Gaining and Controlling Access to the Arena: Stories of Ties in a Technological Dispute.

Tobias Albert Ten eyck
Louisiana State University and Agricultural & Mechanical College

Follow this and additional works at: https://repository.lsu.edu/gradschool_disstheses

Recommended Citation
https://repository.lsu.edu/gradschool_disstheses/6712

This Dissertation is brought to you for free and open access by the Graduate School at LSU Scholarly Repository. It has been accepted for inclusion in LSU Historical Dissertations and Theses by an authorized administrator of LSU Scholarly Repository. For more information, please contact gradetd@lsu.edu.
INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6” x 9” black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI
A Bell & Howell Information Company
300 North Zeeb Road, Ann Arbor MI 48106-1346 USA
313/761-4700 800/521-0600

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
GAINING AND CONTROLLING ACCESS 
TO THE ARENA:
STORIES OF TIES IN A TECHNOLOGICAL DISPUTE

A Dissertation

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy

in

The Department of Sociology

by

Tobias Albert Ten Eyck
B.S., Southern Illinois University – Carbondale, 1992
M.S., Portland State University, 1994
May 1998
ACKNOWLEDGMENTS

As with most research projects, this is the product of a collaborative effort, though only my name appears on the title page. Without the help, support, and dedication of a number of people, this dissertation would have never been finished. Forrest A. Deseran, who served not only my dissertation chair, but as a mentor and friend during my stay at Louisiana State University, must take a great deal of the credit of getting me this far.

Wesley M. Shrum was instrumental in my decision to study the mass media coverage of a science/technology issue. Dr. Shrum’s support in this project and confidence in my abilities was both needed and appreciated. I can only hope that at some point in my career my work will be held in same esteem as his.

Dawn T. Robinson and Charles Tolbert also played integral parts in this project. Dr. Robinson continually pushed me to make my arguments clearer, while Dr. Tolbert helped me focused on my choice of newspapers to study, and to think about the larger issues, such as policy implications, of my work. I could not have asked for a better, more supportive committee.

In addition to those on my dissertation committee, a number of other faculty members deserve credit for my academic and psychological well-being. Dr. Joachim Singelmann has been both a collaborator -- forcing me to work harder on my understanding of the scientific method -- and a friend who was never too disappointed when I would win a racquetball game. Dr. Kate Rosier helped me gain a better
understanding of qualitative methods, and to be determined in using these techniques. I owe a great deal to her strength as a person and a practicing sociologist. I would also like to thank her husband, Scott Parker, for taking the time to play baseball when I needed a break. Drs. Jack Beggs, Jeanne Hurlbert, Scott Feld, and Jill Suitor also offered support during my studies as Louisiana State University.

The best way to survive graduate school is to surround yourself with fellow students who are sympathetic to your cause. I would like to especially thank Vaughn DeCoster and Mike Maume for knowing when to listen, as well as knowing when to tell me to listen. Nicole Flynn, Kelly James, John Kilbum, Mary Gautier, and Graham Ousey were always ready to lend an ear or shoulder. In addition to a great cohort of students, my parents, George and Nan Ten Eyck, were always ready to lend a helping hand. In addition, Peter Ten Eyck and Jana Steele have come through with sibling love and competition when I most needed it. I would also like to thank Ross and Eula Ten Eyck for their financial and emotional support through much of my graduate schooling.

I have left the most important people in my life for last. For seven years, Tyler Ten Eyck has reminded me of the wonders of childhood and the fascination and excitement of learning. He has been a friend, confidant, fellow baseball player, teacher, and student. Being part of his life has been an experience I would not trade for the world. Finally, the love, support, and patience of my wife, Sheri Ten Eyck, have made it possible for me to pursue my dreams. Without her, none of this would have been possible.
# TABLE OF CONTENTS

**ACKNOWLEDGMENTS** .............................................................. ii

**ABSTRACT** ................................................................. vi

**CHAPTER I. INTRODUCTION** .................................................. 1
  - Explicit Goals ............................................................................... 1
  - Implicit Motivations ..................................................................... 3
  - A Caveat ......................................................................................... 4
  - Organization of Chapters ......................................................... 7
  - Conclusion .................................................................................... 10

**CHAPTER II. RESOURCES, ACTION, AND ARENAS** .................. 11
  - Introduction ................................................................................... 11
  - The Arena as a Sociological Concept ......................................... 12
  - Resources and Action in Arenas ................................................. 17
  - Structural Components of Arenas .............................................. 23
  - Arenas in Research ..................................................................... 30
  - Newspaper Arenas ..................................................................... 35
  - Conclusion .................................................................................... 50

**CHAPTER III. METHODOLOGICAL FOUNDATIONS** .................. 51
  - Introduction ................................................................................... 51
  - A Note on Reflexivity .................................................................... 53
  - Gathering the Data ................................................................. 56
  - Transforming the Data .............................................................. 64
  - Conclusion .................................................................................... 66

**CHAPTER IV. FOOD, TECHNOLOGY, AND FOOD IRRADIATION** .. 68
  - Introduction ................................................................................... 68
  - Food, Technology, and Food Technology .................................. 69
  - Food Irradiation Technology ..................................................... 79
  - Food Irradiation Politics ............................................................ 82
  - Food Irradiation in the News – *The Capital Press* and *The Florida News* ................................................................. 90
  - Conclusion .................................................................................... 94

**CHAPTER V. STORIES OF ACTION AND RESOURCES** ............... 95
  - Introduction ................................................................................... 95
  - Sources ......................................................................................... 96
  - Reporters ...................................................................................... 114

iv

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
An Interpretation ............................................................ 120
Conclusion ................................................................. 132

CHAPTER VI. STORIES OF STRUCTURE .................................................. 136
  Introduction ............................................................ 136
  Public and Private .................................................... 136
  Sources ................................................................. 137
  Reporters ............................................................... 145
  An Interpretation ...................................................... 152
  Conclusion ............................................................. 153

CHAPTER VII. CONCLUSIONS .......................................................... 155
  Introduction ............................................................ 155
  Beyond Food Irradiation ............................................ 156
  From Here ............................................................... 172

REFERENCES ................................................................................. 175

APPENDIX ......................................................................................... 194

VITA ................................................................................................. 196
ABSTRACT

This is a study of the stories told about distribution of resources and structural constraints which operate within newspaper arenas that were experienced by reporters and sources involved in coverage of food irradiation between 1987 and 1996 at two regional newspapers (Louisiana and Florida). Using an unstructured interview instrument, I conducted interviews with 40 sources and 12 newspaper reporters, which I used to construct a framework in which to show how cultural, economic and social capital are used for getting and blocking action in the newspaper arenas. These interviews show that while cultural capital was the most prominent type of capital used by reporters and sources, the reliance on this type of capital gives reporters a position of power within the relationship, as they are in position not only to decide which issues will become newsworthy, but how that capital will be framed within the newspaper report. When ties between reporters and sources are embedded in economic or social capital, then sources can gain some power over the interaction, though the value given to the topic in the newspaper still rests heavily with the reporter and/or the news organization. In addition, stories of structural components of these arenas – audiences, boundaries between audience members and arena participants, and prior knowledge between arena participants – are used to highlight the fact that newspapers are not entirely public arenas, but are characterized by private components. Finally, I apply an arena approach to other areas of sociological interest, such as food policy and the sociology of knowledge.
Explicit Goals

My intention in this study is to construct a theoretical framework from which to study newspaper coverage of a scientific/technological\(^1\) issue. The main actors throughout this study are the reporters and sources whom I interviewed about their experiences in the newspaper coverage of food irradiation. I chose to study food irradiation for a number of reasons -- that this topic has received newspaper coverage, those involved in this newsmaking process were willing to speak with me about their experiences, and that food irradiation has the potential of resonating deeply within our culture, as both food and radioactivity are key cultural elements in our society, though we typically do not consider them to be closely linked. The mention of food brings thoughts of family gatherings, while radioactivity is typically associated with nuclear bombs, the Cold War, Three Mile Island, and x-rays at the dentist -- all unpleasant images. The fact that some people have argued the process of irradiation has the potential to make our food safer, has made it imperative that the process be brought to the public’s attention.

While interviewing the reporters and sources involved in the newspaper coverage of food irradiation, I found that I needed a theoretical perspective that focused

\(^1\)I use “science” and “technology” interchangeably throughout my dissertation.
on both the interactions taking place between these actors, and the fact that these interactions were taking place in what was assumed to be a public forum. I found that the arena metaphor, as used by White (1992) and Strauss (1993) offered the foundation for such a theory. While White and Strauss offered insights into arenas, I found that I needed to expand these insights to include the larger social spaces in which these arenas were embedded; that is, I had to move beyond using arena as merely a metaphor and construct a theoretical framework aimed at explaining this type of social space. Upon further data gathering and analysis of both the internal dynamics and the more general structural constraints which are part of all arenas, I decided that a theory of arenas must distinguish between public arenas and private arenas, and that newspaper arenas fall somewhere along this continuum; that they are neither completely public nor private, but possess both private and public characteristics.

Once this theoretical approach had been constructed, aided by interview data, other possible applications of this approach began to take shape. Generalizations from one case study -- how actors entered into the newsmaking process at two newspapers on the issue of food irradiation -- are tenuous at best, but work on arenas and the construction of risk perceptions in these spaces (Renn 1992) pointed to the possibility of at least describing how this theory may be applied to other areas of sociological interest. Specific use of this approach in other areas of sociology can be found in the concluding chapter, but the prospect of using this approach in other areas of research became an underlying force of this study.
**Implicit Motivations**

Sociology is still searching for an identity. This lack of identity has led some researchers to conclude that sociology is in a state of crisis (Smelser 1988) or in the doldrums (Collins 1986). This crisis has been fueled, according to these authors, by the segmentation processes taking place within the discipline. The development of general theory has not been excluded from this process, and so is no longer an acceptable career goal by many, as sociologists carve out niches based on content areas rather than directing their energies toward common goals (Abbott 1997; McCall and Becker 1990). Given our tendencies to seek out similar others and question those that are different (Hogg 1992; Hogg and Abrams 1988), this should not be too surprising; even proponents of general theory can be accused of doing the same, as general theory has become just another specialty whose proponents are fighting for space under the sociological umbrella.

My motivation to formulate a theory with broad applications, then, could be considered as going against the current sociological grain, though Kiser and Hetcher (1991) have argued that general theory does have a place in sociology.² The theory I will propose encompasses the control and management of resources and the private-public aspects of arenas. Arenas, which I will describe in more detail later, consist of a

---

² It should also be noted that Kiser and Hechter (1991) argue that general theory should be deductive, though inductive approaches are useful for specific events. I would argue that deductive and inductive logics should be used to compliment each other, with the research question and theoretical framework dictating the type of reasoning to be used.
combination of the constraining and empowering characteristics which embed, and become embedded in negotiations (Fine 1984; Strauss 1978b). Negotiations, in turn, are the processes in which "individuals and society continually generate each other . . . " (Fine 1984:242). Many sociological treatments of individuals and societies, though, fall short of their theoretical goals of moving between individuals and community/society. According to Lash (1994), what is needed is a theory which treats group activities, however they are termed, as part of an everyday world in which subjects share with others. I believe that my theoretical approach to arenas is a step in this direction.

In addition to the formulating of a theory with potential of broad application, I couched my theory in somewhat critical terms. According to Lash (1994), a theory which purports to be critical must be aimed at understanding systemic processes; or, to put it differently, it should be concerned with symmetric asymmetries (Thompson 1991). While the interview material that I will present is aimed at individual experiences with or within the newsmaking process, the shared experiences that emerge in the respondents' stories point to a systemic force underlying these narratives. Though I refrain from making any strong political statements about the newsmaking system I have studied, which is the approach advocated by Agger (1992), I have tried to offer enough material for readers to make such interpretations if they are so inclined.

A Caveat

Any approach, such as my approach to arenas, which purports to understand the creation and maintenance of individuals and society must face the question of what
constitutes proof of the theory. Turner (1991:22) argues that theories “should be abstract. That is, the less substantive the content in the concepts, the better they are.” I believe this is to be a mandarin view of sociological theory. I tend to be more inclined to follow Corbin and Strauss (1990:9), who contend that “the aim [of sociological theory] is ultimately to build a theoretical explanation by specifying phenomena in terms of conditions that give rise to them, how they are expressed through action/interaction . . .” This grounded theory approach, though, can be accused of solipsism or atomization in that “[t]he aim is not to generalize findings to a broader population per se” (Corbin and Strauss 1990:9). Instead of broad theories, we have specific theories about specific groups which are only relevant at specific times, further segmenting the field of sociology and sociological research. Still, the idea that theory and findings should inform and compliment each other is sensible to me. In addition, the general use of qualitative methods by those using a grounded theory approach are better suited for answering my research questions in this study.

Returning to how one is to assess the merit of a theoretical statement, I do not purport to know when a theory has been sufficiently affirmed or nullified, but I do have thoughts on where we should gather our evidence. Following Stinchcombe (1968), who maintained that empirical statements must agree with observations, and Blumer (1969:143), who said much the same thing in that “[t]heory is of value in empirical science only to the extent to which it connects fruitfully with the empirical world,” I believe that evidence of social processes should be gathered in the social spaces were
interactions take place and processes arise. If empirical observations and theoretical insights agree, then sociology has been moved in the right direction. This can best be done by gathering data in the everyday activities of social actors which we call society. The evidence I have gathered is grounded in the empirical world of those who have experienced the newsmaking process, either as reporters or sources, and I think my theoretical framework would stand up well against alternative explanations. The best strategy to strengthen this statement is to present a large amount of interview material which could be compared to stories from other arenas, which I have tried to do throughout this study, especially in Chapters V and VI.

At this point I find it necessary to explicitly state the scope of this study. I am interested in the stories of the newsmaking process. These stories include how reporters and sources have come to know of one another, and the strategies used to gain and maintain these ties. In addition, reporters and sources were questioned about the legitimacy of their own positions, and their opinions of the fairness of the coverage given to food irradiation. I have not undertaken a study of the public understanding of food irradiation, which would involve consumer perceptions of the risk involved with this postharvest technique. At the same time, the public understanding of science needs to be further explored. As Gamson et al. (1992) have found, not only are media images polysemic, but the various backgrounds of audience members act as filtering devises during media consumption activities (see also Hoijer 1992).
Finally, I have not investigated the motivations underlying the desire of the different participants to enter the newspaper arena on the topic of food irradiation. Motives, as noted by Mills (1940), are statements about reasons behind actions, and rationalizing the consequences of those actions. Past successes and/or failures in gaining newspaper access, in addition to perceived impact of the issue, may play a large part in the efforts made to gain access of the issue of food irradiation. Since the people I spoke with had all been participants in the arena, I did not feel that this aspect needed exploration.

**Organization of the Chapters**

The arena approach that I use to ground this study is discussed in the next chapter. Beginning with the work of White (1992) and Strauss (e.g., 1993), I argue that arenas are sites in which social actors are engaged in conflicts stemming from discrepancies on the best solution to a problem. These social spaces are controlled by those who have the ability to control valued resources. In addition to the resources controlled and managed by arena participants, the structural constraints of arenas can strongly influence the interactions of the participants. If we distinguish between private and public arenas on the dimensions of the presence or absence of an audience,

---

1Arena contests are typically thought of in zero-sum terms, i.e., winners and losers. Issues, such as food irradiation, which have been in the newspaper arena for over a decade, should be thought of in terms of control. As Gamson and Modigliani (1989) have shown with nuclear power, how issues are framed tend to change as actors enter and leave the arena, and as the amount and value of resources controlled by these actors change.
permeability of arena-audience boundaries, and the prior knowledge of others among participants, we begin to note that the internal dynamics of arenas are affected to various degrees by these structural aspects. Public arenas are characterized by the presence of an audience, permeable boundaries, and a low degree of prior knowledge among participants, while private arenas are characterized by the lack of an audience, impermeable boundaries, and a high degree of prior knowledge among participants. The specific consequences of these structural constraints on arena contests is an empirical question, I argue that interactions in public arenas are much less defined or planned for in advance than those in private arenas.

The methodological foundations of this study are reported in Chapter III. Within this chapter, I discuss both the reasons for my interest in studying the newspaper coverage of food irradiation, as well as the methodological issues that I faced. I offer the reader an insight into what was done, why it was done that way, and some possible shortfalls of my approach, including my choice of newspapers to investigate. Given the qualitative nature of this study, this chapter is meant to offer readers enough information to come to their own conclusions about the descriptions, analyses, and interpretations I will present throughout this study (Wolcott 1990).

I offer a brief background on the history and politics of food irradiation in Chapter IV. I begin with a review of the sociological literature on food and technology, highlighting the cultural resonances of these elements in our society. I then explain food irradiation technology in layman terms, and discuss the controversy that has
surrounded this process since the end of World War II. Finally, I present a summary of
the news coverage that has been aimed at food irradiation in two local newspapers, one
in Louisiana and the other in Florida.

In Chapter V, I present stories from the interviewees about the resources used to
gain and maintain access to other participants in the newspaper arenas. Using
Bourdieu's (1984, 1986) classification of social, cultural and economic capital, I show
how these different types of resources have been used by sources to gain access to
reporters and vice versa. My aim is mainly to offer an account which encompasses
description, analysis and interpretation of this material, as I argue from these stories that
reporters tend to control reporter-source linkages, and that they are more likely to be the
judges in the newspaper arena, which means that they are ultimately making the
selections of purity across the claims-making activities of sources. This is not a new
finding, but displays reporter-sources ties as more dynamic than other studies which
have focused on these types of interactions, and extends the critical understanding of the
newsmaking process.

