Assembly Process to Collective Behavior Episodes

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ASSEMBLY PROCESS TO COLLECTIVE
BEHAVIOR EPISODES

BY

Karen M. Glumm

THESIS
SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF

MASTER OF ARTS IN SOCIOLOGY
IN THE GRADUATE SCHOOL, EASTERN ILLINOIS UNIVERSITY
CHARLESTON, ILLINOIS

1986
YEAR

I HEREBY RECOMMEND THIS THESIS BE ACCEPTED AS FULFILLING
THIS PART OF THE GRADUATE DEGREE CITED ABOVE

21 Nov. 1986
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ADVISER

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DEPARTMENT HEAD
There have been three major reviews of the field of collective behavior out of which have come a challenge for future research. In response to that challenge this thesis is the investigation of growth and dispersal patterns of one short-range non-periodic extemporaneous gathering from beginning to end.

A brief review of the literature will be presented to focus on what has been done with regard to collective behavior episodes. The research has been somewhat limited and has tended to focus on retrospective accounts rather than on-the-spot interviews and observation.

The research for this thesis was conducted on the day of the event and included on-the-spot interviews as well as film data. The event chosen was an evangelistic speaker on the campus of a mid-size midwestern university in a small community.

The event was filmed with a super-8mm camera, a 16mm camera, and a video tape in order to obtain data on growth and dispersal patterns of the gathering. Although there were several problems with the filming, enough data were obtained for my purposes.

A questionnaire was designed and administered to both
assemblers and non-assemblers. Three interview teams were set up on the day of the event to conduct interviews. Although rain ended the event prematurely, sufficient data for my analysis were collected.

The results of the film records were not what I had hoped. The 16mm film was faulty and thus produced no data. The super-8mm and video tape records contained unanticipated obstructions due to camera angle changes. However, it was still possible to note gross changes in size as well as test assertions Milgram and Toch (1969) made in their classic review of the literature.

One hundred thirty persons responded to the questionnaire. The bulk of the respondents reported being present at the gathering alone. This is in contrast to previous research studies. Most persons interviewed reported stopping at the gathering. This was true whether or not the respondent was alone or had immediate commitments. Most of the assemblers classified themselves as religious.

This research did not answer all the questions with regard to the assembly process. I sought to investigate one short-range non-periodic extemporaneous gathering from beginning to end. There were several problems with this research which open questions for future studies. Had the event continued to its entirety I could have answered additional questions. Had the film records been what I expected I could have answered additional questions. These limitations suggest implications for future research.
ACKNOWLEDGEMENTS

My appreciation to the Department of Sociology at Eastern Illinois University for providing a framework by which this thesis as well as my interest in sociology were developed. Special appreciation to Dr. Bob Whittenbarger and Dr. Ron Wohlstein for their time and expert criticism which guided the development of this thesis. A deep thanks to Dr. Wohlstein for not only his patience, support, and guidance throughout this project, but also for continually insisting that anything less than my best was not good enough. It was through him that I developed not only my devotion to the field of empirical research, but my desire to continue working in that field as well. This thesis, therefore, is not an end of that desire but a beginning. Thanks, Ron, for your friendship and for your understanding when things got tough.

My gratitude to my mother and sister who may not have always understood my intentions, but supported and took an interest in them nonetheless.

My thanks to my former roommate, Ellen, who tolerated endless hours of typing and who provided an excellent atmosphere in which to write.

And finally to John, who not only provided many of the drawings in this thesis, but with whose love, support, and mere presence I was able to accomplish in one year what I had previously been unable to do in three.
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CHAPTER 1
INTRODUCTION

In this chapter I will, 1) provide an overview of the field of collective behavior; 2) define my research problem which falls within that area; 3) provide a rationale for the selection of the problem; and 4) outline the plan of the thesis.

OVERVIEW OF THE FIELD OF COLLECTIVE BEHAVIOR

In the last twenty-five years, there have been three major reviews of the field of collective behavior. These reviews attempt to describe the state of affairs regarding theory and research in this area; however, disagreement still persists regarding the establishment of significant problems for investigation. This probably stems from the lack of a "critical mass" of sociologists who are in agreement regarding a formal definition of collective behavior, as well as "the field's location within sociology" (see Quarantelli and Weller, 1974). Nonetheless, there are some common threads and some areas requiring empirical investigation as will be clear from this brief review.

In their review of 1969, Milgram and Toch discuss the elementary features of the crowd--its shape and structure, boundaries, subgroups, polarization, ecology, crowd motion, and size. They note numerous areas requiring future research and make a number of assertions which, in themselves, require empirical investigation. In particular, they hypoth-
esize that the most intensely motivated participants in the crowd will be disproportionately located at the crowd's core (1969:531). They also assert that in a flat plane, the crowd will gather about a speaker, for example, and will form a circle around that speaker. As the numbers increase, the crowd will grow as layers are added keeping that crowd in more or less of a circle. Finally, they assert that the crowd reaches a certain size and ceases to grow further and the ultimate size will depend on the population density of the surrounding area, the time of day, and the diminished visibility which the initial onlookers cause (i.e. as the crowd grows the points of interest become less visible) (Milgram and Toch, 1969:531-533).

Along with specific research strategies, the most important directive Milgram and Toch make is the following: "...get the main questions off the debating rostrum and move them to a level at which controlled observation and imaginative experiment can begin to play some part in choosing among competing views" (Milgram and Toch, 1969:584). Such an orientation reflects their definitional concerns.

The second major review, by Marx and Wood (1975), suggests a major shift in the emphasis from that of Milgram and Toch. While Marx and Wood note that collective behavior emphasizes a type of behavior, and "it is therefore ironic that crowd behavior as such has been so little directly studied" (1975:372), they suggest such an orientation may well be limited. In their words, "such research should
certainly be encouraged... (however) ..., for many observers the truly important questions have to do with the consequences of collective behavior, the meaning people give to their behavior, and the kinds of ideology involved (Marx and Wood, 1975:375)." Thus, such research at the micro level is needed, but it can lead one to miss the symphony for concentrating on the instruments. It appears, then, that the majority of their review reflects not only the paucity of research at the micro level, but a theoretical preference as well. In sum, the majority of their review focuses on social movements and not collective behavior in the sense Milgram and Toch put forth in their earlier review.

The most recent review of the field of collective behavior, by McPhail and Wohlstein (1983), focuses on the interim phase of collective behavior. Such an emphasis directs our attention once again to collective behavior per se. They primarily looked at gatherings such as sporting events, demonstrations such as religious and political demonstrations, riots, and the behaviors that occur in these events. In sum, they noted that most individuals assemble with friends, family, or acquaintances; that the size of gatherings and demonstrations can now be reliably estimated; there is an "illusion of unanimity" as a inverse relationship exists between the number of people involved in a behavior and the frequency with which the behavior occurs; and that some very elementary forms of collective behavior can be observed across a variety of gatherings (i.e. mil-
ling, collective focus, collective locomotion, collective vocalization and applause) (McPhail and Wohlstein, 1983:594).

