational facilities be reopened and school busing terminated. By way of comparison, the rise in disaster related conflict in September concerned two issues -- dissension within a Federal agency and its implications for the loan applications of Xenia residents, and the desirability of a new zoning plan.

In the same six month period, disaster related cooperation content peaked dramatically at an average of 136 column inches in April, declined to 43 and 42 inches in May and June respectively, fell to a low of 10 inches in July, and then rose gradually to 18 and 28.5 inches in August and September (Table 1). It is interesting to note that disaster cooperation remained above 100 column inches for all of the seven days in April which were sampled; yet, after that time, the highest level to which it climbed was 61 inches (August 30th).

Another method of analyzing disaster related conflict and cooperation is to calculate the ratio of the former to the latter. When this was done (see Table 2), it was found that this ratio was lowest (.04) in April and highest (.54) in September. The pattern here is more or less consistent with our general theoretical model; that is, a low ratio (.04) in the impact month, a noticeable increase (.32) in the second month, a decline in the third month (.19), and then a higher but fairly constant ratio in the fourth (.51), fifth (.45), and sixth (.54) months.

In his exploratory paper, Weller (1971) notes that he found a low prominence of potentially divisive content treating such matters as the Viet Nam War and local gangsters in the Tribune following a major Chicago snowstorm.

Table One

Monthly Comparison of Each Major
Content Area

Month	Disaster Cooperation		Disaster Conflict		Non-Disaster Cooperation		Non-Disaster Conflict	
	*Average	+Rank	Average	Rank	Average	Rank	Average	Rank
April	136	1	6	5	10	4	25	5
May	43	2	14	2	13	2	56	1
June	42	3	8	4	29	1	17	6
July	10	6	5	6	11	3	51	2
August	18	5	8	3	4	5	29	4
September	28.5	4	15.5	1	1	6	37	3
	Disaster Neutral Average Rank							
April	307	1						
May	115.5	3						
June	134	2						
July	67	5						
August	76	4						
September	59	6						

* Average Number of Column Inches per Day Sampled

+ Ranked from Greatest to Least

Our figures gave no strong evidence to suggest that the Xenia newspaper purposely restricted overall conflict content in order to avoid the introduction of controversy. While the coverage of non-disaster conflict was relatively low in April (25 column inches per day on the average), the second lowest figure for the six month period, it was lower (17 inches) in June and not appreciably higher in August (29 inches), the fifth month following the tornado impact.³ Similarly, non-disaster cooperation appeared to follow no predictable pattern (Table 1).

When the ratio of non-disaster conflict to non-disaster cooperation was calculated, however, the monthly pattern roughly matched that which might be expected according to our model (Table 3). During the month following the tornado impact, the ratio was relatively low (2.64), although conflict still predominated. It then rose to 4.21 in May, but fell dramatically to 0.59 in June. By July, the ratio was back to 4.55; it then began a manifold climb to 8.01 in August and 49.00 in September. In part, this rise in later summer can be traced to two events -- the invasion of Cyprus by the Turks on July 20th and the takeover of a French Embassy by Japanese terrorists on September 14th.⁴

It is important to note that Weller's comments pertain more exclusively to the emergency period itself, while the present study is oriented toward a more long-range analysis. Thus, as Weller suggests, domestic and international conflict content may well be put aside in the four or five days immediately after impact; clearly, however, this is not uniformly so for the period after this.

As shown in Table 4, most conflict related to the disaster situation involved complaints or criticisms of a group related nature. That is, 83.6% of all disaster related conflict content was of this type. In contrast, only 18.3% of non-disaster related conflict was of this "order." No violence was reported under the heading of disaster related conflict, while 18.6% of non-disaster related conflict was of a violent nature.

As with disaster conflict, a significant part of disaster related cooperation was of a verbal nature. Thus, 36.6% of all disaster cooperation concerned verbal support; a similar percentage (38.6%) was found in relation to non-disaster cooperation. On the other hand, aid to others appeared to be more widespread in relation to disasters (21.7%) than other areas of cooperative endeavour (.79%). Conversely, complimentary effort was more salient for non-disaster related cooperation (46%) than disaster related cooperation (26.5%) (Table 5).