The stories of the impact of arena structures on reporter-source interactions are
presented in Chapter VI. It is this chapter that I believe I make the strongest
contribution to sociological theory. By refocusing attention on the structural
components of arenas, one gains an insight into the larger networks of identities which
impact these arenas. While I agree with White (1992) that sociologists are wrong in
trying to explain the workings of society while delegating the individual to the margins
of the discipline, factors which may be beyond the control of the individual need not be totally excluded. These factors lie in the social structures in which we are embedded. Whether these structures are constructed of network lineages or societal norms is an open question. I will argue that whatever these forces are, they can and do shape our actions.4

Finally, I conclude my work by arguing that my approach could be useful in other areas of sociological research. I discuss the implications of the arena approach to five sociological undertakings – cultural studies, structure, the sociology of knowledge, food policy, and collective behavior. I feel that the approach used in this study could be used to gain valuable insights into these areas.

Conclusion

This is a study of the distribution and management of resources, and of the structures which shape social space. It is informed by those who lived through the experiences, as well as the theoretical framework which I have constructed for the purpose of understanding the dynamics of arenas. I now turn to the theoretical foundations on which this study is based.

---

4Following Lash (1994), I believe we need to study actors who are both inside and outside social structures, as well as the structures themselves. A research agenda which focuses on the symmetrical asymmetries of society is an integral component of critical theory (Thompson 1991).
CHAPTER II:

RESOURCES, ACTION, AND ARENAS

Introduction

If we assume that media discourses contribute to knowledge or perceptions, especially concerning issues in which experiential knowledge is minimal (Gamson 1992a), then it is imperative that we gain an insight into the labor or production processes involved in the selection and construction of these discourses. By focusing on the labor processes involved in newsmaking, we can place media work, on the part of both reporters and sources, within mainstream sociological perspectives, instead of treating it as some type of unique social phenomenon. My purpose in this chapter is to build such a foundation for understanding the dynamics of newspapers by approaching them as arenas in which actors must work to gain access to each other, using whatever strategies are available to them to accomplish their goals. This approach necessitates an examination of both the internal dynamics of arena participants and the structural components which shape these dynamics.

I begin with a discussion of theoretical work which has focused on arenas, borrowing heavily from the perspectives of White (1992) and the social world perspective (e.g., Clarke 1991; Strauss 1978a; 1993). Next, I focus on the internal dynamics of arenas, arguing that to get action within arenas, participants must be able to mobilize valued resources. I then discuss the impact of the structural components of arenas, and distinguish between public and private arenas. A continuum will be offered
in which public and private arenas are differentiated on three structural dimensions -- presence or absence of a general audience, permeability of boundaries between arena participants and audience members, and accumulated prior knowledge among arena participants. Finally, I argue that under these criteria, newspapers are not wholly public arenas, and that actors interested in gaining access must be able to mobilize resources considered valuable by other arena participants. This framework -- control over resources and uncovering the structural components of arenas which have an influence on interactions -- sets up the next two chapters in which I present the stories from those who have been involved in the newspaper coverage of food irradiation.

The Arena as a Sociological Concept

The typical sociological definition of an arena is that of a "symbolic location of political actions that influence collective decisions of policies" (Renn 1992:181). While this definition helps us in understanding that arenas are "place[s] of action and contest" (Wiener 1992:175), it does not capture the full complexity of arenas. White (1992) approaches arenas from the standpoint that they are social settings in which "valuations of purity" are made through selection processes. This definition is somewhat vague in the context in which it will be used, so it needs to be elaborated. White (1992) argues that arenas are social formations in which selections are made. In newsmaking, selections are made concerning what issues will be covered, and who will be used to speak on the issue. In addition, newsmaking entails the production of the news item or article. The newspaper arena, which might also be referred to as the newsmaking arena,
encompasses both processes, and so I must move beyond White’s (1992) definition. Strauss (1993) maintained that arenas develop around issues that are not quickly resolved. Given that both the selection and production processes of newsmaking are potentially contentious, it is imperative that my definition of arenas does not lose sight of this fundamental dimension. At the same time, White (1992) offers an insight into the reasons why conflicts arise and are not always readily resolved. Combining these approaches gives us a definition of arenas where actors with vested interests in incompatible alternatives¹ compete in selection and production processes aimed at ranking these alternatives. That is to say, arenas are social spaces in which actors have a stake in the outcome of a decision in which they must compete with other actors. To be successful in these social spaces, actors must be able to mobilize resources to influence the decision-making process. These processes may become clearer by looking more closely at White’s (1992) and Strauss’ (e.g., 1993) work in this area.

Returning to White’s notion of selection processes taken place within arenas, we should understand that the underlying force behind these processes is the power and control of those involved in the selection processes. Selections are based heavily on anticipated future payoffs which, in turn, stem from past performances. In such a situation, past definitions of the criteria for selections and selections themselves are the

¹Given the wide variety of things – views, opinions, ideologies, material objects, etc. – in which actors may disagree, I use the term alternatives to refer to both the wide variety of things that could be judged, as well as the diversity of forms each of these things can take.
starting point for present definitions, which means that the selection processes taking
place within arenas, especially established arenas, will typically be biased toward some
end. That is, what has performed well in the past is expected to perform well in the
future.

Given that past performances give identities\(^2\) power in future arenas, we begin to
see how selection processes come to be reified to a certain degree. Children choosing
sides for a football game on a school playground is an example White uses to
demonstrate these arena dynamics. The children come to the playground with idealized
definitions of what makes a good football player. Children that have performed well in
the past are expected to perform well in the future, and are usually made captains of the
teams or are chosen first among the children who have gathered to play. Selection
continues until the children expected to contribute the least to the game are divided
among the teams, if they are allowed to play at all. Control and power are clearly
visible in this selection process, as those children who have the best talents have more
input over the selection of teams. Of course, if the only ball available is controlled by a
mediocre player, or the game is being played on the property of one of the unskilled
players, the centers of control and power can move to those who control the coveted

\(^2\)White (1992:6) defines identities as “any source of action . . . to which observers can
attribute meaning.” Identities, according to this definition, are not necessarily human
actors, but can be animals, television programs, clothing, and so forth. I find this
definition useful, in that organizations, while consisting of humans, are more than the
sum of those actors, and so I can speak of media relations offices within organizations
as identities. At times, I use the terms identity and actors interchangeably.
equipment or property. Still, if the better players feel slighted, they can threaten to not play or leave, thereby regaining some power and control.

These types of selection processes can arise in many settings, and the consequences arising from these different arenas will have much the same impact as that of the playground football game -- those identities selected as best will have more power in future arenas. In addition, identities given the task of selecting among alternatives control a great deal of power, at least in the local arena, and possibly other similar arenas. This selection process is itself a setting for conflict, giving rise to arenas within arenas.

Given the importance of having control within arenas, we would expect participants to use whatever strategies are at their disposal to gain control over the arenas in which they are involved. Returning to Strauss' (1993:226) idea that arenas are places "where actions concerning [issues] . . . are being debated, fought out, negotiated, manipulated, and even coerced within and among . . . social worlds," we come to understand that action of any kind cannot be ruled out. This approach is grounded in the pragmatic approach of Mead's symbolic interaction in which individuals, or the social worlds in which they belong, undertake whatever action is necessary to accomplish their goals (Mead 1934; Turner 1988). This social world perspective on arenas (Strauss 1978a) can be combined with White's (1992) work, while discarding his notion that arenas are a type of discipline, or a social molecule that perpetuates itself through the actions of those identities which constitute its membership. By synthesizing
these two approaches, the arena becomes a place of action in which final outcomes are never guaranteed, and where we must distinguish between judges and contestants. The function of an arena for either White's purposes or those who study social worlds, though, is still the same: The selection of the best alternative in a contingent environment.

The pragmatic approach to arenas emphasizes that some actors are able to influence the actions of others (Clarke 1991; Clarke and Montini 1993; Kling and Gerson 1978; Meir-Dviri and Raz 1995; Strauss 1984; Wiener 1991). Studies using this perspective give attention to the structural conditions of the arena, the power of those participating in the arena, their activities, and their interactions (Strauss 1978a; Strauss and Corbin 1990). While each of these aspects is important and will be touched on throughout this study, it must be understood that these structural aspects of arenas are not constructed in a vacuum. Instead, resources are used to construct arenas, differentiate among the powerful and powerless participants, and lay the foundations for activities and interactions. In addition, all arenas are characterized by structural components which participants, and potential participants, must be aware of and act accordingly. I focus on three structural dimensions of arenas -- presence or absence of an audience, permeability of boundaries between participants and audience, and prior knowledge among arena participants. These dimensions will be used to construct a continuum of arenas on a public-private scale. Before addressing these dimensions, I need to discuss the importance of resources and action in arenas.
Resources and Action in Arenas

If we are to argue that arenas are places of action and efforts made to accomplishing goals, we should decide what action is. Action, which I approach from a pragmatic standpoint, is simply the practicing of strategies used to reach goals. Action, though, is not always in the same direction. White (1992) contends that there are basically two modes of action: blocking and getting. Blocking action consists of those strategies which are used to control contingencies stemming from other identities, while getting action "is cutting open the Sargasso Sea of social obligation and context to achieve openness sufficient for getting fresh action" (230). In other words, getting action consists of the efforts made to break out of routines, for the self and/or others. To be successful, though, action, either blocking or getting, must be embedded in resources; goals are rarely achieved simply through wishful thinking. As Blumer (1969) argued, society is made up of a diverse set of groups, each with its own interests, and each group is confronted by their own specific circumstances which arise from their location in social space. To reach their disparate goals, groups must mobilize the resources they control to gain advantages over other groups. Resources, though, can serve as either keys to unlocking doors or as doors themselves. As Sewell (1992:27) noted, "sets of resources . . . empower and constrain social action and tend to be reproduced by that action." The question now is, what constitutes a resource?
Resources, as I am using the term, are material or nonmaterial that can be used to help achieve goals through exchanges, negotiations, coercion, and so forth. In capitalist societies, economic resources are typically the most salient or studied (DiMaggio 1994; Granovetter 1985; Parkin 1971), but are not the only items which are used in the pursuit of goals. Knowledge has been linked to power (e.g., Crozier and Friedberg 1980), as has control over popular media discourse (e.g., Bagdikian 1992; Montgomery 1989) and science (e.g., Collins and Pinch 1993). In fact, the variety of resources available in modern society is so large and varied, we need to capture them in meaningful categories. Renn (1992) has constructed one approach in which he distinguishes between money, power, social influence, value commitment, and evidence as social resources, which in turn are exchanged through the mediums of money, force and authority, reputation and reward, persuasion and meaning, and methodology and rhetoric, respectively. This approach fails to understand that all of these resources and mediums of exchange have bases in other resources and mediums of exchange. For example, force is tied to things such as weapons, physical strength, and the number of people which can be mobilized to fight battles. Bourdieu's (1984, 1986), distinction between three types of resources, or capital — economic, cultural, and social, on the

\[\text{\footnotesize{\textsuperscript{3}Again, resources are not intrinsically valuable or worthless, but depend on linkages to specific social actors and interactions which are linked to prior valorizations of the resources (Becker 1995; Thompson 1991).}}\]
other hand, provides a framework in which resources are the mediums of exchange in social interactions and the foundation for life chances.

**Economic Capital.** Those who control large amounts of economic capital, in the form of income and wealth, can block action through strategies referred to by Parkin (1974:3) as exclusion. Exclusion is the outcome of strategies used to “maximize rewards by restricting access and opportunities to a limited circle of eligibles.” These types of actions embedded in control over economic resources, according to Parkin, are typically used by those in the upper class, for the purpose of blocking any kind of redistribution of wealth which would give others access to their domains, and, therefore, threaten the status quo. While the upper classes use economic capital to block the action of those in lower classes, economic capital also can be used to get action, or breaking out of routines. Again, those in the upper class are most privileged in this regard. The ability to block action through the manipulation of economic resources does not preempt attempts by others to gain access to these groups, but when such attempts are made, the economic resources controlled by those in the upper classes can be mobilized to impact policy decisions aimed at maintaining their privileged positions within corporate and governmental arenas, where such decisions are likely to be made (Domhoff 1990).

While the upper classes may have a greater degree of control over economic resources, this does not mean that economic resources cannot be used by others to get action. The ability of present-day professional athletes to start their own businesses is one highly visible example of using economic resources to get action. While athletic
ability does not necessarily transfer into business savvy, the high pay of many of today's professional athletes offers them the opportunity to maintain their business ventures while they learn how to succeed outside the professional athletic limelight. Individuals who do not have the economic capital to get action can pool their resources with others to challenge the status quo. For example, when Sierra Designs in Oakland, CA announced that it was closing its plant to move offshore, the workers pooled their economic resources to form a coop and forced Sierra Designs to "contract a substantial amount of work to the new coop for at least three years" (Haas 1985:44). Much the same process occurred with A&P stores in Philadelphia, in which employees, upon learning of plans that the company was shutting down thirty stores, pooled their resources, with the help of a local union, to buy the stores (Haas 1985:44-45).

**Cultural Capital.** Cultural capital, according to Bourdieu (1984, 1986), is largely a matter of levels of knowledge and consumption of the fine arts. The idea that knowledge of something is a basis of cultural capital is helpful, but, as DiMaggio (1994:27) has noted, culture is more than arts and letters, and should include "shared cognitions, values, norms, and expressive symbols . . ." However, DiMaggio fails to fully explore the constraining and empowering ability of culture-as-knowledge, and, therefore, does not treat culture as a type of capital or resource. The structural approach to culture, as defined by Wuthnow (1987:12), is better suited for my purposes here. This approach defines culture in terms of "boundaries, categories, and elements," though this definition needs further explanation. By defining culture as structural, it
must be understood that culture consists of layers which are rooted in these different components. The most basic components are elements, which are the material or nonmaterial objects used by a group of people. These elements can be such things as drums, deities, drugs, rituals, foods, clothing, etc., and compose the basic objects of a group. Categories, in turn, are groupings of these objects. There are categories of musical instruments, rituals which are used as celebrations for different gods, food and clothing which are considered appropriate for specific occasions. Boundaries are built upon categories, and are used to distinguish between groups who have objects categorized differently or whole categories of objects that are unique to the group. It should be noted that this is not a deterministic approach to culture, as each of these aspects of culture can be interpreted differently between ingroup and outgroup members, and even among these groups there can be disagreements.

If culture consists of boundaries, categories, and elements, then our knowledge of these boundaries, categories, and elements, can become a resource as we encounter others. For example, Crozier and Friedberg (1980) found that engineers in a certain factory were able to control production workers by controlling knowledge of the factory machinery. These "spheres of knowledge" gave the engineers an advantage over the workers because the workers relied on the engineers to maintain the equipment. The engineers were also able to assure themselves job security by fixing the machines in such a way as to guarantee breakdowns at regular intervals. By controlling the boundaries and elements of knowledge concerning machine technology and
maintenance, the engineers gained control over their own well-being and the well-being of the production workers. At the same time, they were able to control the owners of the factory -- who had more economic capital -- with this knowledge. This approach is compatible with Swidler's (1986) notion that culture is much like a toolkit, in which actors can pick and choose between strategies (the tools in the toolkit) as they work their way through interactions with other identities. It should be noted, though, that the tool kits, or knowledge of the tools supplied by a shared culture will be compatible across all actors, though not necessarily evenly distributed.

Social Capital. The role of social capital -- the connections between individuals and/or groups (Bourdieu 1984, 1986) and the strength of these ties in terms of trust and cooperation (Putnam 1993) -- in getting action has been well documented. Granovetter, for instance (1973, 1974), found that individuals with networks of weak or indirect ties had better access to information about employment opportunities than people with the same number of strong or direct ties. Becker (1974) found that art worlds could be traced along lines of social capital, as the value of a piece of art was not intrinsic in the work itself but in the connections of those with vested interests in art worlds. While weak ties may give identities longer networks, strong social ties are not necessarily constraining, as "... people embedded in durable and close-knit social networks need fewer status cues than those whose interactions are characteristically more fleeting, and therefore are likely to invest less in status commodities or cultural capital" (DiMaggio
1990:126). In other words, once strong ties are made, energies can be directed toward controlling other forms of capital.

Social capital can also block action, as membership into, or access to, a group or collective can be institutionalized by a core set of actors, and uninitiated individuals are denied access (Bourdieu 1986). As Bourdieu (1986:249) has noted, social linkages are formed for the purpose of "transforming contingent relations" to stable relations for the purpose of exchange. In other words, these are "investment strategies." Outgroup members cannot call upon these linkages for their own purposes, unless they have resources with which to enter the relationship.

Structural Components of Arenas

While economic, cultural, and social resources are important in understanding action within arenas, we cannot overlook the fact that there are larger factors which impact arena dynamics. All arenas share the fact that there are structural constraints which arise during the construction and maintenance of arenas, and we can distinguish between private and public arenas by studying these structural components. The three dimensions, or constraints, of arenas I want to highlight are presence or absence of an audience, the permeability of boundaries between action in the arena and action outside the arena, and prior knowledge among arena participants.