STATEMENT OF THE PROBLEM

The first step in an empirical research study is to find and formulate a research problem (Simon, 1978:96). However, as Merton notes (1959:ix) this may be more difficult than solving it. The topic must be of manageable size and of theoretical consequence for the field of sociology. Collective behavior, per se, is a subfield of sociology but is far too extensive to be dealt with successfully in and of itself.

This thesis focuses upon the assembling process which sets the stage for collective behavior episodes. This topic is of importance because, as Park and Burgess (1921:381) noted years ago:

...when people come together anywhere in the most casual way, on the street corner or at a railway station, no matter how great the social distance between them, the mere fact that they are aware of one another's presence sets up a lively exchange of influences, and the behavior which ensues is both social and collective.

Following Milgram and Toch's (1969:584) challenge to "get the main questions off the debating rostrum" this thesis focuses upon one non-periodic, short-range extemporaneous gathering. McPhail and Wohlstein (1983:580) define a gathering as "two or more persons present at one time in a public plane--e.g. on sidewalks, streetcorners, and plazas, as well as at scenes of fire, accident, and
arrest." When looking at different types of gatherings we come up with the following taxonomy:

**TYPES OF GATHERINGS**

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McPhail and Bailey (1979:2) define a periodic gathering as one that "occurs on a daily, weekly, monthly or some other regular basis, and primarily involves the same people following the same path from the same points of origin to the same points of destination." They define a non-periodic gathering as one whose "origins, routes, and destinations are seldom the same nor are the same people regularly involved in the assembling process." Short-range assembling processes here refer to "distances within one-half mile between the locations from which people travel to the gathering." Long-range assembling processes refer to "gatherings which people travel more than 25 miles to and which require 30 minutes to one hour or more in travel time by motor vehicle." Mid-range assembling processes "range from one-half mile up to twenty-five miles in distance travelled to the gathering" (McPhail and Bailey, 1979:2-3).

McPhail and Bailey (1979) researched one short-range non-periodic gathering by interviewing persons who reported
attending the gathering. However, this research was based totally on retrospective accounts. This thesis is the study of growth and dispersal patterns of one non-periodic, short-range extemporaneous gathering. The research was conducted at the site of an evangelistic speaker on the campus of a mid-size midwestern university. This gathering was chosen because it was directly accessible by the researcher and provided an ideal setting to investigate the long-standing issues regarding the formation of a gathering.

Milgram and Toch (1969:531-533) make assertions that warrant attention. They assert that a crowd reaches a certain size and ceases to grow further and point out the inadequacies of techniques available to estimate size. They hypothesize that the most intensely motivated persons will be disproportionately at the crowd's core. In response to the challenge and calls for research on these issues, this thesis is an investigation into the growth and dispersal patterns of one non-periodic, short-range extemporaneous gathering. The research was conducted on the day of the event and included on-the-spot interviews as well as film data.

SUMMARY AND PLAN OF THE THESIS

There have been three major reviews of the field of collective behavior out of which has come a challenge for future research. In response to the call this thesis investigates growth and dispersal patterns of one non-peri-
odic, short-range extemporaneous gathering.

Chapter two will provide the background of theory and research relevant to the topic. Chapter three will outline the methods and procedures employed in conducting the research. In Chapter four, the results will be presented and Chapter five will contain conclusions and implications for the future.
CHAPTER 2
REVIEW OF THE LITERATURE

INTRODUCTION

In the area of collective behavior, considerable criticism has been advanced (cf. Wohlstein and McPhail, 1979) regarding the lack of theoretical guidelines for specifying what it is that we should pay attention to when observing the phenomenon in question — namely collective behavior. I would argue that this same criticism could be leveled against the articulation of what casual factors account for collective behavior as well. Nonetheless a careful and thorough review of the research focusing on gatherings and their causes is in order before developing a research strategy for observing and accounting for the development of a more or less spontaneous gathering around a campus evangelist.

The main goal of this chapter is to review the research which has focused on the formation of gatherings. I will also outline the efforts to describe the phenomenon in question and note what factors have been advanced to account for the formation of gatherings. I will critically evaluate these efforts, and conclude with an overview of the theoretical directives which result from this effort.

PREVIOUS RESEARCH

In their review of the field of collective behavior, Milgram and Toch (1969) noted what we should be looking at and state some hypotheses that warrant attention with re-
spect to the "crowd."

Of particular interest are the elementary features of the crowd. Milgram and Toch (1969:518-521) described the rudimentary structure of the crowd and emphasized that if individuals are randomly distributed over a flat surface in the starting situation, a point of common interest in the same plane will create a crowd the shape of which will tend toward circularity. This permits the most efficient arrangement of individuals around a point of common focus. They hypothesize that those who are most intensely motivated to carry out the crowd's purpose will be disproportionately at the crowd's core (1969:520).

With regard to the size of the crowd, it is often noted that official estimates of crowd attendance are grossly exaggerated. Milgram and Toch (1969:531) assert that the crowd does not grow in unlimited fashion, but rather reaches a certain size and ceases to grow further. They hypothesize that the ultimate size of the crowd is limited by population density of the immediate area, the time of day, and the diminished visibility which the initial onlookers cause.

McPhail and Miller (1973) examined one short-range non-periodic gathering. The gathering was a midnight congregation at an airport following the upset victory of the university basketball team over a nationally ranked rival. A questionnaire was distributed to 531 students of psychology and sociology at the university within three weeks of
the assembly regarding their participation in the gathering. The questions dealt with the respondent's participation, the assembling instructions they received, descriptions of their activities, locations, the number of persons co-present, prior activities, access to transportation, competing demands, sex and year in school.

The results of the investigation showed that all respondents were located within six to eight miles of the event when they heard of the event, and heard of the event within two hours of the starting time. A high correlation was found between the receipt of assembling instructions and presence at the assembly. There was a modest relationship between prior behavior and attendance at the gathering. There was little relationship between sex and year in school and presence at the gathering (McPhail and Miller, 1973: 729-730). McPhail and Miller (1973:724-726) stress that many things can influence whether a person attends a gathering or not after the receipt of instructions to assemble: access, prior behavior, availability, space-time lag between receipt of instructions and time of event.

McPhail and Miller (1973) made an important contribution but studied only one non-periodic gathering and their data were based on retrospective accounts. They state a need for further exploration of the relationship between instructions for and behavior within gatherings (1973:733).