These figures appear to suggest that in disaster situations conflicts are of a relatively low order of intensity while cooperation is of higher order. Thus only slightly more than 6% of all conflict reported reached the stage of a verbal confrontation or worse in contrast to over half (51.6%) of the non-disaster conflict areas of this nature. In contrast, 36.1% of disaster related cooperation involved more than verbal support, while only 2.5% of non-disaster related cooperation was of this type.

Table Two

Ratio of Disaster Conflict to Disaster Cooperation
(By Month)

Month	Ratio	Rank	1= Highest 6= Lowest
April	.04		6
May	.32		4
June	.19		5
July	.51		2
August	.45		3
September	.54		1

Table Three

Ratio of Non-Disaster Conflict to Non-Disaster Cooperation
(By Month)

Month	Ratio	Rank	1= Highest 6= Lowest
April	2.64		5
May	4.21		4
June	0.59		6
July	4.55		3
August	8.01		2
September	49.00		1

Table Four

Disaster Conflict: Breakdown by Order

Order	# of Column Inches			% of Total Disaster Conflict
	Intra- Impact	Impact vs Outside	Total	
Competitive or Opposing Effort	42	---	42	9.79
Complaints/ Criticisms	144.5	214	358.5	83.57
Verbal Threats/ Confrontation	18	---	18	4.20
Arbitrary Actions	10.5	---	10.5	2.44
Violence	---	---	---	---
	215	214	429	100.00

Table Five

Disaster Cooperation: Breakdown by Order

Order	# of Column Inches			Total	% of Total Disaster Conflict
	Intra-Impact	Impact +	Outside		
Negotiated Agreement	---	14	14	14	0.68
Complimentary Effort	479	60.5	539.5	539.5	26.54
Verbal Support and Praise	378	367	745	745	36.66
Aid to Others	124.5	317.5	442	442	21.75
Joint Effort	138.5	153.5	292	292	14.37
	1120	912.5	2032.5	2032.5	100.00

Moore's (1958) Texas study suggested that a disaster has little relative news interest by the third week after impact. Our figures do not uphold this notion. While disaster-neutral content certainly declined in magnitude (from an average high of 307 column inches in April) nevertheless the Xenia newspaper still was devoting an average of 76 column inches to disaster-neutral material in August and 59 inches in September (Table 1).

It was earlier suggested that over time human interest stories would decline and more "political" stories would predominate. While human interest stories did decline in terms of absolute magnitude, they did not do so in terms of relative percentage of disaster content. That is, in April human interest stories represented 6.01% of all disaster-neutral coverage; in September, this type of coverage represented 11.38% (Table 6).

In contrast, more interest-charged stories were expected to increase as human interest stories faded in interest. Such content was thought to be best represented by stories concerning "rebuilding plans." As seen in Table 7, this suggested pattern was generally upheld. In the first three months after the tornado, stories concerning rebuilding plans climbed from 4.27% of all disaster-neutral content (April) to 9.62% (June) and then to 43.14% in July. After a decline in July (13.22%) this type of material rose to over forty percent (41.40%) in August before dropping again in September to 8%.

The top five disaster-neutral categories in terms of total space over the six month period sampled were: 1) rebuilding plans, 2) physical destruction, 3) public and business information, 4) other disasters, 5) human interest and opinion (Table 8). By way of contrast, Moore's (1958) top five categories over a period of a year were: 1) government aid, 2) human interest, 3) government activities, 4) public and business information, 5) rebuilding plans. Government aid and activities were clearly less central in the Xenia disaster aftermath, while coverage of the damage itself was greater. This can be expected to vary, of course, with the kind of disaster agent encountered. Thus, our pretest of Wilkes-Barre suggested that flooding implies more government aid (extensive insurance is unavailable for flooding), and less emphasis on the actual physical destruction but more coverage of cleanup operations.

Conclusions

In this paper, we have described an exploratory study of the longitudinal impact of a natural disaster, as evidenced in the content of the daily newspaper. In particular, we have focused upon differing patterns of conflict versus cooperation content over a six month period. While many of our findings are highly tentative and open to more rigorous testing, there does appear to be some evidence to support our basic thesis that community conflict declines in the initial recovery period while community cooperation and enacted solidarity increase, but that as reconstruction unfolds, the community returns to more divisive "interest based" social relations.