Audiences. The first dimension of interest is whether or not an audience will be allowed to observe the actions taking place within the arena. I assume that the presence of an audience is expected by those involved in newspaper (and other mass media)
arenas, so newspaper arenas are public in this sense. This comes as no surprise, but what we need to understand is what this means for arena participants and their interactions. According to Goffman (1959), any time an audience is present for a performance, that performance is affected. For example, performances must be idealized, in that actors are expected to uphold certain norms and standards during their public appearance; these actors might also engage in dramatic realization where "... the individual typically infuses his activity with signs which dramatically highlight and portray confirmatory facts that might otherwise remain unapparent or obscure" (30). In addition to the actual performance, regions -- or places where performances are conducted -- are key to Goffman's actors' management of the audience and other actors. Actors will typically keep a backstage area hidden from the view of the audience from which they manage their performance. The front stage area, on the other hand, is the place where performances are acted out and actors are expected to stay in character when in these areas. When an actor's performance is not up to standards, sanctions are typically carried out in the backstage regions.\(^4\)

\(^4\)While Goffman's dramaturgical approach is arguably the most popular approach to the study of audience influence in sociology, it is not the only work that has been done on the impact of being observed. The Hawthorne studies found that workers would increase their production output when researchers manipulated their working environment. It was argued that this increase in production was not an outcome of the environmental changes but a consequence of the workers knowing they were being observed (see Fraser [1978:218-219] for a brief overview of these studies).
The one-way flow of information, combined with the point-to-multiple point structure of mass mediated communication, makes direct audience feedback difficult, but those within mass media organizations are never too far from thinking about their audiences. Cantor and Cantor (1986) found that soap opera producers keep a close eye on fan mail and audience measures, something of which most television producers are concerned (Barnes and Thomson 1994). Fiske (1992) found that a letter-writing campaign headed by the housewife of a wealthy businessman and aimed at criticizing the television sitcom *Married...with Children* was ignored when audience ratings started climbing. This latter example – measures of audience share – while not direct feedback, is an important measuring stick for those involved with mass media presentations.

In terms of news reporting, Gans (1979:230) found that reporters “had little knowledge about the actual audience and rejected feedback from it. . . . [A]ssuming . . . that what interested them would interest the audience.” Again, the difficulty in measuring actual audience reactions may have played a role in these attitudes, as reporters discount the small proportion of direct feedback they get as coming from unenlightened consumers. The other thing to note about newspaper audiences is that they are typically not present when the reporting takes place, only becoming aware that something took place after it has occurred. This exacerbates any misinformation or exclusions in news reports.

**Boundaries.** The second dimension of interest is the permeability of the boundaries between arena participants and audience members. Williams (1981) noted that when a
culture becomes increasingly complex, there is an inevitable division between cultural producers and audience members, or cultural consumers. Once this division is made, there will be barriers to those interested in producing culture, relegating those who do not have access to the resources needed to be involved in production to a role of consumer. If the audience member is not part of the production processes, cultural or otherwise, but only a consumer, then there are differences between the consumer and the producer, or, in the present case, between audience members and arena participants. These constraints to movement relegate the audience member to a passive role, or to face the consequences of challenging the outcomes of a process controlled by those who have the resources necessary to shape arena outcomes.

It is important to recognize that the possibility of changing places between arena participants and audience members not only involves the possibility of literally changing places, but doing so without destroying the continuity of the arena. As Goffman (1959:167) noted, if participants in an interaction do not maintain their boundaries, "all participants find themselves on the same team . . . with no one left to play to." This is an extreme example of what would happen to an arena if there were no boundaries between participants and audience members -- the arena would cease to exist, or it would split into numerous smaller arenas, much like the segmentation processes so commonly found among social worlds (Strauss 1984). When these segments are formed, social worlds run the risk of losing sight of the goals or raison d'etre of participating in an arena.
A more likely scenario is for audience members and arena participants to change places while continuing the conflict. When this happens, such as with the anti- and pro-Vietnam groups of the 1960s (Gitlin 1980), conflicts can be perpetuated through the resources and energies of new arena participants. The infusion of new participants, though, can lead to a breakdown in the structure of the original arena. Gitlin (1980) chronicles such a breakdown in the Students for a Democratic Society (SDS) in the late 1960s. As more people joined SDS, new ideas and strategies were introduced to the organization, many that were incompatible with original SDS aims. Dissident groups and leaders emerged, including governmental infiltrators, and the organization splintered and eventually collapsed.

The permeability of boundaries includes not only the ability of participants and audience members to physically enter and leave the arena, but also the ease and amount of information flow which takes place between participants and audience members. Information flow is a problematic concept, and so we must be specific in our usage of the term. One pragmatic approach is to consider the range of effective communication (Shibutani 1955, 1966). Effective communication, as I understand it, is the ability to take the role of the other. Shibutani (1966) refers to this as consensus, though consensus in an arena may mean only consensus of the task at hand -- that choices between alternatives must be made -- and not necessarily what criteria are to be used to judge rankings of purity, or who should be making those determinations. Since effective communication, or consensus, can take place on any number of levels,
measures of consensus on only one level may not reflect deeper disagreements. If audience members do not have the ability to exchange information with arena participants -- especially when audience members will be affected by what takes place in the arena, and to work toward deeper levels of consensus, the possibility of audience backlash increases. It is often the case that communication has been effective on some levels but not others when there is news coverage of an event, such as news reporting during the McCarthy era and the Watergate scandal (Zelizer 1993).

**Prior Knowledge.** The final dimension I want to discuss is the amount of prior knowledge participants have of one another upon entering the arena. Prior knowledge, gathered either through direct or indirect contact, helps us in situating both ourselves and others in present and future encounters. When we have little prior knowledge of another actor, we tend to base our initial interactions on typifications taken from others or prior experiences which seem to fit the present situation (Berger and Luckmann 1967). In other words, the less prior knowledge we have of another actor, the more likely we are to use stereotypes to categorize this unknown actor. As we begin to repeat our interactions, some characteristics of the other will become more embedded in the initial stereotype, while others will become more unique to this specific other. Whether prior knowledge increases or decreases the amount of conflict would depend on the value which participants place on the outcome, but prior knowledge of other arena participants does impact behavior (Breault, Barker, and Lemle 1987). If we approach arenas and their ties by including structural aspects from the perspective that these
realities are socially constructed, then we can begin to understand why participants may be better prepared for interactions with known others as compared to unknown others.

The importance of these three dimensions becomes apparent when we use them to distinguish between types of arenas. A private arena would be characterized by a lack of an audience, impenetrable boundaries, and a high level of prior knowledge between participants. A public arena would be characterized by the presence of an audience, no boundaries between participants and audience members, and a low degree of prior knowledge between participants. Both scenarios are idealistic, but this offers me a starting point from which to approach newspaper arenas.

Before moving to the newspaper arena, it would be helpful to show that this framework can be used to approach other arenas, as one of my goals in this project is to construct a theory which can be incorporated into other sociological endeavors. In the next section, I will review other studies that have involved the use of resources in arenas to highlight my approach to resources and their relation to the larger arena context (e.g., Kitschelt 1985; Lipsky 1968; Renn 1992; Zald and McCarthy 1979). The examples I have chosen -- the family, a corporation, professional sporting events, a social movement with open recruitment, and science arenas -- include a wide range of arenas. Following this section, I will locate newspapers on the public-private arena continuum, as well as discuss how resources are used in these arenas, drawing on both prior research and my own interviews with reporters and sources who have been involved in the coverage of food irradiation.
Arenas in Research

One arena that falls on the private end of the arena continuum -- no audience, strong boundaries, and high levels of prior knowledge -- is the family in modern Western culture. Rising rates of divorce and domestic violence are indicators of the level of conflict that can be present within a family, but families are still regarded as private settings. The degree of prior knowledge among family members is typically high, which has been found to lead to less sympathy and empathy between family members than between strangers in some situations (e.g., Breault, Barker, and Lemle 1987). In terms of audience, while it is true that other family members or friends may be present during a confrontation, an audience is usually nonexistent. In addition, membership into a family is highly privatized and based largely on natural processes or religious rituals, so the ability to change places with a family member is difficult. The flow of information into family arenas can be more variable, ranging from very minimal -- involving only other family members, to extensive in the form of counseling or other types of direct and/or indirect advice from others. Participants, though, can have a great deal of control over this flow of information, and how much of it is put to use.

Morrill's (1991) study of a toy company (Playco) is an example of a formal, organizational arena. Morrill's main objective was to study organizational conflict and change, and to offer an insight into the strategies used by different groups within the toy company to reach their goals versus the goals of opposing groups. Prior knowledge of participants was extremely high, as committees were formed around problematic issues
and committee members were aware of whom their potential allies and enemies would be prior to committee meetings. In addition to committees and other business meetings, which were announced prior to arena engagements, Playco -- as with many large organizations -- had a command structure which constrained information channels by directing communications of who could speak to whom about what issues. Playco employees could miss meetings or attend them uninvited, and bypass command links, but doing so put them in jeopardy of losing face among fellow employees, or worse. In addition to the high amount of prior knowledge between arena participants, no audience was present during the meetings, and information flowing from the surrounding social space can be assumed to be largely in the form of sales figures. Placing the internal arena of Playco on the continuum of private and public arenas, I would argue that, while not as private as a family, this arena contains more private characteristics than public.

A professional sporting event, such as a football or baseball game, is an example of an arena in which both public and private aspects are highly visible. Prior knowledge between teams is based on prior contests, which, in turn, are based on scheduling idiosyncrasies and scouting, so prior knowledge can be minimal or extensive. Members of the general public are invited to watch and cheer for the teams, so audiences are present during the conflict between the teams. These audience members, though, have little hope in exchanging places with the arena participants, and the flow of strategic information between the audience and the team is disproportionately a flow from the latter to the former. Audiences are kept up-to-date on injuries, trades, salaries, and
personnel moves, but, other than ticket sales, vocal support, and sales of team paraphernalia, audience members have little input into the day-to-day operations of the teams.

A social movement with open recruitment is an arena that is more public than private, such as anti-nuclear protest groups. As noted by Benford (1993), opponents of nuclear weapons and power have tried to recruit as many people as possible, and many of these groups have demanded collective action on the part of their constituents to reach their goals. Not only is recruitment open for opponents of nuclear power, but it can be assumed that the same holds true for those groups who support nuclear power. In such a situation, prior knowledge between participants may not be very high, as opposing groups are unsure of who is going to be on which side, and what tactics will be used by the opponents. In addition, the presence and behavior of outside groups, such as police, reporters, and government agencies are typically unknowns to some extent, though strategies are used to try to manipulate these factors (Gamson 1992b; Gedicks 1993). If media coverage is given to the movement's antics, or a protest is scheduled for an area where it will be highly visible, then the audience for the arena can be quite large. As noted, the boundaries between audience members and participants can be quite porous, though leaders may be reluctant to give up their positions of power. Information flow between movement members and audience members can be high, as audience members are kept informed of the movement's needs, tactics, and goals, and
movement members keep abreast of information coming from outside groups such as
scientists, other activist groups, and regulatory agencies.

The final arena to which I will apply these private-public dimensions, before
turning to newspapers, is the science arena. There are two reasons for discussing this
type of arena. First, I want to show that the science arena is little different than other
arenas, characterized by both public and private aspects. Secondly, because food
irradiation can be thought of in terms of a scientific/technological issue, I think it is
important to set the parameters in which this issue will be discussed.

A number of examples highlight the conflict that may take place within
scientific arenas. The cold fusion controversy pitted researchers from the University of
Utah against researchers from around the world (Close 1991; Collins and Pinch 1993;
has been a controversial subject for the past 15 years, with scientists arguing for and
against the possibility that an asteroid colliding with the earth caused the mass
extinctions (Glen 1994; MacLeod and Kellar 1996). Coffee was even at the center of a
scientific debate which concerned the linkages between coffee consumption and
pancreatic cancer (Hilgartner and Nelkin 1987; MacMahon and Sugimura 1984;
MacMahon, et al. 1981; Ryan, Dunwoody, and Tankard 1991). In each of these cases,

Science/technology is only one frame which could be used to discuss food irradiation.
As noted in the last chapter, frames which are more closely aligned with consumer
issues and business news have also been used on this topic.
scientists came up against other scientists, and news reporters were there to relay the contests to the public. Direct feedback to scientists engaged in such debates is hard to track, but financial rewards may have played a part in the debates over dinosaurs and coffee. The amount of public interest in dinosaurs can be translated into financial rewards, and the possibility to tap into these rewards may have helped fuel this debate (Clemens 1986). Coffee, in its turn, may have been held afloat by those with a vested interest in giving it a healthy stamp of approval — coffee producers. A conference held to investigate the effects of coffee on the human body was funded by such groups as the Folgers Coffee Company, General Foods, and the Nestle Company, with the final analysis being that coffee was not as dangerous as had first been suspected (MacMahon and Sugimura 1984).^6

These scientific issues were chosen because of the mass media attention they gained, giving them an audience, and, therefore, a public dimension. The amount of prior knowledge among participants was high, and the ability of audience members to exchange places and give information to the arena participants was low, characteristic of private arenas. In other words, like most arenas, science arenas have both private and public dimensions, and could be studied using the same framework I have proposed for

^6It should be noted that some of the researchers who originally made the claim that there was a possible connection between incidents of pancreatic cancer and coffee consumption were present at this conference. As with the other conference participants, these researchers recanted their original cautionary messages, saying, in one case, that coffee had so many ingredients that there was no way to pinpoint which, if any, could be considered risky.
studying newspaper arenas. In fact, the arena approach is not new to science studies. Clarke (1990; Clarke and Montini 1993), for example, has used this perspective to study reproductive science, though private and public dimensions of that arena were not part of the study. It is interesting to note that the groups involved in the reproductive science arena were not exclusively scientific groups. According to Clarke

The social worlds participating in the broader arena in which reproductive science emerged included universities, biology, genetics, embryology, animal scientists, and the animal agricultural industry, birth control movements, medicine, obstetrics, and gynecology — a wide array of scientific and nonscientific worlds (1990:28).

The fact that all of these groups were not communicating directly with each other means that some vehicle of communication must have been in place to fill that role. Clarke mentions that different groups were forcing this topic into the "public forum," but does not discuss the nature of this forum. It can only be assumed that channels of mass communication, such as newspapers, were part of this public forum.

Newspaper Arenas

It is often the assumption of social scientists that newspapers are public arenas based on the notion that the information is widely disseminated and highly visible. Hilgartner and Bosk (1988:58-59), for example, argue that social problems are constructed in public arenas:

The collective, definition of social problems occurs not in some vague location, such as society or public opinion but in particular public arenas in which social problems are framed and grow. These arenas include the executive and legislative branches of government, the courts, made-for-TV movies, the cinema, the news media (television news,
magazines, newspapers and radio), political campaign organizations, social action groups, direct mail solicitations, books dealing with social issues, the research community, religious organizations, professional societies, and private foundations. It is in these institutions that social problems are discussed, selected, defined, framed, dramatized, packaged, and presented to the public.

The claim that each of the mentioned arenas, such as professional societies and branches of government, are public is questionable. There can be little doubt that these arenas are important in the construction of social problems, but it is not clear to what extent these arenas are public. As Travers (1995:214-215) notes, "... public discourse, although reflective of the views of the majority, may serve the interests of only a privileged minority, and thus, may be ideological in nature and function."

If we focus specifically on the mass media, we have abundant evidence that these institutions of public discourse serve the interests of a privileged minority (Bagdikian 1992; Kellner 1990; Mitroff and Bennis 1989; Schiller 1989; Sklair 1991), and have been labeled chimera for critical theorists (e.g., Agger 1989; Horkheimer and Adorno 1974), who argue that advertising interests have come to control media discourses, if not through advertising dollars, then through direct purchasing of the media outlets, which gives them even greater control over the information flow from media outlets to audience members.

While it is true that more and more media outlets are being controlled by fewer and fewer organizations (Bagdikian 1992), what researchers who focus on this aspect of the mass media fail to realize is that dissenting voices can still be heard (Gamson et al.
By focusing on issues of media control, theorists overlook not only the importance of prior knowledge, audiences, and boundaries, but also of the structural conditions of the arena, the power of those participating in the arena, their activities, and their interactions (Strauss 1978b; Strauss and Corbin 1990).

**Audience.** It is obvious that newspaper arenas are constructed for the sake of attracting audiences, otherwise newspapers, at least in capitalist societies, would cease to exist. While I do not want to dwell on this obvious point, I think it is important to consider temporal aspects of the audience. By this I mean that newspaper arena audiences are typically present after the arena contest, or at least become aware of the contest after it has started; in other words, the news consumer is usually reading yesterday's news. Still, the fact that an audience will be present at some point can make a difference in the behaviors of the arena participants, as will be seen in a later chapter.

**Boundaries.** As it will become clear, journalists have a propensity to use the same sources across reports, so it could be assumed that the boundaries between newspaper arena participants and audience members are relatively impermeable. Gitlin (1980) found that once a person had been labeled a source it was difficult for others to attract the media spotlight, unless they distanced themselves from the original source, which could lead to a weakening of any kind of coalition between these sources. The creating of well-used sources is also true of scientific sources (Goodell 1975; Shepherd 1979). In addition, scientists may find barriers to channels in the form of professional norms which emphasize the peer review process and scorns dissemination along channels of
popular mass media (DiBella, Ferri, and Padderud 1991). This adds impetus to reporters using sources who have been willing to divulge information in the past.

The ability (or probability) of scientists to replace each other as sources, or for audience members to speak on behalf of scientists within mass mediated channels of communication is unlikely, though individuals who are not practicing scientists can gain media attention on scientific issues. As mentioned earlier, activist groups and other nonscientific organizations have entered the debate over reproductive science (Clarke and Montini 1993), and knowledge concerning AIDS has been largely influenced by grassroots groups (Indyk and Rier 1993). Activist groups have also played a major role in the debate over food irradiation, and one reporter I spoke with recommended taking calls from audience members on all topics.