McPhail and Bailey (1979), in a replication study, developed a procedure for generating and comparing a sample
of persons completing the short-range assembly process with a sample of persons who did not initiate or complete that process. They investigated one short-range non-periodic gathering which consisted of 300-400 persons who converged on the scene of a fire on the fringe of a university. The investigation involved interviews which took place 18-25 hours after the start of the fire. They made rings around the site and located persons who were present in each ring during the fire. Assemblers as well as non-assemblers were located and interviewed.

The questions asked at the time of the interview were: "Did you know about the fire?" (if the answer was no the interview was ended), "How did you learn of it?", "Where were you when you heard?", "What were you doing?", "How many were you with?", "Did you go?", "Did anyone suggest you go?", and "How many did you go with?" (McPhail and Bailey, 1979:9).

Results of the study revealed high correlations between the receipt of assembling instructions and assembling, and the absence of competing demands and assembling. A moderate correlation existed between the number of persons co-present when instructions were received and assembly, access to the gathering and assembling, and the number of persons with and receipt of instructions. A low correlation existed between the number of persons co-present when instructions were received and the number co-present when assembled and the sources of information and assembling
McPhail and Bailey (1979:14) state that future studies must generate more information about activities the respondents were engaged in when learned of the event. They also assert that more detailed records are required of the behaviors respondents address to and receive from others regarding the event. They state we must keep track of age, sex, and other demographic data on respondents; and, develop interview schedules in advance reflecting our theoretical concerns. Although McPhail and Bailey (1979) made an important contribution, they only studied one non-periodic gathering and their data were based on retrospective accounts.

Aveni (1977) studied one non-periodic gathering in his research on friendship groups in crowds. The gathering occurred on the edge of a university on the evening following a football game. Aveni interviewed pedestrians within ten blocks of the university area. Traffic was heavy due to the game and the area was one where crowds tended to assemble (1977:98). The interviews were conducted at the time of the gathering. Eight interview locations were set up, each 50 yards from the university. Two workers were stationed at each location (one asking questions and one recording the responses). After each interview was conducted, the team allowed ten persons to pass toward the next intersection and then they stopped the next person.

The results of the investigation showed that both isolated individuals and small groups assembled. Twenty-
six percent of the sample reported being alone and seventy-four percent reported being with one or more others. Sixty-four percent of the respondents reported seeing persons they knew. Aveni (1977:99) argues that anonymity in crowds is a variable rather than a constant. Aveni (1977:98) asserts that the "crowd" should be viewed as made up with individuals as well as small groups. Also, he states that crowds should be sampled to see if individuals are alone or with others.

Seidler and colleagues (1976) developed the Zone Sector Sampling technique by which to obtain data on crowds. They suggest that the field of collective behavior needs a methodology by which to obtain attitudinal and nonvisible information on respondents engaging in collective behavior episodes (1976:508). Many theorists note difficulties in collecting data on gatherings (i.e. Berk, 1972; Evans, 1969; Milgram and Toch, 1969) and the pitfalls in the techniques such as sideline observation and retrospective questioning used to gather data (i.e. Couch, 1969; Fisher, 1972; McPhail, 1971). Seidler and colleagues (1976) suggest a research strategy which emphasizes zone sector sampling and addressed itself to the attitudinal aspects of respondents. The Zone Sector Sampling technique involved on-the-spot interviews of persons present at the time of the gathering. The crowd is divided into areal segments; the area is surveyed and divided into grids and then zones. Seidler and colleagues (1976:513) suggest two-person interview
teams to interview a certain number of people in each zone. Two-person teams offer role rotation, companionship, accuracy, adherence to principles, and convenience (one asks questions and one records answers).

Zone Sector Sampling provides results that are reliable, valid and representative, and works best on gatherings that are stable and have a center of focus (Seidler and colleagues, 1976:516). It can be used on large samples to gather more complete data and to gain access to the internal status of participants (Seidler and colleagues, 1976:516-517). They tested the validity of their method on four political demonstrations. They tested propositions made by several theorists (i.e. Fisher, 1972; Hundley, 1969; Milgram and Toch, 1969; Turner and Killian, 1972) that a positive relationship exists between the intensity of participants' involvement and the proximity to the focal point of the crowd. They stated that their findings supported this proposition. Proximity to the speakers' platform was positively related to such indicators of involvement as belonging to rally organizations and embracing the dominant attitude of the rally (Seidler and colleagues, 1976:514).

Milgram, Bickman, and Berkowitz (1969) researched the acquisition rate of crowds of varying sizes. Coleman and James (1961) suggest that there is a 'natural process' by which groups acquire and lose members and thus reach specific maximum sizes. Milgram, Bickman, and Berkowitz (1969) tested this assertion by varying the size of a stimulus
crowd and noting the acquisition rate of each crowd.

In their study, they used a 50 foot piece of sidewalk space. On signal, a group of confederates entered the middle of the sidewalk (stimulus crowd) and looked up at the top of a building. They maintained this gaze for 60 seconds and then were signaled to disperse. Several different sizes of stimulus crowds were used and there were five trials for each size crowd. Motion pictures were taken of the observation area and were analyzed to determine the number of persons who joined the stimulus crowd as well as those that gazed up at the building (engaging in the same behavior as the stimulus crowd) as they passed.

The results of the study showed that the number of persons who will react to or join observable behavior of a stimulus crowd is related to the size of the stimulus crowd (Milgram, Bickman, and Berkowitz, 1969:3). When people engage in an action simultaneously, they have the capacity to draw others into the crowd. As the size of the stimulus crowd was increased, a greater proportion of the passersby adopted the behavior or part of the behavior of the crowd (Milgram, Bickman, and Berkowitz, 1969:3-4).

A methodological problem was noted by these researchers—the effect of a stimulus crowd of constant size was not studied. The size of the stimulus crowd increased as soon as persons joined it. In addition, they assert that the maximum size which the crowd attains is dependent not only on the initial size of the crowd, but also on the nature of
the stimulus to which the passerby is directed. In their study, passersby were oriented to scene that was not on compelling interest. If, however, the scene was of greater interest, they assert that the interest of the scene would hold crowd members for a longer period of time and thus the crowd would grow to a larger maximum size (Milgram, Bickman, and Berkowitz, 1969:3-4).

In addition to the above review of the field of collective behavior, McPhail (1983) reviewed the past two decades of research on the origins of gatherings, demonstrations, and riots. For my purposes, I will review only the research on gatherings.

McPhail (1983:5-6) notes that human beings are not continuously co-present in large numbers. On occasion, and sometimes routinely, we come together with a large number of other people, engage in a variety of individual and collective behavior within the gathering and then go our separate ways (McPhail, 1983:5-6).