Future research in this area should be of a comparative nature, utilizing a number of communities and taking into account such community characteristics

Table 6

Monthly Comparison of Disaster Related Human Interest and Opinion Content

Month	Daily Average (column inches)	% of Total Disaster- Neutral Content
April	18.5	6.01
May	7	6.39
June	13	9.63
July	2	3.66
August	-	--
September	7	11.38

Table 7

Monthly Comparison of Content Concerning Rebuilding Plans

Month	Daily Average (column inches)	% of Total Disaster- Neutral Content
April	13	4.27
May	11	9.62
June	58	43.14
July	9	13.22
August	32	41.40
September	5	8.00

Table 8

Disaster Neutral Content: Breakdown by Subject (Descending Order)

Subject	# of Column Inches	% of Total Disaster Neutral
Rebuilding Plans	943.5	16.90
Physical Destruction	513	9.19
Public/Business Info	488	8.74
Other Disasters	429.5	7.70
Human Interest/Opinion	345.5	6.19
Salvage/Clean Up	331	5.97
Other	282.5	5.06
Government Activities	266	4.77
Government Aid	258	4.62
Educational Effects	254.5	4.56
Building Condemnation and Demolition	231	4.14
Injury/Death	224	4.01
Aid Required	194.5	3.48
Physical Rebuilding	180.5	3.23
Consumer Protection	152	2.72
Employment and Business Effects	148	2.65
Disaster Agent	97	1.74
Aid Received (Non-Gov't)	90	1.61
Rescue Activities	48.5	0.87
Looting	44	0.79
Religious Activities	33	0.59
Temporary Housing	27	0.48
Total	5581	100.00

as size, municipal arrangements, leadership pool, previous disaster experience, etc. A major weakness of the present study is the lack of baseline data, i.e., newspapers before the tornado impact. A fully satisfactory longitudinal study should rectify this shortcoming and also attempt to trace changes on a day-to-day basis during the initial emergency period.

Finally, there remains the problem of to what degree newspaper content mirrors the reality of the community. In this study, we used non-disaster conflict and cooperation as a kind of control to determine whether there was a tendency to suppress all divisive content and "play up" that involving cooperation. This did not appear to have occurred. However, it is beyond the capability of present research instruments to determine whether the patterns of disaster related conflict and cooperation discussed here are representative of what really happened or merely of what the newspaper wished to report. Only by integrating such a content analysis of the daily newspaper into a wider study of cooperation and conflict in disaster impacted communities, can the validity of results like those reported here be confirmed or rejected.

Footnotes

- (1) Excluded from the analysis were: 1) advertisements, 2) editorial features, 3) all stories predominantly about crime or criminals. The latter stories were excluded for two reasons: a) most crime stories were basically on an individual rather than the group level; b) reports of the apprehension of criminals and their subsequent trials contribute more to community integration, i.e., reinforcing the "collective conscience," than to the creation of controversy. (There are of course notable exceptions; for example, police brutality often becomes a socially divisive issue.)
- (2) A major problem in any empirical specification of conflict content is to determine whether one limits it to actual behavior, or extends it to reports of underlying tensions and divisions. In this case, a relatively broad definition of conflict was used, ranging from mutually conflicting group efforts to violent action. (For a discussion of the "active centered" versus the "passive centered" approaches to conflict, see Mack and Snyder, (1957).
- (3) That the amount of non-disaster conflict should exceed cooperation was expected; however, the difference was much higher than expected. Cony (1953: 18), for example, found that the amount of conflict reported in his five paper study exceeded the amount of cooperation, but only by 10.6% (if measured in terms of number of stories) and 17.6% (if measured by number of paragraphs). A difference of 20 years, along with a different conceptualization of what should be coded as conflict and cooperation no doubt significantly contribute to the difference. One of the weaknesses in content analysis using basically abstract categories is this problem of comparability.
- (4) One cannot discount the contaminating effect here of seasonal variation in conflict and cooperation rates. For example, in Paris, France, most city residents go on vacation for the same month each summer, during this month conflict in the city could be expected to drop considerably, rising again when the factories, universities, etc., reopen.

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