. . . as an editor I always tell my reporters, look, just because somebody's a nut, you know, doesn't mean you shouldn't take their call. I mean, you get your best tips from nuts. That's just good reporting. So, I mean, I am very receptive to just about anybody who wants to call me and give me a news tip. (Telephone Interview, May 7, 1997)

While this statement may give the impression that newsmaking is a dialectic process of reporting and public feedback, the part played by the audience in the process can be very minimal, possibly because the public feels alienated from the production of media discourse (Montgomery 1989). Still, when a reporter feels that there is little interest in a story, reporting on that story may very well be discontinued, as the same reporter noted
... everybody cared even less than I did about the subject. You know, I think our food writers did some coverage, but, you know, they weren't all that interested in [food irradiation] either. You know, it was kind of flash in the pan, and it wasn't anything that was really that important to most of the people in the paper, or to that many of our readers.

**Prior Knowledge.** The level of prior knowledge among newspaper arena participants, both reporters and sources, can be quite high in many newspaper stories. On issues such as food irradiation, which has received coverage for a number of years, sources can also predict who will likely appear in an article. For example, one activist told me how reporters rely on earlier stories to figure out who they will contact. This practice of using sources from past stories gives the arena participants an idea of who will appear with them in subsequent stories.

... they do a search, they look up in the library some articles, and, you know, there is, you know, [an industry spokesperson] from Vindicator that said something good about it, there's [an activist] ... that said something bad about it, and, you know, maybe a handful of others, someone that, [a scientist] at the FDA, and, you know, you know, we have other scientists that we often turn the media on to, and then that just becomes successive journalist story thereafter. And that's why you get such a, kind of a homogenization of the people that are quoted on these issues. (Activist, Telephone Interview, May 23, 1997)

This sentiment is echoed by others who have studied the relations between sources and reporters. For example, Tuchman (1978) found that once reporters had made contact with willing and reliable sources, they tended to use them on a consistent basis (cf. Gans 1979; Gitlin 1980). With these regular ties, or what Tuchman (1978:19) referred to as "umbilical cords," sources could anticipate which other sources would be used by a reporter when they were asked to comment on an issue. Much the same can
be said about scientific reporting, in which specific scientists are repeatedly used as sources (Friedman and Dunwoody 1986; Goodell 1975; Singer and Endreny 1993), even when they have done little or no research on the issue in question (Dunwoody and Ryan 1987; Shepherd 1979).

**Internal Dynamics.** Up to this point, the evidence is clear, indicating that newspapers have both public and private arena characteristics, and that it is misleading to approach them as strictly one or the other. I will now turn my attention to the internal dimensions of these arenas.

As noted by Ericson, Baranek, and Chan (1989), the structure of news organizations has received a great deal of research attention. One of the more obvious structural constraints on news organizations, in regards to the production of news, is that they are in business to make money. Because the vast majority of the operating budget for most newspapers comes from advertising revenue, there is an incentive to shy away from stories which might upset advertisers. For instance, Bagdikian (1992) relates a story about when a consumer activist group was asked by a producer of *NBC's The Today Show* to give them a list of the major consumer boycotts which were taking place. When the activist group mentioned that the biggest boycott was aimed at General Electric, the producer refused to run the story because General Electric not only advertised heavily on the network, they also owned the network at the time.

Advertising not only shapes newsmaking, but has helped in constructing what Altheide and Snow (1991) refer to as "media logic." Media logic encompasses a
number of the structural components of the popular news media, including the crunch of deadlines, principles of objectivity, and entertainment appeal. Altheide and Snow may have overstated the flattening effect of the media on culture and society (e.g., Gamson et al. 1992; Gunther 1992), but there is something to be said of this approach. Deadlines can make it difficult for reporters to check on the reliability of sources, so reporters tend to give preference to those sources who have proved reliable in the past (Gans 1979). In trying to satisfy the principle of objectivity, reporters can over-represent extreme groups which make up a minority of those interested in a certain issue (Noelle-Neumann 1993). In addition, given the proliferation of news magazine shows, there can be little argument that many popular news stories and the sources behind them have become more sensational (Mitroff and Bennis 1989). Finally, the bureaucratic structure of most news organizations lends itself to mistakes or editorial blunders as a story is written and rewritten as it moves through the news hierarchy (Gans 1979).

Each of these characteristics contribute to the packaging of a news story, which must be timely, consist of opposing viewpoints, quick, and colorful. Altheide and Snow (1991) argue that the consequences of these structural constraints on a powerful institution have translated to a society which is driven by the same logic so that all behavior is shaped by the same structural components. In other words, instead of events shaping media coverage, we now live in a society in which all social phenomenon is made to fit the mass media model, which has become both omnipresent and omnipotent.
Participants and Power. The next aspect of the newspaper arena to address is the power of the participants, which would pit sources against reporters. Research findings concerned with the distribution of power between reporters and sources have been mixed. In a review of this research, Soley (1992) found, on the one hand, sources in key positions, such as individuals within the federal government, were able to control a great deal of media attention. On the other hand, research had been conducted which found the media were able to slant reporting by choosing which sources they included and excluded from coverage. Ericson, Baranek, and Chan (1989:16), who carried out an extensive study on source organizations, argued that both reporters and sources face difficulties in gaining access to each other, and that "[r]eporters have multiple and varied sources of knowledge, and sources have multiple media outlets to convey their preferred versions of what appears to be the case." In other words, the reporter-source interaction is potentially a site of conflict and the site of control efforts. What is important to keep in mind is that both parties have an interest in controlling the interaction, so power is a concern to all sides.

If struggles for power take place within newspaper arenas, then we need to pay attention to what reporters do to gain and maintain access to sources, and vice versa. Early studies of the activities of both reporters and sources include Boorstin's (1964) work on pseudo-events, in which Boorstin found that an increasing number of groups were staging events for the sole purpose of gaining media attention. By understanding the media logic of news organizations, groups have been able to position themselves
and their issues to be readily available to news reporters, giving the interest group an advantage over competing groups that do not have the same abilities. A second study, conducted by Sigal (1973), came to much the same conclusion: that news was dominated by those sources which were able to open channels to news outlets, usually by way of operating a media relations office which furnished reporters with ready-made news stories.

The kinds of strategies discussed by Boorstin (1964) and Sigal (1973) can be found in the coverage of food irradiation, as one reporter noted

[One activist group] was very aggressive. I think relentless is a good word for them. . . . They were constantly faxing us things, they were constantly calling us. They were constantly giving us tips, and some of these tips turned out to be, you know, semi-accurate, some of them turned out to be just, you know, really worthless. But, I remember reaching a point with them where they were clearly trying to monopolize my time purposively so that I wouldn't talk to anybody who disagreed with them. And, I remember one case where, you know, I, I sat down . . . I was trying to keep a tally of how many times they called me in the course of three or four days, and it was something like 33 times. (Telephone Interview, May 7, 1997)

Pseudo-events and press releases are strategies used by sources to gain access to reporters, although most press releases received by media outlets never make it into the newspapers. It is imperative for the source to know how to package an issue, and which media outlets may be interested in covering the issue. This is a form of cultural capital which was widely used in the coverage of food irradiation.

**Interactions Within the Arena.** The interactions between reporters and sources are important for understanding the newspaper arena. As shown in the above quote, these
interactions can be anything but cordial, though reporters and sources that I interviewed
recalled most interactions as being amicable, or at least benign. The effectiveness and
durability of these interactions are evident in both the news articles and the stories told
by reporters and sources. That these reporters and sources did have interactions that
resulted in newspaper articles is explicit in that they were chosen to be interviewed
based on these criteria. The stories that were told of these interactions will offer a
deeper understanding of the strength of the ties which developed between these actors.
While these will be examined at length in the next chapter, I want to set out an
interpretive framework which will be used to ground the descriptive and analytical
discussion I will be undertaking. While this is not a study of networks, the notion of
ties, which are used extensively in network studies (e.g., Granovetter, 1973, 1974, 1985;
Leifer 1988; Wellman and Wortley 1990; White 1992), provides a base for a
classification scheme that dovetails nicely with my ideas of action and interaction.

White (1992:68) argues that "[s]tories come from and become a medium for
control efforts . . . " in situations where disciplines have failed and the resulting linkage
between identities is a tie. Given that ties are problematic, especially in an arena, it is
important to distinguish between different types of ties from which stories arise, and, in
turn, embed action. Within any tie, there must be some type of reciprocity, for without
any exchange, the interaction will stagnate or collapse (Strauss 1993). Reciprocity does
not need to be equal between interactants, which is the impetus for a classification of
ties. For purposes of examining the newsmaking process, I want to distinguish between four types of ties – parallel, distant, central, and dependent.

Parallel ties are characterized by a non-mediated and balanced reciprocal flow of resources between linked actors. Friendship is a story which can arise out of parallel ties, as actors come to rely on the resources of each other across a variety of situations. Friendship is not a necessary outcome of parallel ties, but only one possible outcome from a wide range of stories. Distant ties do not require a balanced flow of resources, as distant ties are characterized by at least one mediating actor between the linked actors. The presence of a mediator lowers the need for reciprocity, but does not eliminate the possibility of reciprocal action. In addition, distant ties are susceptible to the production of misinformation, as a mediator increases the level of contingencies bearing on the linkage. Granovetter's (1973) weak ties are similar to distant ties, in that actors with more weak ties have larger information networks, though the actor is not necessarily aware of the origins of the information. Centralized ties are characterized by one powerful identity controlling the reciprocal actions of a number of other identities, while reciprocating only when needed. Stalin’s rise to power in the former Soviet Union offers an example of centralized ties (Bullock 1992). Stalin was able to use his position as Secretariat of the Communist party to move between factions, playing stronger factions off weaker ones. These control efforts, made possible by his central

Linkages refer to the connection between the actors under investigation, in this case the reporters and sources involved in the coverage of food irradiation.
position in the party, left him more powerful than any serious rivals such as Trotsky and Zinoviev. Finally, dependent ties are characterized by a minimal amount of reciprocity as one actor is able to dominate the flow of resources. Slavery in much of the New World is an extreme example of dependent ties, as slave owners had the resources to work slaves to death, or at least afford them few life chances, and only through armed retaliation, the collapse of markets, or abolition where slaves able to gain any control over reciprocity, though even in this extreme example of domination, slave owners depended on the slaves to work their lands (Johnson 1991).

Each of these types of ties could arise between reporters and sources, depending on the resources controlled by each party, as well as goals of the actors. If the relationship between a source and reporter is close, stories of parallel ties would emerge, and both actors would have a stake in reciprocating in ways that maintain the relationship. Parallel ties could also arise around cultural capital, such as when a reporter finds a source that is both willing to be interviewed and reliable to provide accurate information. In such a situation, the reporter would seek out the source over a period of time, building rapport based on mutual expectations. Parallel ties would be less stable if based on economic capital, especially in the case of reporters and sources, as the only way money could be the base of such a relationship is through advertising or

---

While the extreme living conditions of slaves in the New World are well known, the following quote is another example of just how dominate slave owners were. The quote is from the wife of a plantation owner in the early 1800s. “It makes one grieve to pay 300 pesos for slaves that you cannot use for more than eight years” (Johnson 1991:318).
bribes. Distant ties could arise out of any of the types of capital, as actors could pay others to gather or disseminate information (economic capital), gain knowledge of linkages to distant others that could then be used to gain access to these distant others (cultural capital), or rely on known others to gain this access (social capital). The same is true of centralized and dependent ties, although I must caution against thinking of the types of capital which make these ties possible as equally potent. The stories which will be presented in the next chapter show that they are not equivalent across situations.

Not all of these structural components of the newspaper arena will be thoroughly examined in this study. I have highlighted these aspects of the newspaper arena to give the reader a better understanding of the social spaces in which these arenas operate. I will focus on the resources and strategies which reporters and sources use to further their interests, and couch these resources and strategies in terms of power. In addition, an interpretation of the linkages experienced by the reporters and sources I interviewed will be constructed around the types of ties I have discussed. Finally, I will present stories of the larger structural components which impact the internal dynamics of the newspaper arena.

I now want to briefly discuss mass media coverage of science and technology, so as to begin constructing the linkages between theory and observation. The area of science in the media has been well studied (Clemens 1986, 1994; Dunwoody and Ryan 1985, 1987; Goodell 1975; Mazur 1981, 1990; Nelkin 1987, 1995, 1996; Ryan, Dunwoody, and Tankard 1991; Singer 1990; Ungar 1992). As Hansen (1993) and
Lewenstein (1995a) have noted, though, these studies seldom try to approach science coverage from larger, or more general, theoretical perspectives. The focus is usually on the relations between scientists and journalists without trying to understand these interactions from the standpoint that both sides are empowered and constrained by social factors that affect these interactions. This approach, that the coverage of science somehow differs from other social phenomenon, may be a consequence of putting science and scientists on a pedestal from which truth floats down to the masses. The recent proliferation of studies on the social construction science and technology (Bijker 1995; Callon 1986; Collins and Pinch 1993; Latour 1987; Latour and Woolgar 1986; Pickering 1993; Woolgar 1988) has tarnished this image, as many of the claims made by scientists and technicians are no longer treated as authoritative, and public opinion is actually beginning to turn against science in some cases (Crook, Pakulski, and Waters 1992:197-219), including food science (Anderson 1995; Hoban 1995). This gives impetus to the idea that news coverage of science can, and should, be informed by sociological perspectives that have been constructed to understand other social phenomenon.

Some would argue that scientists are not concerned with public opinion because lay audiences typically do not have the necessary education to understand their work (Dunwoody and Ryan 1985), and funding is not dependent on public opinion. A more recent study, though, found that many scientists feel that interviews given through mass media outlets are important means for educating the public (DiBella, Ferri, and
Padderud 1991). Most of the scientists I spoke with felt much the same way. The following response was typical of scientists in both government and university settings.

TT: Do you think this is a topic that should have been covered in the newspapers?
GS: Yes. I think it, I think it would have been, I think it is being covered more frequently now in an even-handed manner. As with several new technologies, there are groups that oppose this technology. And, they seem to have access to the public press with greater ease than do scientists and government representatives. And, also they're not constrained by necessarily telling only the facts. They can give their interpretations of the facts, which don't have to be backed up, or supported, by, by scientific study or, or factual information.

(Government Scientist, Telephone Interview, June 12, 1997)

The qualification given to this statement, that activist groups seem to enjoy greater access to the media, is an indication that scientists are beginning to see that they are not a privileged group when it comes to media access. Instead, they feel that they must control resources which give them access, much like other individuals and groups. In other words, scientists do not become media spokespersons merely by occupying a position on a university or government payroll. They become media spokespersons when they have control over some kind of resource that is deemed newsworthy. The ties are not dependent on the scientist agreeing to be interviewed and the journalist following this lead. Instead, reciprocal activities take place across the interaction, giving both parties opportunities to gain control over the situation. The stories told of these interactions by those who have experienced them will give us an insight into the resources that are being used to construct these different types of ties.
Conclusion

I have argued that newspaper arenas contain both private and public characteristics, based on the presence or absence of an audience, the permeability of boundaries between the arena and audience, and the amount of prior knowledge between arena participants. The main point of this argument is that both sources and reporters must gain and maintain access to each other. This is done by getting and blocking action, which is based on the resources, or capital these actors control. Following Bourdieu (1984, 1986), I have distinguished between economic, cultural, and social capital. The distribution of control over these types of capital can and will affect the linkages between sources and reporters, in addition to giving arena participants the opportunity for changing arenas from public to private, or vice versa, depending on their conceptions of what will best suit their needs. In the next chapter, I will discuss the methodological foundation which directed the interviews I conducted with reporters and sources. In chapter V I will present the stories of these linkages as given by the reporters and sources. By describing, analyzing, and interpreting these stories, I hope to show that the production of news depends as much upon control over these types of capital as does other production processes. I will present stories which pertain to the public-private dimensions of newspaper arenas in Chapter VI.
CHAPTER III:

METHODOLOGICAL FOUNDATIONS

Introduction

In searching for a methodological foundation that suited both my needs for gathering data from which to construct a general (and somewhat critical) theory, and to answer questions concerning the experiences of being part of the newsmaking process, I found that qualitative methods were well suited for the task. Qualitative methods, though, encompass a large range of actual data gathering techniques, including ethnography, participant observation, and interviewing (e.g., Feagin, Orum, and Sjoberg 1991). Each method has both its strengths and weaknesses, so while I have relied for the most part on interviews, I have also made use of existing documents, namely newspaper articles. My goal in this chapter is to offer the reader an insight into these methodological undertakings. My starting point is a brief mention Everett C. Hughes’ approach to qualitative methods, which seem to compliment my own ideas on this subject.

Hughes, according to Strauss (1996), was inclined to engage in field work, and was, therefore, involved, or at least closely observing those who were involved, with whatever was being studied. Hughes (1971:454) noted that society is the “ideal laboratory in which to observe certain processes which will give us new knowledge of special interest,” and that we must pay attention to both contemporary situation and ties to the past. While this might not have been an overarching endorsement of qualitative
methods, and I would think that Hughes would not have endorsed such an interpretation of this statement, I believe it to be an assertion that sociologists should use the most appropriate tools available, including qualitative methods (see King, Keohane, and Verba [1994]).