McPhail's (1983) primary focus then is on the research that has been conducted in the past two decades. Elliot Liebow (1967) did a study on one periodic gathering on working class black males and W.F. Whyte (1943) did a study on the periodic gathering of working class white males. W.H. Whyte (1980) has also done several studies on periodic gatherings in plazas and parks. He interviewed members of the gathering and used time-lapse film of the daily patterns of the plaza or park occupancy and use. He noted
that most persons arrive in two's and three's and that
some arrive alone but see friends or acquaintances. W.H.
Whyte (1980) found that the radius of the assembling pro-
cess was about three blocks.

McPhail (1983:7) states that these studies of periodic
assemblies are valuable but focus on the end rather than the
processes by which they come into existence.

SUMMARY AND DIRECTION OF THE THESIS

The purpose of this brief review of the literature has
been to focus on what has been done with regard to the
assembling process to collective behavior episodes. In sum-
mary, there have been patterns in the research and problems
that warrant further attention.

First, we know that during gatherings most individ-
uals assemble with friends, family, or acquaintances.

Second, the size of gatherings, often over-estimated
in official reports, can now be systematically and reli-
ably estimated.

Third, there are many factors which affect whether a
person attends a gathering or not after receipt of instruc-
tions: access, prior behavior, availability, space-time
lag between receipt of instructions and time of event.

Fourth, it has been suggested by several theorists
that a positive relationship occurs between the intensity
of participants' involvement and the proximity to the focal
point of the crowd.
However, the research has been somewhat limited and has tended to focus on retrospective accounts rather than on-the-spot interviewing and observation.

This thesis is the study of one short-range non-periodic gathering from beginning to end. The research was conducted on the day of the event and included on-the-spot interviews as well as film data in order to determine growth and dispersal patterns. The interview schedule was developed in advance and modeled after the questions McPhail and Bailey (1979) and McPhail and Miller (1973) used in order to determine where respondents were coming from, going to, and whether or not they stopped at the gathering.

I now turn to the methods and procedures which guided the development of this research.
INTRODUCTION

The purpose of this chapter is to outline the procedures employed in conducting this research. The areas of concern are: filming the assembling process, and the design and administration of the questionnaire.

FILMING THE ASSEMBLING PROCESS

The assembling process was filmed in order to systematically study the growth and dispersal patterns of the gathering. I also wanted to determine friendship groups at the gathering, spatial arrangement and proximity of individuals present at the gathering, and the form of the gathering.

The cameras used in this study were a super-8mm camera, a 16mm camera, and a video tape. The super-8mm camera was 28 feet and 7 inches off the ground and set back 1 foot and 1.5 inches from the window. The film speed was set at 18, the zoom setting at X4, and the ASA at approximately 12.5. The 16mm camera was set 27 feet and 3 inches above the ground and 11 inches back from the window. The video tape machine was set up on the ground floor of a dormitory.

The event. The event filmed for this research was an evangelistic speaker on the campus of a mid-size midwestern university in a small community in the spring of 1982. This setting was chosen because (1) it was readily avail-
able and directly accessible to the researcher; (2) it was a short-range non-periodic gathering (and there is a need to research these); and (3) it was an appropriate setting to research the growth and dispersal of an extemporaneous gathering.

Each spring this evangelistic speaker came to campus as part of a circuit of midwestern universities he visited. However, the specific date for his arrival was not known. The classic argument against the possible study of collective behavior episodes is that they occur unpredictably (Milgram and Toch, 1969:583-84). In order to set up and conduct the research, it was imperative that I know the specific date the speaker would arrive on this particular campus. Therefore, I contacted him several times to find out his arrival date. I indicated to the speaker that I was one of his followers. I believed I could best win his cooperation on choosing a specific date if I proclaimed myself to be a follower. I was not honest about my intentions to research the gathering. This raised a definite ethical problem. I did not offer the speaker the option of not wanting his presentation to be researched. Given the nature of evangelists, I knew he would cooperate with me if he thought I was a follower. In order to complete my research I used this as a means to set a date for his arrival.

It is significant that the speaker was located at the center of campus along the main walkway by the student union. Most students traveling to and from campus as well as to and
from classes pass by this location, thus offering the speaker a tremendous amount of visibility and student traffic.

A super-8mm camera and a 16mm camera were set up on the second floor of a building directly adjacent to the position this speaker was located at the year before. The camera locations are presented in Figure 3.1. Every year the evangelist had spoken at this location. The super-8mm camera was exactly 242 feet away from the anticipated location of the speaker. The video tape was set up for a direct shot of the anticipated location.

There were two people placed at each camera and the video tape in order to allow the cameramen to take turns filming.

However, when the speaker arrived and began speaking, it was in a location different from the one the cameras were focused on. Thus, the cameras had to be swung over to focus on the speaker after they were secured to the floor. Instead of a direct shot of the event the cameras were set at a bad angle.

The film from the 16mm camera did not turn out because of faulty film. The results of the video tape were not what I expected because the camera had to be moved. Part of the gathering on the video tape was obstructed by a building. I had hoped to be able to determine friendship groups and the spatial arrangement and proximity of individuals present at the gathering from the film data. This
FIGURE 3.1

ANTICIPATED POSITION OF SPEAKER

BOUNDARY OF CROWD

VIDEO CAMERA

INTERVIEW TEAM

16MM/8MM CAMERAS

STUDENT UNION

UNIVERSITY LIBRARY
would have been possible if it had not been necessary to move the cameras from their original locations. As it turned out, because of the new camera angles and the building obstruction, it was impossible to determine which individuals were co-present and how far apart individuals were spaced at the gathering. Enough film data were obtained, however, for my purposes. It was still possible to note gross changes in size as well as other aspects of the gathering.

As the purpose of filming the gathering was to research growth and dispersal patterns over time, and because of the length of the evangelist's presentation (he planned to speak for five hours), it was not necessary to film continuously. Therefore, one frame of film was shot for every five seconds of crowd action. Still it was impossible to adequately count the people in the film in order to determine growth and dispersal patterns. I did not have access to a Kodak Ektographic MFS-8 motion analysis projector which would have allowed the film to be stopped at each frame. Therefore, slides were made from the film for easier analysis. One slide was made for every minute of crowd action for the first 60 minutes. For the final 30 to 35 minutes of crowd action, one slide was developed for every two minutes. I was then able to analyze each slide to determine gross changes in size.

Midway through the speaker's presentation, it began to rain. Twenty minutes later it began to rain hard enough to
cause the immediate dispersal of the gathering. The speaker sought shelter under the walkway of a nearby building with some of his audience. It was impossible to continue filming the gathering from where the cameras were located. Enough footage was obtained, however, for my purposes.

The speaker began his presentation at 11:45 a.m. and stopped (moved to the walkway) at approximately 1:20 p.m.