Bauman (1992) has also presented a challenge to researchers to move about within the empirical world. In a critique of Jean Baudrillard's work, Bauman argued that "[p]ersonal experiences can be enclosed by the frame of the television screen. One doubts whether the world can. . . . It becomes . . . an analyst . . . to go out and use his/her [sic] feet now and again. Strolling still has its uses" (155). Again, this does not presuppose a researcher to using one specific data gathering technique, as that should be a function of the research question which is being asked; what it does tell the researcher is where to go to gather data. For my purposes, and to address the research questions I am posing, I will use qualitative methods.

My reliance on qualitative methods is not without contemporary supporters. For example, Abbott (1997) has criticized the variables revolution in sociology, which places a great deal of emphasis on correlations, saying that we need to study human interaction within the context in which it takes place, and that sociologists "now have the empirical power to return social facts to their temporal and spatial context" (1169). That qualitative methods can help in this undertaking is without question, and, as noted by Wolcott (1990), qualitative methods have been sufficiently defended, though researchers using these tools seem to reinvent this wheel each time they write about
their work. Instead of being defensive, qualitative researchers need to offer readers, and themselves, enough information about what has been done so both reader and researcher can question the study. One of the strategies of disclosure which has become very popular among qualitative researchers is reflexivity, which is where I will now turn my attention.

A Note on Reflexivity

The reflexive push in qualitative studies cannot be overstated or overlooked, as the next few examples will illustrate. Rapp (1998) studies reproductive technologies after having used amniocentesis while pregnant; Star (1993) turns her allergic reactions to onions into a piece on power; Latour (1992) laments about his automobile’s automatic seat belts and writes about the role of non-human actors in the sociology of science. In addition to these personal experiences leading to an interest in studying certain topics, some sociologists, such as Andrew Pickering, are studying disciplines in which they were once involved professionally. While it is true that researchers using qualitative methods have long been reflexive, such as Whyte’s (1943) explanation of how he came to be interested in, and how he gained access to, the people of Cornerville, they did not pursue how these reflexive accounts could elucidate the framing of their studies. Reflexive accounts are now considered an important part of judging qualitative research in terms of “its validity, reliability, plausibility, and other points of scientific, personal or policy relevance” (Johnson and Altheide 1990). My own interests in offering a self-reflexive account echoes Richardson’s (1998:359)) idea that “[s]elf-
reflexivity unmasks complex political/ideological agendas hidden in our writing. Truth claims are less easily validated now; desires to speak 'for' others are suspect.” It is imperative that the researcher who maintains to truthfully display the lived experiences of others must be aware that such an endeavor cannot be done without great difficulty, if it can be done at all. It should be noted that this is not a bandwagon I have jumped upon, but an understanding of the importance of laying bare the scientific process.

The idea to study food irradiation grew out of my interest in both the sociology of mass media and the sociology of science. My interest in the former is largely the result of having been a radio announcer, and I was intrigued by some of the approaches taken, and conclusions made, by sociologists in this area. Though I never worked within the confines of the major networks, I found myself asking whether or not I, as well as other mass media personnel, really had as much power as writers such as Bagdikian (1992) and Mitroff and Bennis (1989) say I did, or was the locus of power within the newsmaking process a negotiation between reporters and sources. The idea that a study of food irradiation may shed light on this concern arose out of a reading of newspaper coverage of oysters and oysters harvesting in Louisiana. After a closer look at this coverage of oysters, I noticed that food irradiation was not only discussed by scientists but by activists, government spokespersons, and industry spokespersons as well. I began to gather more newspaper articles on food irradiation, in addition to reading more literature on the popular mass media coverage of science. Much of this latter literature was aimed at the role of scientists as sources, with little thought of the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
part played by activists or lay people as spokespersons. The variety of sources speaking on food irradiation seemed to make it an ideal topic with which to study not only the locus of power in reporter-source interactions, but the experiences of a wide variety of people who had taken part in constructing a scientific/technological issue.

This is my reflexive account. While I was not sure what I was going to find when I spoke with reporters and sources who had been involved in the coverage of food irradiation, I did expect to find that all sides were interested in gaining control over the interactions, and that both sides would wield some degree of power. In fact, I find processes of negotiations within the newsmaking process, and I think the data will show this. In other words, while I confirmed my suspicions about the locus of power between reporters and sources, I do not think my own background colored this finding beyond provoking an interest in the sociology of mass media and science.

With my reflexive account finished I can now turn to my data gathering techniques. I will first discuss the choice of newspapers from which I gathered the names of reporters and sources to interview. I will then offer an overall description of the interviewees I spoke with, followed by an explanation of the interview instrument I

\[1\] Johnson and Altheide (1990) have argued that the reflexive account encompasses not only the relationship of the researcher to the setting and substance of study, but issues of perspective, the role of the researcher in writing, and the style of writing used. I do confront each of these issues in this chapter, so it could be considered as one long reflexive account, though I think the most important aspect of the reflexive account is the relationship between the researcher and the focus of study.
used. Finally, I will discuss the actual writing of my study, as the writing phase is as important for this type of study as the gathering of the data (Warner 1991).

**Gathering the Data**

**The Newspapers.** At this point I want to discuss the strengths and weaknesses of the two newspapers I used to construct a list of reporters and sources involved in the coverage of food irradiation. I will discuss in more detail the actual coverage of food irradiation by these newspapers in the next chapter. To begin, I should mention the role of technology in this study. Electronic databases, such as Lexis-Nexis, have made research concerning newspaper coverage much easier and accessible, and I have used Lexis-Nexis and an in-house database to collect newspaper articles that were used to generate the list of reporters and sources used in the food irradiation issue. Not all articles carried by a newspaper are included in these electronic databases, such as wire service stories, unless they are focused on a local situation, are considered to be of major importance to the local audience, or include information gathered by a local reporter.² While this limits the number of articles, journalists, and sources discussed here, it should not impact an estimate of the amount of coverage given to this issue at the local level. In addition, since I was interested in talking with reporters and sources

---

²I was told by one of the reporters/editors whom I interviewed that which articles will be included in such electronic databases depends on decisions made by personnel at each newspaper.
involved in coverage at the local level, wire service articles would not have been useful for gathering names of these types of sources.

The first paper I used to gather information concerning food irradiation is the major daily newspaper in a southern capital city, which I will refer to as The Capital News. While this paper does not have the largest circulation in the state, it does cover state proceedings and is close enough to the largest city in the state to have a reporter assigned there. One reason for choosing a newspaper in a state capital was the importance of legislation on banning irradiated foods in New Jersey and New York (Pszczola 1990). This was not a necessary consideration, as no legislation concerning irradiation foods took place in this state.

In addition to a newspaper serving a state capital, I wanted to include a newspaper which was close to the only commercial food irradiation plant in the United States, which is located in Mulberry, Florida. After gathering information on the amount of coverage given to irradiation by the major papers near Mulberry, I contacted each paper to get an idea of the willingness of reporters to talk with me, and whether or not any of these newspapers had any disclosure policies that would make interviewing difficult. After contacting each paper, I found one -- referred to as The Florida Press -- in which a number of reporters were willing to be interviewed, and editors would give me their approval to conduct the interviews. The Florida Press has a larger circulation
than *The Capital News*, and prints a number of regional issues. While *The Florida Press* did have a regional office near the irradiation plant during the period I studied (1987-1996), it has since closed that office.

In considering the similarities and differences between the papers, the most striking similarity is that neither paper has a designated science writer, so assignments to cover food irradiation were given to general assignment reporters, so the interest and background of these reporters would probably differ from a science reporter. While this may explain the amount of attention given to non-scientists by the reporters covering the issue, it may also be a sign of the budgetary restraints many local papers face, even those servicing top 100 media markets. This begs the question as to what research focused on science in the media is missing when the only papers used in the studies are national papers such as *The New York Times* or *The Washington Post*.

One of the major dissimilarities of these two newspapers is not an internal difference, but the amount of coverage given to food irradiation. *The Florida Press* carried nearly four times the number of articles on irradiation as compared to *The Capital News* (119 and 34 items, respectively), which is likely a consequence of being close to the food irradiation plant. Locality has been shown to be important in

---

constructing scientific knowledge and applying technological innovations (Smilie 1991); it seems that it is also important when considering mass media coverage.

**Selecting Reporters and Sources.** I separated all articles from both newspapers that focused on food irradiation and written by a local reporter from articles written by either syndicated columnists or wire service reporters. A list of local reporters and their sources were made, including sources’ organizational affiliations. I made a special effort to find sources appearing in the greatest number of articles. Although I tried to find contact numbers for all sources, this was not possible for some people due to a lack of background information (such as a grocery store shopper who talked to a reporter about buying irradiated food). In terms of the percentage of items in which reporters or sources from the newspapers were interviewed, reporters and/or sources from 24 (70.59%) items in *The Capital News* and 42 (35.29%) items from *The Florida Press* were interviewed.

After gathering this information, I contacted administrative personnel at both newspapers to learn about their policies on giving interviews to persons such as myself,

---

4I would like to point out that, according to a Lexis-Nexis search, the national edition of *The New York Times* carried 70 articles on irradiation during this same time period. Generalizations made from *The New York Times* on the importance of food irradiation to the nation, then, would overestimate the salience of the story in Louisiana while underestimating it in Florida.

5One source appeared in 26 articles, while another appeared in 16. All other interviewed sources appeared in six or fewer articles, 17 which appeared in only one article. Reporters were similarly distributed, as one reporter wrote 12 articles, and all others less than six (three wrote one article).
and I was given permission to talk with reporters. I went through the same procedure with a reporter who had left The Florida Press and was working for a different newspaper. I then began calling on reporters and asking them about their experiences concerning the coverage of food irradiation. I was also contacting sources at this time, following the same procedures, though in many cases I did not need to speak to administrative personnel before conducting the interview. Table 1 contains information concerning the types of sources I interviewed. In addition, I spoke with twelve reporters who had written articles for each of the newspapers.

<table>
<thead>
<tr>
<th>Type of Source</th>
<th># Interviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industry</td>
<td>11</td>
</tr>
<tr>
<td>U.S. Government</td>
<td>9</td>
</tr>
<tr>
<td>University</td>
<td>9</td>
</tr>
<tr>
<td>State Government</td>
<td>6</td>
</tr>
<tr>
<td>Activist</td>
<td>5</td>
</tr>
</tbody>
</table>

The Interviews. Of the 12 reporters and 40 sources, I interviewed 11 of the former and 36 of the latter through direct conversation, either as face-to-face interviews (eight) or phone interviews (38). Other forms of information gathering consisted of a series of phone messages from an in-house columnist (the columnist did not have a direct line),
an electronic mail dialogue with one source (who appeared in one article in *The Capital News*). In addition, I spoke with four other people who were acquainted with the source who had appeared in one of the papers, and were aware of the media relations of the source organization. In fact, each of these people had also been a news source for their respective organizations. Of these 52 interviews, 34 interviews were taped, and 16 reconstructed after the interview. Reconstructed interviews were with sources or reporters who were marginal to the reporting (writing or appearing in only one article). Only two sources declined permission to tape the interviews, and one of these terminated the interview before it was completed, though I did get some information about her experiences as a media source. Interviews, including this one which was cut short, lasted between four and forty minutes.

All interviews were conducted while the interviewees were at work, except for one activist, who was at home, and one reporter, who only had time to be interviewed after work. The interviews, which were conducted between April and July of 1997, were centered around a focused interview instrument, though the style of interviewing was unstructured. By focused, I mean that I had particular questions I wanted to ask each respondent, specifically on how and why they had been chosen as reporters or sources on the topic of food irradiation. I wanted them to discuss the different types of strategies, resources, capital, and/or ties they had used or constructed with as little

---

6An annotated interview schedule appears in the Appendix.
prompting as possible on my part. But, as noted by Merton (1987), to focus on one thing is to miss something else, so I kept the interviews unstructured, so that answers not directly pertaining to my research agenda, but which brought up other areas of interest, could be followed to some extent.

This unstructured approach also gave me the flexibility needed to help contextualize the reporter-source interactions. Because much of the coverage took place between 1990 and 1992, many of these encounters occurred five to seven years prior to my interviews. In some cases, reading the article to the interviewee helped in recalling the interaction, such as in the following interview with an industry spokesperson. I had just read a quote from an article to see if it could help the interviewee in recollecting the interaction.

Well, yeah, I remember that term, “eco-terrorists,” now. You've triggered my memory banks a little. That's how I viewed them then, and that's how I view them now. You know, the oyster industry has been fighting an uphill battle over the last ten years, and, you know, irradiation was simply one alternative that was being considered as a way of eliminating the bacteria that causes *Vibrio vulnificus*. And, it's still under consideration. And, my understanding that, you know, as a matter of fact, I know, that they were using irradiation for strawberries and for spices that were imported into this country. And, several other countries,

---

7This is not to say that food irradiation has become an archaic news item. On August 28, 1997, *The New York Times* ran an Op-Ed piece of food irradiation. This article was followed by five Letters to the Editor on September 2, 1997. In December 1997, an FDA ruling on the irradiation of beef gained national media attention with television news coverage (ABC’s *Nightly News*) on December 2, and front page coverage in *The New York Times* on December 3 and 4.

8I have not used pseudonyms, but instead will refer the interviewees by their affiliations or parts played in the news coverage to protect confidentiality.
including Canada, and some other countries, irradiation in Europe is used. (Telephone Interview, May 27, 1997)

The fact that most of these encounters did take place a number of years ago means that selective recall was a concern for me during these interviews. It should be noted that all reporters I spoke with were still working as newspaper reporters at the time of our conversations, and many sources still had contacts with the media, and so were still involved in the newsmaking process. The routines followed in the irradiation coverage did not seem to deviate from other reporter-source routines, or when they did, the interviewee recalled the situation. As one reporter, who wrote a number of articles, recalled

Well, this was, OK, the story itself was not typical. I mean every story's different, but this one had its own components to it. . . . There were several different types of sources. [An activist group] was in a class by itself, so let me leave them for last. The company . . . , it was generally a fairly cordial type of reporter-source relationship, I mean I won't say overly friendly, but they certainly were accessible to us, and answered our questions to the extent that, you know, they felt it was in their interest. So, that was fairly typical of covering a business. It was straightforward, you know, we came to their press conferences, we called them, you know, up to ask them about earnings reports, and they gave us quite a bit of factual information. The other interviews, you know, to some extent it was experts or government officials, or regulatory officials, and those were fairly typical too. I mean, when I had to call [a state agency] to find out, you know, when the company's going to get its license, you know, to, to throw the switch, that was also fairly routine. Also, various experts that I talked to about the possible health effects, you know, there was nothing unusual about that. [An activist group], my dealings with [them] were extremely unusual. (Telephone Interview, May 7, 1997)
Although not all reporters or sources remembered the specifics to this extent, all interviews were informative about reporter-source interactions, as well as the general context of reporter-source relations. Gaining insight into the recipe knowledge of reporters and sources can help us further our understanding of the control efforts that take place between groups, regardless of the goals of these groups.

In addition to asking respondents about their own experiences, I asked them questions concerning such matters as how they would handle a question they did not feel qualified to answer, and whether or not they felt the news coverage of food irradiation had been fair, or focused on the right areas of concern. I also asked for background information on each respondent (length of time with source or news organization, education, and so forth) and assured each respondent of the confidentiality of the interview.

**Transforming the Data**

As mentioned earlier, the writing phase of qualitative research can and should be as important as data gathering (Warner 1991), and so I will briefly discuss how I approached the construction of this study. I borrow heavily from Wolcott’s (1990, 1994) work on presenting qualitative research, who states that basically there are three things you can do with qualitative data: describe, analyze, and interpret. I incorporate each of these into my study, and will discuss each separately.

**Description.** Many qualitative researchers present their work as descriptive, when in fact the only data they present are what best supports their theoretical ideas. I present a
number of interview excerpts in the next chapters (especially Chapters V and VI), uncut (except for all the linguistic nuances of spoken language) so that the reader has an opportunity to question my analysis and interpretations. While I have made an effort to include excerpts that are succinct and to the point, the nature of human conversation means that the excerpts do not always fit these criteria. At times these excerpts may seem more akin to raw data than description, but I want to make the reader aware of the complexity of the stories told of the newsmaking process. While I could do this in my own words, by telling it in the words of those who experienced it, I feel that a better description of the process is given.

**Analysis.** As Wolcott (1994) notes, reliance on description alone can lead a reader to think that the researcher is incapable of narrowing his/her focus, or unsure of what question(s) is being answered by the researcher. While I do make an effort to present a large amount of descriptive data in the form of interview excerpts, the bulk of these will fall within two analytical frameworks, which will be discussed in detail in Chapter IV. At this point it will suffice to mention that one of the frameworks is based on Bourdieu's (1984, 1986) work on types of capital, while the other is centered on my own ideas on the structural components of newspaper arenas which illuminate the public and private aspects of these arenas. This type of analysis offers me the opportunity to "look for and discuss the relationships, the what-goes-with-what that realizes in the study of a single case the potential for understanding something beyond it" (Wolcott 1994:33).
**Interpretation.** I have relegated the interpretation components of this work to the ends of Chapters V and VI, and give brief mention to these interpretations in my concluding chapter. Again borrowing from Wolcott (1994), I use a strategy of using my theoretical approach to extend my description and analysis to an interpretation of where the locus of power lies within the reporter-source interaction from which we can distinguish between arena judges and arena contestants (Chapter V), and the importance of including structural factors in studies of arenas, especially when we start distinguishing between private and public arenas (Chapter VI).