DESIGN OF THE QUESTIONNAIRE

Six questions were asked of persons present at the gathering to determine the nature of the respondent's participation in the gathering. More specifically, the questions were designed to determine whether or not the respondent stopped at the gathering; events the respondent was engaged in prior to attending the gathering; and, who the respondent was with at the time.

McPhail and Bailey (1979:9) suggest the use of these types of questions in their study. Interviewers also kept note of the time of interview, location, and sex of the respondent. These questions also allowed me to determine relationships between gatherers and non-gatherers with respect to sex, prior commitments, and the number of companions with at the time.

Aveni (1977:96-98) states a need to ask persons how many others they were with when they assembled. Similarly, McPhail and Wohlstein (1983:37) note that future studies of collective behavior should address not only what par-
participants did during the event but also who they were with at the time. McPhail and Miller (1973:727) also used questions similar to these in their study. They sought to determine the individual's participation in the event; the number of persons they were with during that period; their prior activities regarding the event; their access to the event; and, competing demands the respondent may have had.

When the questionnaire was designed, it included the religious preference of the respondent if he/she stopped at the gathering. However, it did not address the religious preference of those that did not stop. This was indeed an oversight when writing the questions and, therefore, did not allow for a correlation between the religious preference of assemblers and non-assemblers.

ADMINISTRATION OF THE QUESTIONNAIRE

Seidler and colleagues (1976:509-511) suggest zone sector sampling in order to collect data on crowds. This approach involves dividing up the crowd into sectors or zones. Interview teams are then set up to interview a portion of each sector. This type of sampling is used best on crowds that are relatively stable and have a center of focus. By using this method, data on non-observable behavior can be collected and concentration can be placed on individuals and members of small groups present at the gathering (Seidler and colleagues, 1976:516).

A method similar to this was used in observing this
gathering. Although the gathering did not remain as stable as that of a concert, it did have a center of focus (evangelistic speaker) and did remain stable enough to allow for the sampling of those that attended the gathering as well as those who passed through or near the gathering.

During the gathering, three interview teams were set up at three locations to conduct on-the-spot interviews of those individuals both present at the gathering as well as those passing through or near the gathering. The teams were unobtrusive—they were out of the way so as not to be noticed by passersby. However, they were still near enough to the gathering to observe the events.

One interview team was located at the student union, one team was located at the campus library, and one team was located at the gym (see Figure 3.1). One team specifically stopped gatherers by interviewing them as they left the gathering. I wanted to ensure that I obtained an adequate sample of gatherers for this research. The other two teams stopped random passersby. Each team consisted of three persons: two doing the actual interviews and one coordinating the team and selecting the interviewees. There were two runners to go between the three teams to exchange information or provide relief. There were also several extra persons available to use for relief or to run errands.

The interview team which selected only gatherers did so randomly as the gatherers were leaving the assembly. The other two interview teams selected respondents system-
At the slow times during class periods, teams selected every fifth person as they passed through their section. When classes broke and traffic through the sections increased greatly, teams selected every twentieth person as they passed through their section.

**SUMMARY**

This thesis is the study of one short-range, non-periodic extemporaneous gathering from beginning to end. The research was conducted at the site of an evangelistic speaker on the campus of a mid-size midwestern university in a small community in the spring of 1982. In order to collect data on this gathering the event was filmed and a questionnaire was designed and administered to a sample of attenders and non-attenders.

A super-8mm camera, a 16mm camera, and a video tape were set up to film the event from beginning to end to determine growth and dispersal patterns and crowd formation. Although there were several problems with the filming, enough data were obtained to determine gross changes in crowd size.

A questionnaire was developed following designs and suggestions by McPhail and Bailey (1979), McPhail and Miller (1973), McPhail and Wohlstein (1982), and Aveni (1977). The questionnaire allowed for relationships to be determined between gatherers and non-gatherers with respect to sex, prior commitments, and persons co-present.
Three interview teams were set up at the site of the gathering to conduct on-the-spot interviews.

In the next chapter I will present the analysis of the film records and the questionnaire data.

FOOTNOTES

1. The specific questions used for this research were as follows: "Did you stop and listen to the Evangelist?"; "If yes, would you categorize yourself as Atheist, Agnostic, Religious, Born Again Christian, or other?"; "Where are you coming from?"; "Where are you going now and when do you have to be there?"; "Are you alone or with others?"; and "How many others?".
CHAPTER 4
PRESENTATION OF THE RESEARCH FINDINGS

INTRODUCTION

In this chapter I will present an analysis of the film and video tape records. I will also present the results of the survey which was conducted in conjunction with the filming of this extemporaneous gathering.

ANALYSIS OF FILM RECORDS

Analyzing the film records was more difficult than originally anticipated due to the new camera angles and obstructions. I had intended to determine friendship groups and the spatial arrangement and proximity of individuals present at the gathering from the film records. This would have been possible if the cameras did not have to be moved after they were secured. Fortunately, sufficient data were collected in order to answer some of the major questions my research addressed.

Slides were made from the film records for easier analysis. One slide was made for every minute of crowd action for the first 60 minutes and one slide for every two minutes of crowd action was made for the final 30-35 minutes. Slides were made at this rate due to cost effectiveness and time. It would have been far too costly and cumbersome to have a slide made for each frame and then analyze each slide.

The total number of slides produced of the assembling process was seventy-seven. In each slide the number of
persons present at the gathering were counted to determine the growth and dispersal patterns of the gathering. The results of the slides demonstrate that this gathering continued to grow until it reached a peak of 100 participants at approximately 1:00 p.m. that afternoon and ceased to grow further. Figure 4.1 is a graph of the growth and dispersal of this gathering. This finding supports Milgram and Toch's (1969) assertion that crowds reach a certain size and cease to grow further. In addition, this gathering fluctuated in the number of persons present. The peak times in numbers at the gathering appear to be at the times classes changed. As the speaker was located at the center of campus, students going to and from classes and campus were channelled through this area. Numbers present at the gathering appeared to fall when classes began. I suggest that this pattern would have continued throughout the afternoon had not the gathering been dispersed prematurely by rain. I had anticipated five hours of data instead of 90 minutes.

As it turned out, the bulk of the assembly took place during the noon hour (the speaker began at 11:45 a.m. and continued until approximately 1:20 p.m.) During this particular hour there are fewer classes in progress than at other times of the day. Not only is noon a light hour for classes, but the hour directly preceding and following the noon hour (11 a.m. and 1 p.m.) are the heaviest hours
FIGURE 4.1
Growth of the Gathering Over Time

Selected Times During the Gathering
of classes (see Table 4.1). Thus a large number of students were leaving class at 11:50 a.m. and did not have a noon class; and a large number of students had a 1:00 p.m. class but were free the hour before. As the speaker was located along the main walkway of campus, most of these students passed by this area as they left or walked to class. It would appear, then, that the noon hour would create an increased amount of student traffic through the gathering than at other times of the day. Had the event not ended prematurely due to rain, I could have determined if the peak of the crowd were the noon hour as anticipated.