**Conclusion**

My focus in this chapter has been a discussion of the methodological foundations of this study, which has been predicated on my belief that studies -- quantitative and qualitative -- need to be done in a systematic fashion, focused around a question we find interesting, with results presented in such a way as to be accessible to a wide audience. I have tried to show how I plan to accomplish these tasks, and I think the reader will find that I have achieved my goals for the most part. While I would agree that there are more sophisticated descriptive, analytical, and interpretive models available, I do not think this necessarily means they are better.

Before turning to the stories of the newsmaking process, it is important that I frame the issue of food irradiation in a social-historical context (Thompson 1991). Without knowledge of the history of food irradiation and the controversy surrounding it, the stories that will be told of how this issue has been selected as a newsworthy topic,
and how it has been framed, would be only a partial picture of this technological controversy.
CHAPTER IV:
FOOD, TECHNOLOGY, AND FOOD IRRADIATION

Introduction

Coverage of science and technology is not new to the newspaper arena (Peters 1995), and many of the topics which have gained attention would have lent themselves well to the type of study I have proposed. The selection of food irradiation is based largely on the fact that food is both a valuable resource needed for survival and an integral part of most cultures, and, therefore, enjoys deep cultural resonance. Although few people need to be reminded of the importance of food, developed nations are bombarded with mass mediated images of starving children from developing nations. Even when food is plentiful, there is always the possibility of consuming contaminated foods. In the United States, which is considered by some to have the safest food supply in the world (Aldrich 1994), an estimated 10 to 30 million cases of illnesses and nearly 9,000 deaths occur annually due to foodborne microbes (Roberts and Unnevehr 1994). The annual financial expenditures poured into food safety, including research and development by both government and private firms, and lost productivity from workers who have contracted illness from food, have been estimated to be between $5 billion and $6 billion (Lee 1994).

Food irradiation has been touted as an effective and efficient way to make the food supply safer and cut down on the spoilage of food -- which would help increase the food supply and alleviate hunger in famine-stricken areas. Irradiation, which involves
exposing foods to radioactive materials or x-rays (Chinsman 1987), is strongly opposed by some groups, and the ensuing debate between proponents and opponents has been carried in the popular mass media since the mid 1980s, although knowledge of the process has been available for much longer. In this chapter, I examine the sociological literature which has focused on the importance of food and food technology, and explain why we should not separate food from the technology used to grow and process the foods we eat. I then move on to describe the technology and politics of food irradiation. Finally, I will discuss the coverage given to food irradiation by *The Capital News* and *The Florida Press*.

**Food, Technology, and Food Technology**

Food and technology enjoy deep cultural resonance in the U.S. and most other countries. While sociologists have had plenty to say about technology, food has not received the same amount of attention (Ferguson and Zukin 1995; McIntosh 1996; Mennell, Murcott, and van Otterloo 1992). Food is typically approached, when it is studied in work dealing with stratification and social inequality, as a measure of well-being (e.g., Dyson 1996, Sen 1981).

Despite this neglect or oversight, it is clear that food is a key component in constructing self and cultural boundaries. We often choose the foods we consume based on the images we want to convey of ourselves, while categorizing others by their food and beverage consumption patterns (Alba 1990; Fischler 1988; McIntosh 1996; Sahlins 1976; Visser 1986), although some have argued that processes of modernization -- such
as the global transportation of food stuffs and/or ideas -- can blur these boundaries, though there are numerous examples of boundaries constructed around food and eating practices. Belasco (1993) has shown how individuals and groups involved with the countercultural movement of the 1960s and '70s in the United States consumed natural foods as a way to differentiate themselves from mainstream corporate America. Harris (1974) offers an insight into alliance-building among South Pacific Island tribes where the abilities to raise, cook, and eat pork are highly respected among tribal leaders, while many religious groups with roots in the Middle East consider the consumption of pork as an unholy and abominable experience, and would expect only sinners or infidels to partake in meals which include any kind of pig meat. In Peru and Bolivia, beer and chicha -- the latter being a native beer made from maize -- are used to demarcate different situations, with the former being consumed during formal occasions, such as weddings, and the latter during festivals held in honor of national or indigenous pride and peasant festivals (Orlove and Schmidt 1995). In Mexico, TV dinners are mainly consumed by those in the upper classes, and wheat and wheat products are symbols of prestige (Pelto 1987). In short, once survival needs have been met, food stuffs are likely to become symbolic/cultural resources used to differentiate between groups.

As with food, we can argue that technology -- especially when it consists of large machinery or large investments of scientific know-how, is considered a valued resource in the U.S. and elsewhere, and boundaries built around technology can act as symbols of membership which, in turn, can be quite formidable (Collins and Pinch
1979; Fuller 1993; Gieryn, Bevins, and Zehr 1985; Petersen and Markle 1989), although all insiders are not necessarily scientists or technological experts, as alliances are built between scientists and many other actors (Callon 1986; Latour 1987). For purposes of the present study, I will focus on the relationship between food and technology, and how this relationship can be (and has been) used to gain control over others.

The alliance between food and technology has been cultivated by humans for centuries, with the dawn of civilization as we know it coinciding with advances in agricultural practices and horticultural societies, although the real power in these early centuries was based on control over food supplies, not agricultural knowledge per se (Lenski and Lenski 1987; Moscati 1957; Smillie 1991). In modern society, as the family farm has given way to corporate farms, the emphasis has shifted from control over the labor of farmers to control over food production processes. While family farms have become less profitable, corporate farms have become powerful players in the agricultural economy, offering their owners and managers a highly profitable form of business (Goldsmith 1978).

In addition to the changing structure of agricultural production, a great deal of emphasis on food technology in recent decades has been focused on postharvest processes, which includes how to use items that have not been traditionally thought of as food, such as wood pulp, in food stuffs (Belasco 1993). One telling example is given by Block (1981) of the use of styrene rubber (butadiene) — a product of modern technology that most of us would not think of as a food item — in chewing gum.
Imitation seafood can be made from algin, derived from giant brown kelp, and formed into seafood shapes with the help of calcium baths (Harrington 1987).

Technology has also had a major impact on the transportation and distribution of food, although this is not a new phenomenon. For example, in the 1820s, canals in New York State were being used by millers to transport flour to areas far removed from the mills, making it possible for land and labor to be used for other purposes, including the growing of different foodstuffs and the making of more extravagant meals, since the flour used in these meals was cheap and readily available. Transportation was also a key ingredient in the moving of components and products of steam powered mills, which were in wide use by the 1860s. These mills could produce flour in most areas, encouraging further expansion into the U.S. frontier, which helped the U.S. make the transition from a nation of food producers to a nation of food consumers separated from food processing (Cowan 1983). The advent of railroads and automobiles continued this trend, as food could be shipped quickly across long distances, giving customers even more time to pursue other aspects of cooking or other interests.

Probably the most visible symbol of food distribution in the U.S. today is the food supermarket, which Visser (1986:22) describes as "market place, temple, palace, and parade all rolled into one," and technology has played a major role in the rise and evolution of this industry. Walsh (1993) studied the evolution of supermarkets from the 1950s to the 1980s, and found that innovations in such areas as computerization of customer orders, power saws for cutting meat, and decentralization on the supermarket
floor were instrumental in making possible the smooth functioning of large grocery stores. Advances in refrigeration and packaging, both for transport and storage, have also been essential in changes in food consumption patterns (Cowan 1983).

As Walsh (1993) points out, though, technological innovation does not happen in a vacuum, nor can the economic advantages of innovation automatically override existing social relations. To return to postharvest processing, producers pursue new techniques for a number of reasons, such as lower food production costs, more convenient, i.e., easier-to-prepare foods, and food safety. These goals, though, are not necessarily consistent, as safety issues are sidestepped for economic reasons. For example, when convenience foods are considered to be unhealthy, and consumers raise concerns about the safety of their food, manufacturers argue that the safety measures needed to alleviate fears are either nonexistent or would price the food out of the market (Belasco 1993). And, not surprisingly, one of the main arguments from manufacturers is that if consumers were really concerned about their health, and the foods being produced and sold did pose a health risk, consumers would stop buying them and the manufacturers would stop selling them. In other words, it cannot be all bad if people are willing to buy the product (Belasco 1993; Mennell, Murcott, and van Otterloo 1992).

Consumer fears about their foods, though, have not diminished. Instead, food safety issues have caused a great deal of concern among consumers, both in the U.S. and abroad (Aldrich 1994; Henson and Traill 1993; Jussaume and Judson 1992; Steel 1989).
As mentioned earlier, in the United States alone, nearly 9,000 people die annually from food-related illnesses, with another 10 to 30 million stricken by foodborne illnesses that are not quite as serious, and some have argued that the rates of foodborne illnesses are increasing (Sockett 1993), although the proliferation of chemical additives and pesticides in recent decades are partly to blame (Imperato and Mitchell 1985).

Technology has played a major role in the increased use of food additives and pesticides, but it is also expected to play a role in preventing foodborne illnesses. The boon and bane of food technology in relation to food safety are clearly evident in this passage from Visser:

> The antibiotics which all factory-farmed creatures must consume in large quantities in order to curb the disease and stress from their confinement, have turned out simultaneously to accelerate flesh production. The reason for this is not fully known, but it is thought that killing off bacteria in the gut of an animal leaves more food energy to go into weight gain. Offsetting this bonus to the business is the necessity to keep up research into disease control, as bacteria keep breeding resistance to each successive antibiotic treatment (1986:140).

In other words, the same technology which gave us more meat per animal also produced virulent forms of bacteria which could affect consumers, but this mixed message is not always understood, as in the following statement on food irradiation:

> Science tells us that food irradiation makes food safer and will prevent injuries, not create them. Public perception, however, has suppressed development of markets for irradiated foods. Public ignorance and fear of food irradiation invite the perpetuation of misinformation by those opposed to the technology (Robeck 1996:80).
Who is to say what constitutes science and what constitutes misinformation? Shibutani (1966) has suggested that people are not so gullible as to believe everything they are told; that new information has to be plausible and resonate with other held knowledge concerning both the content and context of the communication. Given the importance of food to our survival, coupled with the less than perfect record of food safety technology and the regulatory agencies overlooking its implementation, consumer fears surrounding any new food technology should not be surprising. Whether these fears are played upon to pursue the political/economic agendas of consumer activist groups, or whether there are legitimate concerns about the technology is not the point; instead, the point that needs to be made is that the effects of a technology can be plausibly framed in opposing ways.

From a constructionist perspective, the value and meaning of an object are not intrinsic to the object itself, but come from processes of accumulated agreement, through negotiations and transactions, amongst those dealing with the object in question (Becker 1974, 1982). In addition, there are no natural or specified endings to negotiations prior to, or during, the interactions. Whether or not total agreement is reached depends on many factors, including the resources controlled and managed by those involved in the negotiations. For example, in the above quotation from Robeck (1996), a distinction is being made between scientific knowledge and lay opinion. The reader is led to believe that the former is closer to objective truth, while the latter can be controlled through emotional appeals, and therefore an unreliable measure of the worth
of the technology in question, in this case food irradiation. Robeck (1996), who is not a
food scientist but an attorney, makes this statement at the end of an article focusing on
the possibilities of food processors being held liable for food poisonings when they
could have irradiated foods to ensure safety. The resources controlled and managed are
basically cultural and economic: he is controlling a sphere of knowledge (Crozier and
Friedberg 1980) which encompasses current lawsuits being brought against food
manufacturers; he uses scientific literature that points to the safety of food irradiation;
and, his article appears in a top food science journal which is likely to be read by those
involved in food processing. He is managing (or telling others to manage) economic
capital in the sense that he is warning food processors of the financial risks involved
with processing unsafe foods — risks that could be averted by implementing irradiation
procedures.

Though I have not explicitly focused on the power stemming from control over
food technology to this point, the basis for such a stance should be obvious. Before
horticultural practices were introduced, all, or most, humans had the knowledge to find
and prepare their own food. With the introduction of horticultural practices, a division
of labor was developed, and control over those involved with agriculture was

1Cultural and economic capital, in addition to social capital, are the three types of
resources that can be mobilized to gain control over a situation. While each of these
types of capital will be discussed further in the next chapter, it should be pointed out
that cultural capital consists of knowledge of the functioning of a system, while
economic capital consists of money and other material items.
concentrated among fewer and fewer people (Smillie 1995, ch. V). With the arrival of modern society and an increasing number of people possessing a decreasing amount of knowledge or control over the growing and preparing of raw food stuffs, those who did have control over this knowledge, whether directly or indirectly, were able to gain more power and control over those who did not (Beardsworth 1995; Anderson 1995).

In addition to the knowledge required to operate, and, therefore, control, food technology, consumers are typically separated from farmers by food processors who are able to maintain a great degree of control over both of these groups. This situation has not gone unnoticed or unchallenged (Belasco 1993). As one activist I spoke with put it

[The food manufacturers have] really, really succeeded in disconnecting the American public from their food supply. I mean, you know, people magically think, you know, at the supermarket the food just kind of pops up in those shelves. You know, I mean, inner city kids, I've seen polls where, you know, they don't even know where milk comes from, that it comes from a cow. . . . [A]nd that's really frightening. And then that makes the job of talking about food safety that much more difficult. I mean . . . we don't have salmonella problems and E. coli problems and other food safety problems, you know, they didn't [in the past]. There's a reason why they're increasing and much of the reason, particularly for salmonella in chicken and E. coli in beef -- two of the things that they promote irradiation for -- is because of the increased corporate consolidation, and the massive size of these farms and food production facilities. I cannot slaughter 90 birds per minute in a chicken facility, modern facility, and expect cleanliness, and expect safety. It doesn't work. And, likewise, with beef slaughtering facilities . . . you can't have four corporations controlling 80 percent of the beef market and having, again, really fast slaughtering-line speeds, and monopoly-like control of every aspect of the industry, from the cattle yards to the processing facilities, to the marketing and retail without giving up concerns for safety and sustainability. And, again, that's kind of the bigger picture that we also try to draw with these technologies. Now, irradiation, where does that fit in? Well, that's just allows the corporate
consolidation and the speed to accelerate. Because, they're saying, 'Hey, don't worry about the facilities, don't worry about the inspection process, don't worry about the salmonella, because at the end of the line we're going to fool the American public and zap it with the equivalent of millions of chest x-rays.' That isn't getting to the root causes of the problem. We want to see the facilities cleaned up, the inspectors put back on the side of consumers, the, you know, more farmers put back into business, and even to as great extent as possible, get back to a regional diet. . . . We've got to start weaving the bigger picture here, and try to swing a bigger bat, if you will, not just at one particular problem at a time, but . . . we need cultural change desperately if we really going to start getting anywhere before our very short lives end. (Telephone Interview, May 23, 1997)

What impact these social movement groups have had on the large food conglomerates is not at issue here, though it should be mentioned that these types of food conglomerates continue to be very profitable (Belasco 1993).

Cultural and economic resources, though, are usually not controlled by any one specific group. The controversy surrounding the abortion pill RU486, as put forth by Clarke and Montini (1993), is illustrative. Proponents of the pill said it was a scientific breakthrough for problems of overpopulation and postfertilization; opponents have called it chemical warfare against children. Both groups could call on scientists and scientific research to back their statements. Pharmaceutical companies in the U.S. have been slow to embrace RU486 because the profit margins are expected to be smaller than for other contraception devices, while physicians see RU486 as a way to avoid lawsuits stemming from surgical abortions.

RU486 obviously is not a food technology issue, but shares certain aspects with food irradiation. It is an issue that has been constructed not only by scientists and other
researchers, but potential lay end-users as well. Approaching the social construction of food technology must also take into account the experiences of consumers, although the amount of awareness of food processing at the consumer level is an empirical question that others have tried to answer (Oberholtzer 1997). My focus in the remainder of this chapter will be specifically on one technology that has been touted as making food safer and more readily available: food irradiation. I will discuss the technology and politics surrounding it, and how The Capital News and The Florida Press have covered and framed it.

**Food Irradiation Technology**

The irradiation of food involves exposing food stuffs, such as fruits and vegetables, poultry, and pork, to ionizing energy. The energy source can be radioactive materials, such as cobalt-60 or cesium-137, X-rays, or high energy electron beams (Gunther 1994). The ionizing radiation breaks down the molecular structure of the cells which are present in or on the food at the time of exposure, killing bacterial organisms, such as E. coli and Salmonella, and insects, such as fruit flies, in the process. In addition, the molecular reconfiguration of many fruits and vegetables keeps them from spoiling or sprouting quickly, giving them a longer shelf life (Urbain 1989).

Food irradiation is not a new technology. It was first recognized as a potential process in 1898 (Ford and Rennie 1987), and the first patent was issued in 1905 in the United Kingdom, while x-rays were used to kill cigar beetles in the United States in 1929. The process did not gain much attention and was not used beyond some initial
efforts and small scale experiments at this time due to a lack of radioactive materials and nascent technology that could not meet commercial demands (Diehl 1993, 1995).

With the onset of the atomic/nuclear age at the end of World War II, radioactive materials became readily available, and atomic/nuclear technology advanced rapidly, fueled by the Cold War. These changes led to renewed interest in the practical applications of radioactive material, and as early as 1947, food irradiation experiments were being conducted, although high energy electron beams were being used in some of the experiments (Brasch and Huber 1947). By the 1950s, institutions such as MIT and University of Washington were conducting their own irradiation experiments, with irradiation facilities, or the money to build them, provided by the United States Atomic Energy Commission (USAEC) (Diehl 1995; Imperato and Mitchell 1985). Recollections of these early experiments by one interviewee highlights how the black box surrounding food irradiation was constructed.