FORM OF THE GATHERING

The results of the film analysis demonstrated that the form of the gathering was generally circular (see Figure 4.2).

Milgram and Toch (1969:518) assert that if individuals are randomly distributed over a flat surface in the starting situation, a point of common interest in the same plane creates a crowd tending toward circularity. The circular arrangement is not accidental but serves an important function: it permits the most efficient arrangement of individuals around a point of common focus (see Figure 4.3).

In addition to this, the Evangelist stood above the crowd (on a concrete stool) and moved in a circle during his performance thus speaking in all directions. This helped the gathering generally form circular.
TABLE 4.1
Number of Classes in Session
By Hour of the Day

<table>
<thead>
<tr>
<th>Hour of Class</th>
<th>Number of Classes</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 a.m. - 8:50 a.m.</td>
<td>103</td>
</tr>
<tr>
<td>9:00 a.m. - 9:50 a.m.</td>
<td>160</td>
</tr>
<tr>
<td>10:00 a.m. - 10:50 a.m.</td>
<td>166</td>
</tr>
<tr>
<td>11:00 a.m. - 11:50 a.m.</td>
<td>146</td>
</tr>
<tr>
<td>12:00 p.m. - 12:50 p.m.</td>
<td>95</td>
</tr>
<tr>
<td>1:00 p.m. - 1:50 p.m.</td>
<td>163</td>
</tr>
<tr>
<td>2:00 p.m. - 2:50 p.m.</td>
<td>135</td>
</tr>
<tr>
<td>3:00 p.m. - 3:50 p.m.</td>
<td>92</td>
</tr>
<tr>
<td>4:00 p.m. - 4:50 p.m.</td>
<td>41</td>
</tr>
</tbody>
</table>
FIGURE 4.2
Form of the Observed Gathering
FIGURE 4.3
The Structure of the Ring

Source: Milgram and Toch (1969:520)
RINGS AND MOTIVATIONS: AN OBSERVATION

Milgram and Toch (1969:520) assert that persons who arrive at a gathering early tend to be at the center of the ring and those who arrive late tend to be at the fringe. However, there also will be movement of the most ardent or involved members toward the crowd's center. Seidler and colleagues (1976) examined propositions about spatial locations of certain types of individuals which were suggested by other researchers (Fisher, 1972; Hundley, 1969; Milgram and Toch, 1969; and Turner and Killian, 1972). Their findings supported predictions that a positive relation exists between intensity of participant involvement and proximity to the focal point of the crowd. Therefore, the most highly involved people would be located near the speaker's platform and the least involved should be located at the fringes (Seidler and colleagues, 1976).

Although I had not intended to research rings and motivations I serendipitously observed that this gathering had two distinct rings around the speaker. The inner ring remained more stable; it was made up of persons who stood or sat close to the speaker for an extended period of time. The outer ring was made up of passersby who stopped for a moment or two.

There was movement between the rings. Those on the outside joined the inside as they became more involved and those on the inside moved to the outside as they became less involved. I noted this at the site of the gathering on the
day of the event. I had not intended to research this and it was not included in the research design. These observations were not identifiable in the film due to poor angles and obstructions.

QUESTIONNAIRE RESULTS

The results of the survey are presented in Tables 4.2 - 4.9. One hundred thirty persons were interviewed and a discussion of the results of these interviews follows. A copy of the questionnaire is in the appendix.

The results of this survey show that most respondents were present at the gathering alone. Sixty-four percent of those interviewed reported being at the gathering alone. This is contrary to expectations. Previous research studies (i.e. Aveni, 1977; McPhail and Wohlstein, 1982) have shown that persons come to assemblies as members of small groups. There are a couple possible explanations for the results of this research to be contrary to previous research. First, it may have been a methodological artifact. Although interviewers were instructed to interview passersby in a somewhat systematic manner, they may have felt more comfortable stopping individuals rather than members of small groups. Second, as the research was conducted on a college campus it is possible that most students would be traveling about campus alone (assertion). All of the respondents (100%) had reasons for being present at the site of the gathering not directly relating to the event. All the respondents were either
traveling to and from campus or from one location of campus to another. A hypothesis, then, would be that students presence at the gathering alone would be related to prior commitments on campus. However, respondents' immediate commitments had no effect on whether or not they were alone or with others. Sixty-five percent of those who had immediate commitments were alone and seventy-four percent of those with no immediate commitments were alone (see Table 4.2). Whether the respondents had immediate commitments or not, sixty-seven percent were alone.

The results of this survey also showed that most of the persons interviewed had stopped at the gathering (sixty-five percent reported stopping). But, whether the person was alone or with others did not appear to have an effect on whether or not the person stopped. Sixty-two percent of those that were alone stopped and seventy percent of those that were with others stopped (see Table 4.3). When computing a Cramer's V to determine a relationship between the variables I came up with an association of .07, a very weak relationship.

Prior commitments did not effect the respondent's stopping (see Table 4.4). Sixty-five percent of those with immediate commitments stopped and sixty-one percent of those with no immediate commitments stopped. This V computes to
TABLE 4.2
Respondents' Status (Alone or With Others) In Relation to Prior Commitments

<table>
<thead>
<tr>
<th>Prior Commitments</th>
<th>Respondents' Status</th>
<th>No Immediate Commitments</th>
<th>Immediate Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Alone</td>
<td>74%</td>
<td>65%</td>
</tr>
<tr>
<td></td>
<td>With Others</td>
<td>26</td>
<td>35</td>
</tr>
</tbody>
</table>

V = .06 (very weak relationship)

TABLE 4.3
Respondents' Status (Alone or With Others) In Relation to Presence at Gathering

<table>
<thead>
<tr>
<th>Respondents' Status</th>
<th>Respondents' Status</th>
<th>Alone</th>
<th>With Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attenders</td>
<td></td>
<td>62%</td>
<td>70%</td>
</tr>
<tr>
<td>Non-Attenders</td>
<td></td>
<td>38</td>
<td>30</td>
</tr>
</tbody>
</table>

V = .07 (very weak relationship)
TABLE 4.4

Respondents' Prior Commitments in Relation to Presence at Gathering

<table>
<thead>
<tr>
<th>Respondents' Presence</th>
<th>No Immediate Commitments</th>
<th>Immediate Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attenders</td>
<td>61%</td>
<td>65%</td>
</tr>
<tr>
<td>Non-Attenders</td>
<td>39</td>
<td>35</td>
</tr>
</tbody>
</table>

\[ V = .02 \text{ (very weak relationship)} \]
.02 and also means a very weak relationship. This is contrary to expectations. I would expect that those that had immediate commitments would not have stopped.

As mentioned in Chapter 3, one interview team stopped only gatherers. In order to compare the random sample of passersby, I eliminated those interviews. I would expect, then, to end up with a greater proportion of respondents that did not attend the gathering. However, what I found was that most of the random passersby reported stopping at the gathering. As with the population as a whole, whether the respondent was alone or with others did not effect whether they stopped at the gathering or not. Fifty-five percent of those that were alone stopped and sixty-one percent of those that were with others stopped (see Table 4.5). The V between these two variables computes to .05 and signifies a very weak relationship. There were not great differences between the total sample and those respondents chosen randomly. Also as with the population as a whole, immediate commitments did not effect whether the respondent stopped or not (see Table 4.6). Fifty-seven percent of those with immediate commitments stopped and fifty-seven percent of those with no immediate commitments stopped. The V computes to 0 or no relationship.

Sex of the respondent was noted at the time of the interview. A weak relationship (V=.23) existed between sex
### TABLE 4.5
Respondents' Status (Alone or With Others) In Relation to Presence at Gathering*

<table>
<thead>
<tr>
<th>Respondents' Presence</th>
<th>Respondents' Status</th>
<th>Alone</th>
<th>With Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attenders</td>
<td></td>
<td>55%</td>
<td>61%</td>
</tr>
<tr>
<td>Non-Attenders</td>
<td></td>
<td>45</td>
<td>39</td>
</tr>
</tbody>
</table>

\[ V = .05 \text{ (very weak relationship)} \]

### TABLE 4.6
Respondents' Prior Commitments In Relation to Presence at Gathering*

<table>
<thead>
<tr>
<th>Prior Commitments</th>
<th>Respondents' Presence</th>
<th>No Immediate Commitments</th>
<th>Immediate Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attenders</td>
<td>57%</td>
<td>57%</td>
</tr>
<tr>
<td></td>
<td>Non-Attenders</td>
<td>43</td>
<td>43</td>
</tr>
</tbody>
</table>

\[ V = .00 \text{ (no relationship)} \]

*These tables eliminated the interviews of the team which selected only gatherers*
of the respondent and whether or not they stopped at the gathering (see Table 4.7). Fifty-two percent of the female respondents reported stopping and seventy-four percent of male respondents reported stopping. A hypothesis for this relationship would be that the Evangelist's chauvinistic style may have attracted more men than women. The Evangelist spoke condescendingly to women. When I eliminated the samples from the team that only stopped gatherers the relationship between sex and presence at the gathering remained the same (see Table 4.8). Forty-five percent of female respondents chosen randomly stopped and 67 percent of the males chosen randomly stopped. The V computes to .22 and is a weak relationship.

The results of the questionnaire also showed that most of the respondents who stopped at the gathering reported themselves as religious (79%) rather than Atheist or Agnostic (21%) (see Table 4.9). This question was not asked of non-gatherers and thus a comparison could not be made between the two groups.

SUMMARY

Although there were several problems with the film records, enough data were collected to answer some of the major questions this research addressed. The question-
### TABLE 4.7
Respondents' Sex In Relation to Presence at Gathering

<table>
<thead>
<tr>
<th>Respondents' Presence</th>
<th>Respondents' Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td><strong>Attenders</strong></td>
<td>52%</td>
</tr>
<tr>
<td><strong>Non-Attenders</strong></td>
<td>48</td>
</tr>
</tbody>
</table>

V = .23 (weak relationship)

### TABLE 4.8
Respondents' Sex In Relation to Presence at Gathering*

<table>
<thead>
<tr>
<th>Respondents' Presence</th>
<th>Respondents' Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
</tr>
<tr>
<td><strong>Attenders</strong></td>
<td>45%</td>
</tr>
<tr>
<td><strong>Non-Attenders</strong></td>
<td>55</td>
</tr>
</tbody>
</table>

V = .22 (weak relationship)

* This table eliminated the interviews of the team which selected only gatherers
### TABLE 4.9

Religious Preference of Attenders*

<table>
<thead>
<tr>
<th>Religious Preference</th>
<th>Attenders</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religious</td>
<td>79%</td>
</tr>
<tr>
<td>Other (Agnostic &amp; Atheist)</td>
<td>21</td>
</tr>
</tbody>
</table>

100% (84)

* This question was not asked of non-attenders
naires were tallied and several things were determined by their results.

The results of the film records show that the crowd reached a peak and ceased to grow further. This finding supports Milgram and Toch's (1969) assertion that crowds reach a certain size and cease to grow further. The peaks in size at this gathering appear to be at the times classes changed. But because the event ended prematurely due to rain I couldn't determine if this pattern would have continued.

Spatial arrangement and friendship groups were unidentifiable in the film records due to the change in camera angles.

The form of the gathering was generally circular. This supports Milgram and Toch's (1969:518) assertion that a point of common interest will create a crowd tending toward circularity.

Serendipitously I discovered that this gathering appeared to have two distinct rings. The inner ring was made up of persons who stood or sat close to the speaker for an extended period of time and the outer ring was made up of passersby.

Contrary to previous research on friendship groups in gatherings most persons present at this gathering were alone. Most persons interviewed reported stopping at the gathering. This was true even when I controlled for the interview team which stopped only gatherers. A weak relationship existed
between sex and presence at the gathering. Most of the gatherers classified themselves as religious rather than Agnostic or Athiest.

Chapter five will provide a summary of the research and implications for future research.

FOOTNOTES

1. Wohlstein (1977) notes the problem of foreshortened perspective with film records and developed a method or correction. This method was unusable with the film records in this study due to the obstructions and shifted camera angles.

2. On the day of the event I coordinated the interview team which selected gatherers as they left the gathering. While performing this function I noted the two separate rings around the speaker and the movement which took place between the rings based on participant motivation.
CHAPTER 5
CONCLUSIONS AND IMPLICATIONS

INTRODUCTION

There have been three major reviews of the field of collective behavior out of which has come a challenge for future research. In response to that challenge this thesis has been the investigation of growth and dispersal patterns of one short-range non-periodic extemporaneous gathering.

SUMMARY AND CONCLUSIONS

A brief review of the literature was presented to focus on what has been done with regard to episodes of collective behavior. There have been patterns in the research and problems that warranted further attention.

First, we know that during gatherings most individuals assemble with friends, family, or acquaintances.

Second, the size of gatherings, often over-estimated in official reports, can now be systematically and reliably estimated.

Third, there are many factors which effect whether a person attends a gathering or not after receipt of instructions: access, prior behavior, availability, space-time lag between receipt of instructions and time of event.

Fourth, it has been suggested by several theorists that a positive relationship exists between the intensity of participants' involvement and the proximity to the focal point of the crowd.
However, the research has been somewhat limited and has tended to focus on retrospective accounts rather than on-the-spot interviews and observations.