You see, I didn't start working with irradiation in '61, I started in '55. My major professor at [a northern university] was working meats irradiation. [This university] did not have an irradiator at that time, so we would prepare the samples. We would put them in cans, and we would take them to [another university]. Irradiate them, and then bring them back, and then store them and do storage studies. We'd open up a can, say at zero time, and we would run analyses, chemical analyses, microbiological analyses, and then have taste panels. And a very amusing thing about that is, at that particular time we did not know what dose to use. And so they were using some real high doses. And when you use real high doses, sometimes you get protein breakdown, and sulfhydryls go floating through the air. And so, they had us graduate students notified when there was going to be a taste panel. You know, the first few times they were able to get us. When we walked into that building, you could smell the sulfhydryls. Just like hydrogen sulfide. It
got to the point when the notice went out graduate students would take off. They would go to the Union. They would go to the library. You couldn't find them. Finally, the faculty had to bribe students with a steak dinner. If they participated in this, then they would get a steak dinner... So that was, that was pretty good that we were able to do that. But that was because the doses were too high. (University Food Scientist, Interview, April 30, 1997)

In addition to food, it was found that medical supplies, such as gloves and needles, could be sterilized by irradiation, and a number of irradiation firms have been started to meet the demand for sterilized medical supplies, and other consumer goods, such as tampons. The first full scale food irradiation plant was opened near Mulberry, FL, in 1992. Within the Mulberry plant, food (or whatever is to be treated) is loaded onto a conveyor belt, and then transported to the treatment room, which contains the radioactive material (in this case, cobalt-60). The treatment room is constructed out of six-foot thick concrete walls, reinforced with steel. Once the food enters this room, and it has been sealed, the radioactive material is lifted out of a pool of water, which is more than twenty feet deep, and the food is then bombarded with the electrons that are breaking free of the cobalt. After the food is treated, and length of treatment depends on dosage allowed and thickness of the food and packaging, it is taken out of the room and sent to its final destination (Papazian 1992).

Irradiation can actually cook the food which is exposed to it, much like microwaving food, if the dosage is too high, or it can be of little use if the dosage is too low. Precise measurements of the irradiation doses, measured in rads, are used when processing the food in this way. In 1980, a joint committee made up of members from
the World Health Organization (WHO), the Food and Agriculture Organization (FAO) and the Organization of Economic Cooperation and Development (OECD) agreed that a dose of 10 kilograys would not pose any toxicological threat, and this has been accepted as the high end for irradiation, though in some countries, such as the Netherlands and South Africa, higher doses (up to 75 kilograys) are used to completely sterilize meat or food for terminally ill patients. In the United States, where food irradiation is considered a food additive, the approved level for most foods is one kilogray or lower, though up to 30 kilograys have been approved for herbs and spices for the purpose of controlling foodborne pathogens (Diehl 1995).

**Food Irradiation Politics**

If the irradiation of food was found to be safe and effective by 1947, why did it take nearly 45 years to build the first food irradiation plant in the U.S.? First of all, not all scientists agreed that it was safe and effective. In addition, accidents involving radioactive material started to become highly visible in the 1970s. Industry could not agree on how to approach food irradiation, and finally, government bodies were not in agreement with each other on whether to ban or promote the process. As noted previously, the construction of a technology that is supposed to ensure safer foods will include not only the technology involved, but what the process does to the food as well.

As noted, experiments on food irradiation were conducted throughout the 1950s and 1960s, funded, in large part, by the U.S. Armed Forces and the USAEC (Diehl
1995). As one university food scientist, who was involved in research at this time, noted:

...I obtained a grant [in 1961] from the Atomic Energy Commission to do food irradiation work, primarily on shellfish. . . . The grant totaled $50,000 a year. The grant went through 1967, when all these projects were then terminated because of lack of funds (Interview, April 30, 1997).

The bulk of these experiments found irradiation to be a safe and effective way of ensuring safer, longer-lasting, shelf-stable food, and by 1963, the United States Food and Drug Administration (FDA) had approved the process for wheat, wheat flour and potatoes (Lecos 1984).

From the standpoint of the resources controlled by these organizations — the U.S. Armed Forces, the USAEC, FDA, and universities, it would seem a daunting task to prove irradiation unsafe. Not all researchers, though, agreed that irradiation was safe or effective. As early as 1951, researchers at the Massachusetts Institute of Technology (MIT) argued that irradiation was a potential threat to humans, as the radioactive material used to kill insects could kill humans if it were to leak from the containment area, and that it was not always effective in killing all harmful organisms present in or on the food being treated, so it should be used only in combination with other processes (Proctor and Goldblith 1951). This continues to be the stance of some researchers, as one university-based scientist told me that certain doses of irradiation would kill *Vibrio vulnificus* but would not touch hepatitis (field notes, June 16, 1997).
Another major blow to food irradiation proponents came in 1975 when an article was published in *The American Journal of Clinical Nutrition*, which focused on the effects of feeding irradiated wheat to malnourished children in India. In these experiments, researchers divided fifteen malnourished children into three groups; one group was fed unirradiated wheat, another freshly irradiated wheat, and the final group was fed irradiated wheat that had been stored for a month. During a six-week period, in which examinations were done every two weeks on the children, researchers found that those children eating the freshly irradiated wheat developed significantly more abnormal cells than the children eating the nonirradiated wheat, though the children eating the stored irradiated wheat showed little difference from those children eating the nonirradiated wheat (Bhaskaram and Sadasivan 1975).

This study has been both refuted (Anonymous 1987; Diehl 1995; Millichap 1993; Truswell 1987; World Health Organization 1994), and used as proof of the harmfulness of irradiation by opponents of the process (Anonymous 1984; Food and Water 1990; Louria 1990; Tritsch 1992), while studies that find food irradiation safe have been similarly praised and attacked. That scientific research can be controversial among scientists is not surprising and has been well documented (Gieryn, Bevins, and Zehr 1985; Martin 1988; Petersen and Markle 1989), but, much like the abortion pill RU486 (Clarke and Montini 1993), the controversy surrounding food irradiation involves others outside the usual scientific domains.
In 1995, Diehl reported that 35 countries had approved the irradiation of some food items, while other countries, such as Sweden and Germany, have banned the sale of irradiated foods. In the United States, New Jersey and Maine have banned the sale of irradiated foods, while other states have considered similar bans (Anonymous 1992; Sapp and Harrod 1990). Much like the newspaper arena, to be discussed shortly, the political arena has been host to a number of groups. A telling example comes from a "Letter to the Editor" published in the September 1987 issue of Food Technology. The letter, written by George G. Giddings, who was director of an irradiation facility in New Jersey, gives proof that many interests were involved in the legislative process which led to a ban on food irradiation in New Jersey. According to Giddings, an industry spokesperson, he "attempted to persuade [a New Jersey State Senator] to reconsider [the legislation] face-to-face at a local public forum." In addition to his own role, Giddings mentions that the FDA and activists were involved, though the latter group won in the end. Giddings concluded that the public needed to be better educated on the topic of food irradiation so that it could be an issue in the upcoming elections, though who would be in charge of educating consumers was never explicitly mentioned (Giddings 1987).

Educating consumers and industry is a theme that is frequently mentioned in the food irradiation controversy, and can be seen as another aspect of the political battle in which food irradiation is steeped. It is not surprising that this issue is the sight of considerable contention, as consumer acceptance or rejection of the process will
determine its fate (Henson 1995). A fund raising/welcoming letter from Food and Water, an activist group based in Vermont, emphasizes their role as educators:

... [A]t Food & Water, we thrive on information and activism. Educate. Activate. That's our motto. We accomplish a lot, like stopping food irradiation in the U.S. for the last nine years. . . .

The first challenge F&W took up was the threat of food irradiation. Just about everybody told us that we couldn't stop it; the nuclear industry and irradiation promoters were far too powerful. But nine years later, the only private food irradiation plant in the country is facing financial ruin. And it's because Food & Water's education and activism have so far convinced the food industry that consumers won't buy their food products if they are irradiated. (Fund-raising letter received in December 1996; emphasis in original)

Proponents of food irradiation also feel that education is needed, though the outcome of the educational process would be much different (Bord and O'Connor 1989; Bruhn 1995; Bruhn and Schutz 1989; Diehl 1993; Marcotte 1992; Pszczola 1990). For example, Schutz, Bruhn, and Diaz-Knauf argued that consumer education regarding the role of irradiation and irradiation compared to alternative protective techniques has a profound impact on consumer attitudes.

Education must be of an unbiased nature so the consumers can make an informed decision on true alternatives in the marketplace. Our results suggest a description would result in more positive attitudes and willingness to purchase irradiated food products (1989:85-86).

That the education of the consumer can be done in certain ways to reach certain opinions is readily apparent in the conclusion of a study done on consumer acceptance of irradiated papayas:

For most people, irradiation was not a barrier to the acceptance of a superior quality product. Two-thirds or more of the people queried...
indicated they would buy irradiated produce. It should be noted, however, that this successful marketing took place in a supportive environment — protestors were not present; consumers could verify product quality by tasting, and informational material was available (Bruhn and Noell 1987:85).

In other words, the marketing of the papayas may not have been as successful if those opposed to food irradiation had been given the opportunity to use their own informational materials to "educate" consumers.

Newspapers and other forms of mass media are considered important educational tools for consumers on the topic of food irradiation and other food safety concerns (Belasco 1993; Bruhn 1995; Hashim, Resurreccion and McWatters 1996). But the press can do much more than just carry information concerning food irradiation. Images and stories related to radiation can also have an effect, such as those centered on the nuclear power plants at Three Mile Island and Chernobyl (Ford and Rennie 1987). The following was a typical response from a university food scientist on the images associated with food irradiation:

Most of these people still associate irradiation with the nuclear bomb. And they're thinking, and that's the quote, 'Oh, you're nuking the food,' and we say, 'No, we're not nuking the food, we're irradiating it with low dose pasteurization, which is going to eliminate a majority of the bacteria, spoilage bacteria, which might be there.'...

When Chernobyl happened, that ruined us irradiating food all over again. Three Mile Island, technically, ruined it again. I mean, we have these markers along the line that we think we're getting over things, and then these things happen. It's big setbacks. (Interview May 1, 1997).

As Gamson (1992a; Gamson and Modigliani 1989) has noted, most people do not have direct experience with nuclear power or nuclear weapon systems, so much of
the knowledge held by the general public on issues related to nuclear energy has been generated by the mass media. If people are opposed to nuclear power and bombs, it is more than likely that they have been exposed to negative portrayals of these technologies in the popular mass media, though the same can be said for people who support these technologies. The difference may lie in the trust these different groups have in the technology itself and/or press coverage of that technology. The opinion of someone like Terry (1987), who argues that food irradiation is a plot by the U.S. Department of Energy to legitimate their use of plutonium, will very likely remain unchanged. The same can be said about the food scientist who has been working on irradiation since the 1950s.

One could assume that some spokespersons would view the popular press as the wrong arena for which to engage in negotiations concerning food irradiation, given the ability of reporters to frame issues in ways that do not fit the expectations of the sources involved. Though most sources agreed that the focus of press coverage was not always on the right issue, all agreed that is was an important issue for the press to cover. The following are typical responses from sources when asked if food irradiation should be covered by the popular press:

... the subject itself, as long as it was handled in the balanced manner, and there was, you know, both sides were quoted and somebody in the middle, I think it was helpful for the debate ... for the public to know what they were dealing with (Industry Spokesperson, Telephone Interview, May 13, 1997).
Well, I mean, it certainly should be in the mainstream media if possible. I think, you know, trade journals cover it quite a bit, but, you know, I mean, the public has to be aware (Activist, Telephone Interview, May 23, 1997).

Before turning to the actual coverage of food irradiation by the press, I want to emphasize that controversies over food and water technologies have a long history.

Water fluoridation has been a controversial subject for nearly fifty years (Martin 1988), and the pasteurization of milk met resistance at the turn of the century (Larsen and White 1913). It is interesting to note that objections raised against food irradiation echo those that were brought against milk pasteurization:

<table>
<thead>
<tr>
<th>Food irradiation objections</th>
<th>Milk pasteurization objections</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Anonymous 1992:1-2)</td>
<td>(Larsen and White 1913:68)</td>
</tr>
<tr>
<td>1. ...irradiation can cause vitamin losses.</td>
<td>1. Desirable lactic-acid bacteria are killed.</td>
</tr>
<tr>
<td>2. ...irradiation is simply an unnecessary, expensive extra step in food processing.</td>
<td>2. The cost of pasteurization is considerable.</td>
</tr>
<tr>
<td>3. [Irradiation can cause] alternations in flavor and texture.</td>
<td>3. [Pasteurization] affects flavor and creaming properties.</td>
</tr>
<tr>
<td>4. [The poultry industry] would accomplish just as much by cleaning up their plants.</td>
<td>4. It promotes carelessness and discourages efforts to produce clean milk.</td>
</tr>
</tbody>
</table>

Given the success of milk pasteurization and parallel discourses surrounding milk pasteurization and food irradiation, it is interesting to note that food irradiation is
referred to as electronic pasteurization by some groups who are interested in promoting it.

The political atmosphere surrounding irradiation, then, involves a number of legitimated institutions -- the U.S. Army, FDA, USDA, business interests, and scientists -- promoting the technology, and less powerful but, up to this point, effective opposition groups, which include consumer activist groups and some scientists and medical practitioners. The majority of potential end users of this technology, though, are not members of any of the above groups. Instead, they watch the issues concerning food irradiation unfold in the arenas of the mass media.

**Food Irradiation in the News -- The Capital News and The Florida Press**

*The Capital News.* Between 1987 and 1996, the topic of food irradiation appeared in 34 articles carried by The Capital News and another paper in the same city, which merged in October of 1991 to form one morning newspaper which serves as the major daily in this southern city. Of these 34 articles, 14 were focused primarily on food irradiation, six had at least one paragraph on the subject, while the remaining 14 only mentioned food irradiation. The main years of coverage were 1987 (seven articles), 1992 (seven articles), 1993 (eight articles), and 1994 (six articles). No articles were recorded for 1989 and 1990.

As to the types of articles that appeared in The Capital News, a vast majority (26) were news articles; seven were editorials or columns, and one was a Letter to the Editor. None of the articles which went beyond merely mentioning food irradiation (20)
were strictly negative, and 13 of these did not mention either any negative aspect of the process or played down the opposition.

The most salient frame which was used by The Capital News was the use of food irradiation on seafood. Seafood irradiation was discussed in 18 of the articles, 14 of which focused heavily on this framing. The main focus within this frame was research being conducted at local universities, and a seafood conference that was held in 1992. The conference articles tended to have quotes from both opponents and proponents of the process, while the non-conference articles tended to focus on the potential of irradiation saving the seafood industry, especially with killing the *Vibrio vulnificus* bacteria in oysters. Two other salient frames were using irradiation on beef and the possibility of building an irradiation plant in the area. As Gans (1979) mentioned, social scientists approach the mass media differently than most popular media consumers, so generalizations of our interpretations are precarious at best, but my reading of the coverage given to food irradiation by The Capital News is that it is considered as a safe process that should be implemented in a number of food processing industries.

*The Florida Press*. The importance of locality in the sociology of science has been noted by others (Shapin 1995), although studies of science in the media do not seem to take into account spatial considerations. In the coverage of food irradiation, locality does make a difference. In the same time period in which The Capital News carried 34 articles, including one editorial on food irradiation, The Florida Press carried 119
articles (including four editorial cartoons and three photographs). Most articles (86) appeared before 1993, with 25 articles appearing in 1991 and 29 appearing in 1992, the year the food irradiation plant opened in Florida. Of the 119 articles, 25 were editorials (or cartoons) and 31 were Letters to the Editor. The difference in the number of articles of all types may be due in part to the fact that *The Florida Press* publishes a number of editions, but the first five years of coverage by *The Capital News* consisted of two newspapers, and articles which appeared in more than one edition of *The Florida Press* were only counted as one article. In addition, I am aware that some articles that originated from wire services, such as the Associated Press and Washington Post, are missing from my *Florida Press* data set, though the same could be said of *The Capital News* articles. In other words, I feel safe in concluding that the geographical location (i.e., proximity to the food irradiation plant) of these papers influenced the amount of coverage given to food irradiation.

In addition to the differences in coverage, the framing of the issue of food irradiation differed between the two papers. As noted, seafood irradiation was the main frame at *The Capital News*, but only one article produced by reporters at *The Florida Press* covered seafood in any kind of detail. The main frames used were of the pros and cons of food irradiation (played up in Letters to the Editor), irradiating fruits and vegetables (22 articles), protests over the building of the plant and selling irradiated foods (20 articles each), and the building of the plant (20 articles). Other frames that were used by *The Florida Press* but not by *The Capital News* were the financial
situation of the plant (five articles), including possible dubious financial dealings among investors (five articles). Given the large number of articles dealing with food irradiation, the irradiation process itself and the pros and cons on each side were better represented in *The Florida Press*.