In response to the challenge and calls for research, this thesis was the study of one short-range non-periodic extemporaneous gathering from beginning to end. The research was conducted on the day of the event and included on-the-spot interviews as well as film data.

The event chosen for this research was an evangelistic speaker on the campus of a mid-size midwestern university in a small community. This event was chosen because (1) it was readily available and directly accessible to the researcher; (2) it was a short-range non-periodic gathering (and there is a need to research these); and (3) it was an appropriate setting to research the growth and dispersal of an extemporaneous gathering.

The speaker planned on speaking for five hours but the event ended prematurely after 90 minutes due to rain. The event was filmed with a super-8mm camera, a 16mm camera, and a video tape in order to obtain data on growth and dispersal patterns of this gathering.

A questionnaire was designed and administered to both assemblers and non-assemblers. Three interview teams were set up to conduct on-the-spot interviews. One interview team stopped only assemblers in order to ensure that an adequate sample of assemblers was obtained. The interview schedule was developed in advance and modeled after the
questionnaires McPhail and Bailey (1979) and McPhail and Miller (1973) used in order to determine where respondents were coming from, going to, and whether or not they stopped at the gathering.

The 16mm film did not turn out due to faulty film. The speaker set up at a location different from the one the cameras were focused on. Thus, the cameras had to be swung over to focus on the speaker after they were secured. Instead of a direct shot of the event the cameras were set at a bad angle. The super-8mm and video tape records also contained obstructions due to the angle change. Enough film data were obtained, however, for the purposes of this research.

Seventy-seven slides were made from the super-8mm film for easier analysis. Each slide was analyzed to determine growth and dispersal patterns. Milgram and Toch (1969:531) assert that crowds reach a certain size and cease to grow further. The results of the film records show that this crowd tended to grow until it reached a peak about noon that day and ceased to grow further. It would appear that the noon hour would create greater attendance due to low amounts of classes in session. If the event had not ended prematurely due to rain I could have determined if this were true. As it turned out the bulk of the assembly took place during the noon hour.

In addition, the crowd grew and tapered off many times. These periods of growth and dispersal appeared to coincide
with the times classes changed. Again, if the event had not ended prematurely I could have determined if this pattern continued. The results of the film records showed the form of the crowd to be generally circular. From Milgram and Toch (1969:518): "if individuals are randomly distributed over a flat surface in the starting situation, a point of common interest in the same plane creates a crowd tending toward circularity."

Seidler and colleagues (1976), Fisher (1972), Hundley (1969), Milgram and Toch (1969), and Turner and Killian (1972) researched propositions about spatial locations of certain types of individuals. This research supported predictions that a positive relationship exists between intensity of participants' involvement and proximity to the focal point of the crowd. Although I had not intended to research motivations, I found out somewhat serendipitously that this gathering had two distinct rings around the speaker. The inner ring remained more stable; it was made up of persons who stood or sat close to the speaker for an extended period of time. The outer ring was made up of those passersby who stopped for a moment or two before moving on. Had the video tape record turned out I could have had this data on film.

One hundred thirty persons responded to the questionnaire. The bulk of the respondents (67%) reported being present at the gathering alone. This is in direct contrast to previous research studies (i.e. Aveni, 1977; McPhail and
Wohlstein, 1982) that have shown that persons come to assem-
blies as members of small groups. This could be the result of a methological artifact or an assertion that most stu-
dents tend to travel to and from class alone. Had the video tape record turned out, I could have determined friendship groups with film data. Students reported being present alone whether or not they had immediate commit-
ments. All the respondents (100%) were traveling to and from campus for reasons independent of the gathering.

Most persons interviewed reported stopping at the gathering. This was true whether or not the respondent was alone or had immediate commitments. A weak relation-
ship existed between sex and presence at the gathering. However, a higher proportion of men reported stopping than women. Most of the assemblers classified themselves as religious rather than Agnostic or Athiest. This same question was not asked of non-assemblers so a comparison could not be made.

One interview team stopped only assemblers as they were leaving the gathering in order to ensure that an adequate sample of assemblers was obtained. Had not the event ended prematurely I would have had enough assemblers chosen at ran-
dom. I removed the questionnaires of this group from the total population to see if choosing these people directly from the gathering had an effect on the variables. How-
ever, correlations between the variables remained much the same.
IMPLICATIONS FOR FUTURE RESEARCH

This research has not answered all the questions with regard to the assembly process. I sought to investigate one short-range non-periodic extemporaneous gathering from beginning to end. There were several problems with this research which suggest questions for the future.

If the event had run its natural course instead of ending prematurely by rain, I would have had five hours of data instead of 90 minutes. With the extra data I could have answered additional questions. I could have obtained enough samples of assemblers at random and I wouldn't have needed the data from the group which polled assemblers as they left the gathering. Also, had the event run to its entirety I could have determined if the growth patterns of the crowd would have continued to rise and fall at the times classes changed. I could also have determined if the peak of the crowd indeed would have been at the noon hour as predicted. Future studies on growth and dispersal patterns of crowds are needed.

As mentioned earlier, the 16mm film record did not turn out due to faulty film. The super-8mm and video tape records contained obstructions due to the new camera angles. Had these records turned out as I had anticipated I could have determined friendship groups in the crowd. Future studies on friendship groups in gatherings are needed.

On the day of the event I noted serendipitously that the more intensely motivated persons were near the speaker
and the less motivated persons were at the fringe of the crowd. Had the video tape record turned out I could have noted this with film data. More research is needed on rings and motivations in gatherings.

Finally, I asked the religious preference of assemblers but not non-assemblers. Therefore, correlations could not be made. Future studies on Evangelists should address this question to both groups for comparison.

SUMMARY STATEMENT

Although there were several problems with this research it has addressed some of the needs with respect to research on the assembly process. In response to calls for research this thesis has been the investigation of one short-range non-periodic extemporaneous gathering conducted on the day of the event from beginning to end.
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My name is ____________________________
and I am a member of a research team studying crowd behavior. Do you mind if I ask you a couple quick questions.

Location: ____________________________

Time: ____________________________

Sex: ____________________________

Description of clothing: __________

1. Did you stop and listen to Rev. Jeb or not? ____________________________

2. IF YES, would you categorize yourself as:
   Athiest ____________________________
   Agnostic ____________________________
   Religious ____________________________
   Born Again Christian ____________________________
   Other ____________________________

3. Where are coming from? ____________________________

4. Where are you going now? (and when do you have to be there?) ____________________________

5. Are you alone? ____ or with others _____. If others, how many __________

6. By the way, what do you think of Brother Jeb? ____________________________

THANK YOU FOR YOUR TIME