The papers do not differ in every aspect. Inside the frames, many of the images were similar, such as proponents of irradiation. In *The Capital News*, where only two of the 34 articles carried any stories of protests or boycotts, protestors voiced such slogans as "Hell No, We Won't Glow" and carried signs (June 18 and 22, 1992). In *The Florida Press*, where protest over irradiation was a more common theme, opponents "wore torn jeans and T-shirts, and one member played 1960s folk songs. On the windshield of a Ford van was emblazoned 'Ban Food Irradiation.'" (March 1, 1992). If vans were not being used, protestors marched through the streets trying to stir up public sympathy and outrage, and signs were waved at rallies (October 21, 1990 and November 17, 1991). These images of protestors -- as radical, burned out hippies with little to do -- are much the same as used by reporters who covered the Clamshell Alliance protests at the Seabrook Nuclear Power Plant near Seabrook, New Hampshire in the 1970s (Gamson 1990), and stems from the images of protestors created in the 1960s during the Anti-Vietnam protests (Gitlin 1980). Once an image has proven successful in the news, reporters will continue to use that image in subsequent stories, or at least find similar images (Zelizer 1993).
Conclusion

Whether or not food irradiation can be thought of as a major topic in either of the two newspapers investigated -- one article in *The Capital News* made front page news, while four made front page news in *The Florida Press*; an additional seven articles were printed on the front of sections in *The Capital News* (20.6 percent), while 34 others in *The Florida Press* made the front of sections (28.6 percent), I believe the coverage to be at least noteworthy. In addition, an investigation of those involved with the framing of a topic that encompasses two items -- food and technology -- which are given a great amount of time and attention in our society, could help shed light on the dynamics of newspaper arenas. It is now imperative that I paint a picture of the events as they happened according to the respondents, for that is power of the interview (Weiss 1994). Of course, the reader has a part to play in this as well, for it is ultimately the reader who decides the importance of what s/he reads. As Hazelrigg (1989) made clear, while pictures and paintings may be worth a thousand words, it is the consumer of those pictures and paintings that supply the words. In the next chapter, I will focus on the stories of how reporters and sources have gained access to each other. I present stories of the structural constraints used to distinguish between private and public in Chapter VI, and use these stories to highlight the private and public aspects of newspaper arenas.
CHAPTER V:
STORIES OF ACTION AND RESOURCES

Introduction

One of the major criticisms aimed at qualitative methods centers around the inability to falsify findings, which is typically a consequence of using gathered material to support a particular research agenda (Wolcott 1994). One of the goals of this chapter is to focus more exclusively on the stories told by those I have interviewed so as to provide sufficient information for the reader to judge the appropriateness of the proposed classification schemes, without casting the reader adrift in a sea of descriptive information.¹ My discussion of this material will include the experiences of both reporters and sources, utilizing both descriptive and analytical approaches to frame these stories. I will categorize different stories in terms of the capital or resources that have been used to construct linkages between reporters and sources. My purpose is not only to uncover the resources which give impetus to action, but also to emphasize the complexity of the stories that arise through these interactions, and in turn embed the control efforts of arena participants (see White 1992). Following the discussion and analysis of these stories, I will offer an interpretation of this data in terms of ties and control over access to the newspaper arena.

¹Given the nature of the methods I have employed and the material I will be presenting, some repetition and lengthy quotes cannot be avoided.
Sources

Cultural Capital. Starting with my definition of cultural capital -- the boundaries, categories, and elements we construct, which, in turn, shape our actions, it becomes imperative that I focus on the knowledge among sources of what they think makes news, or what newspaper reporters deem as newsworthy. I found that this was both broad and diverse, although many of the sources with whom I spoke felt that emotional appeals are likely to gain media attention. One form of staging emotional appeals that did generate media coverage was the use of demonstrations and other planned events, such as conferences and meetings, of which reporters were typically notified beforehand by sources or source organizations. One of the more visible groups which has taken a stand against food irradiation used demonstrations and press conferences extensively as part of its media relations strategy.

Well, how did we come to get quoted so much on this issue? I think it's just the result of a lot of hard work and a lot of very credible information that we've put out over the years, you know, starting with the fact sheets and newsletters, and now we put out [our own] Journal and, and doing a lot of cultivation with the media. You know, each and every day making sure that, you know, we prepare press releases, we prepare press briefings, we do enormous numbers of phone calls, in meetings with people from the press to make sure that they see the information we prepare, and so that they are given our point of view on this issue. And, it also comes as a result of a lot of organizing the general public. Organizing rallies, and information gatherings, and protests that become very visible and newsworthy that the press then covers. . . .

This strategy included utilizing pro-irradiation media work to promote their anti-irradiation message.
....We were doing a lot of, again, a lot of media work beforehand. We, we organized a rally out front of the hotel where they had the seafood irradiation conference, and did a lot of pre-media work in terms of making sure they got, you know, first find out who's beat it was and making sure they got our material, and our fax sheets and a lot of phone calls before we got down there. And then, also, you know, a lot of work when we were down there at the events and before and after them as well. So, we actually had a press conference too, so. It was a really well attended press conference in the same, it was actually quite a fun little thing we did. We, we, which isn't uncommon for us a way to get the media, is when we find out about these conferences, when we try to figure out what's the best way we can get our angle, you know, we know, and the media stories that are going to be around it, we know that it's going to be a story down there, that we see that they've got press conferences planned, and press briefings, and what not, for the pro side, so, you know, we, we're going into it thinking, 'OK, we desperately need to get our side out.'...[W]e called [the hotel] up and asked if they had any rooms, press rooms, conference rooms that were available for that same time period, and luckily they did, and we rented it, telling them up front, in the sense that we told them who we were, and that we were having a press conference, and secured the room. And, then, after looking at their agenda, figuring out when was the best time for us to have our press conference, and we decided at this particular event that we had our press conference about 45 minutes before they were going to have theirs, or maybe it was like a half hour. Strategically, the idea was, we get the press first. Well, they're doing a lot of the press work, first of all, for us. We know they're having a press conference, as I was saying, it was like at one o'clock or something, so we have ours at 12:15, so it's not that big of a deal for the press. It's like, OK, it becomes more of a story for them. Here we have competing news conferences, we get to piggyback on their press work, in terms of trying to make seafood irradiation a story, and then the clincher for this particular one, which worked beautifully, is that we get the press to come up, to come over to our room first. (Activist, Telephone Interview, May 23, 1997)

If cultural capital is the knowledge and control over boundaries, categories, and elements, then we can begin to understand how cultural capital can be used to gain access to reporters. This activist not only understood the work involved in gaining the
attention of reporters, that is, having his ideas and agenda classified as newsworthy, but how to take advantage of the boundaries of an opposing group. This is not a new or unique type of strategy (see Gitlin [1980] for examples of anti- and pro-Vietnam War advocates using each other’s media-attention activities during protests), and it continues to be a successful strategy, since many advocacy groups believe that if they are easily accessible they have a good chance of getting their message in the mass media.

While demonstrations can be used to call media attention to an issue, there are inherent weaknesses to this strategy. For one thing, more and more groups have to rely on this particular type of cultural capital to get attention, leading to an escalation in the number and intensity of demonstrations, and stronger boundary struggles between groups that might benefit by joining forces. This in turn can tap the limited carrying capacities of the press, leaving groups and issues uncovered, which was a complaint made by one activist

We had a [local] food irradiation, against radiation, food irradiation, I think it was called. I went to their meetings. So, there was a lot of different little groups, and bigger groups that were involved. And, it was like 500 people took a day off to speak against it. And, that's something, that says something. On a Monday morning, that people would take that time, and yet, the media, to me, just didn't even cover it. You know, that really, that really was the impact of it. . . . So, there was a lot that was never got in the papers, and never was said. . . . (Activist, Telephone Interview, May 13, 1997)

In addition, given that any number of people may attend demonstrations, there is no guarantee that a designated spokesperson will be chosen to speak on the issue. In the
case of one demonstrator who had attended an anti-irradiation demonstration, she was not even aware that she had been used as a source.

A: When we heard that the plant was going to be built, we went to the library and read about the process. We felt that it was not a good thing to bring to [our city] or as a way to process food.

TT: Do you know why a reporter would talk to you? Did you help organize the protest or anything?
A: No, I was just there to show my opposition to the plant. I didn't even know I had appeared in the newspaper. (Activist, Telephone Interview, May 28, 1997)

While activists acknowledged their participation in these Pseudo-events, the scientists to whom I spoke were not inclined to acknowledge this strategy -- an open, proactive approach -- as a plausible way to gain media attention. Still, they did attend meetings which they knew the press would cover.

TT: When you're at a conference, are you usually aware of when there are reporters there and when there are not?
FS: Um, I don't usually pay that much attention, but because of, because of the committees I've sat on in recent years, there's always a reporter from either a newspaper, and there's always a reporter from a little periodical call Food Chemical News. They always have someone at those big meetings because they are the voice of the food industry in terms of what's going on in the latest things, so if anyone would pick up on anything like that, they would. (University Food Scientist, Interview, June 10, 1997)

TT: Were you at the meeting [on seafood irradiation]?
GS: I was at the meeting, right.
TT: OK. And, so they probably, did they do this through a press conference?
GS: It wasn't a press conference, per se. I guess there was a press conference, but it was the day, it was before the meeting, and I wasn't there yet. At least one person interviewed me on site, and I remember one telephone interview...
TT: But they were pulling you aside somehow, I mean whether it was the telephone. It wasn't . . . just writing down what you said and then put it in the papers.

GS: Right. At least one person did ask for an interview. (U.S. Government Scientist, Telephone Interview, May 12, 1997)

I'm well known by the media as an objective, balanced source for many topics, including breast implants, radiation, and pesticides. I have a solid background in these areas and have published over 300 scientific articles. In addition, I have attended and presented papers at numerous conferences. (University Scientist, Telephone Interview, May 29, 1997)

The idea that these planned events are the only way that different groups can get media attention fits the experiences of one government food scientist, who had been asked to speak on food irradiation at a conference that focused on making seafood safer to eat.

TT: Did you know that the press was covering the conference?
GS: Yes, we were aware that the media were there.

TT: Did the information used in the newspaper article come strictly from your presentation, or where you ever pulled aside to expand or clarify your position?
GS: I don't remember ever being asked to step in front of the camera, so I probably didn't.

TT: Do you get calls at your office on this topic?
GS: Surprisingly enough, no. The issue became very quiet after the conference. (U.S. Government Scientist, Telephone Interview, June 9, 1997)

The importance of attending conferences is clear in this statement, and resonates with the distinction made by Ericson, Baranek, and Chan (1989) between access and coverage. A source with access to a reporter is able to influence the reporting; a source without access may receive coverage, but then the framing of the article relies almost...
exclusively on the interpretations made by the reporter, which are not always favorable.

For example, one university food scientist, who is a proponent of food irradiation, was asked to give an interview to a television news reporter. When the story was broadcast, the story was not what the food scientist was expecting.

... this one reporter called, and she said she would like to do a story on food irradiation, since I had been working on it for years, and I said fine and we set up an appointment. She came in, I think they took a half-an-hour setting up the lights and the cameras and all that... We spent 45 minutes talking about food irradiation. And I gave her facts and figures. ... And then she told me when this would air. I watched it. I probably had ten seconds on there. She cut out completely all the pro arguments for the use of irradiation, and just loaded it with the con arguments, with the con interviews. She had oyster people, processors. NO, they weren't going to use irradiation. They were using depuration... It was just geared to a non-irradiation program to start off with. And, so I contacted the Institute of Food Technologists on this, and they said what you need to do is write the program director. Tell them they did not present a fair, balanced program on this, and let the public make up their minds. And I did, so. I haven't been interviewed by them since. (Interview, April 30, 1997)

While the majority of the scientists with whom I spoke said they did not seek out media attention, even though they were available to reporters and more than happy to speak with them, others have called for more aggressive media relations. Pszczola (1990) and Bruhn (1995), for example, have called for better media relations on the part of food irradiation proponents. As Bruhn (1995:214) notes,

Leaders of consumer groups, representatives of groups at risk, and media persons could be invited to attend a nationwide workshop in which they have the opportunity to develop a dialogue with public health officials and scientists regarding the significance of food borne illness and the potential of food irradiation to enhance health by increasing food safety. ...
To maintain momentum in this educational effort the message must be picked up in the popular and professional press. Bruhn, it should be noted, is not an activist in the sense that she is taking to the streets or calling for demonstrations. Instead, Bruhn holds a position at University of California -- Davis as a food scientist. That a person in this position is calling for better media relations is not necessarily exceptional, but is not typical. As some writers (e.g., Dornan 1990; Nelkin 1995) have argued, many scientists feel that the popular press is not the best place to discuss scientific matters, especially complex ones. The call for better media relations on the topic of food irradiation, though, may be partly due to the fact that it is considered as much a consumer issue as a scientific or technological issue.

While demonstrations and other Pseudo-events made up a large part of the experiences of those with whom I spoke, others who had been the targets of these events were typically critical of those participating and the reporters who cover them.

Some good things did come out of the coverage, but I felt that too much of the coverage was about things like how did I feel about having picketers in front of the store. (Industry Spokesperson, Telephone Interview, May 19, 1997)

There was a major national, slash, international convention of the top scientists in irradiation in the country and around the world in [a nearby city]. Irradiation, because it's connected to radiation, conjures up all sorts of fears. But, as you know, it's been used in U.S. military for 20-30 years. It's recommended by the World Health Organization, all that sort of thing. It's got nothing to do with nuclear power. You know, the concepts are not, not the same. The concept's the same, but the end results' not the same. But, because of the connotations of irradiation, it is a handy thing to jump on, and make all sort of media hey out of it for those who are so inclined. This individual put together four, five people to protest. They made wonderful signs and she was, stood up there, and the cameras were there. Five people in protest from, you know. It was a
classic absurdity in molding and using the media to pursue an end on something that had no physical support other than this tiny, tiny group of people. And, what she did was she got right in front of the camera, and started hollering, "Hell No, We Won't Glow. G-L-O-W. Hell No, We Won't Glow." (State Government Spokesperson, Interview, May 14, 1997)

Given the number of Pseudo-events and various interpretations of such events, training becomes important for those individuals who know they will be called upon to speak on behalf of some group. Individuals from both anti-irradiation and pro-irradiation groups mentioned that training of spokespersons was part of their overall media strategy.

...it's something that we don't take lightly, in that if anyone here is going to speak with the press they have to go through a pretty extensive training, and make sure not only that they know the issue, which they all do, but it's also, you know, it's a one-two punch of knowing the issue and being able to package it in very, very powerful, short sentences, which is frustrating but, again, it's the reality that we're dealing with. So, if you're not going to entertain the journalists or give them something that is short and powerful and even somewhat pithy and fun, they're not going to cover you. (Activist, Telephone Interview, May 23, 1997)

Well, [the Institute of Food Technologists] have what they call TV training. You go up there for a couple of days, and they tell you how to dress, and tell you how your voice is coming over, how your use of your hands and your expressions, and everything like that, to make a good TV presentation. (University Food Scientist, Interview, May 1, 1997)

Another type of cultural capital which is related to Pseudo-events is the media office, in the sense that its sole function is to mediate information to the mass media. Many of the sources I spoke with were either media spokespersons, or worked in or with agencies that operated a media office, in which case any contacts with reporters...
would have been channeled through someone in the media office. This manifestation of
cultural capital definitely overlaps with economic capital, as economic resources must
be controlled to operate a media office. However, I prefer to categorize the media office
as a type of cultural capital, as the presence of a media office is an indication of an
understanding that the flow of information between the source organization and the
media outlet should be managed by specialists.

The way it works, is if someone is calling with sort of a policy question,
or question that has been addressed by a document that we have put out
or someone else with the public health service has put out, then, you
know, we try to help them directly. If they're asking sort of a technical
question or, you know, a scientific question that goes beyond anything
that, you know, at least I would know, or that we have addressed in these
materials, then I would probably put them in touch with, you know, one
of our experts in the field. And, most of the people who deal with this
issue at [the agency] most directly are the folks in the office of premarket
approval, which is the part of the agency that reviews, you know,
applications for using things like irradiation food for various kinds of
food products. So, somebody like [a government scientist] . . . would be
someone we would put the reporter in touch with. (U.S. Government
Spokesperson, Telephone Interview, May 14, 1997)

. . . if someone from the media calls me directly, I will ordinarily refer
them to the press office, and that's mainly because the press office wants
to make sure that responses from the [agency] are coordinated so they
know who's talking to the media. And, then the press office will often
send them right back to me, but, at least, they know who's calling and
why, so that it is sort of S.O.P. to refer it to the press office. (U.S.
Government Scientist, Telephone Interview, May 12, 1997)

Media offices do not always have to be in the same location as the spokesperson
which they manage. Three of the university-based food scientists I spoke with
mentioned that they were regional spokespersons for the Institute of Food Technologists
(IFT), an organization based in Chicago which acts as a clearinghouse for information on food-related issues, and distributes a directory listing regional experts in different food-related areas, so when a newspaper reporter needs a quote, they can find a local source in their IFT directory. In addition, IFT informs their spokespersons about possible issues that reporters may be interested in covering.

FS:...if something, as you indicated, broke out ... there were would be such a wide variety, I would probably get it on my e-mail first, before I could read it in the newspapers. And it would come out of the Institute of Food Technologists, because I'm in direct contact with them. I'm still on their e-mail, even though I'm not active. . . . They continually, every morning and every afternoon when I'm here, I will check my e-mail. And I will circulate to the faculty various articles I printed out on my printer, and circulate them that seem important.

TT: Do you think that someone here would contact the mass media outlet of some kind, or would they wait to be contacted?
FS: I think the IFT would probably contact . . . [the mass media]. They would send something out like that. And then let me know too. . . .

(University Food Scientist, Interview, April 30, 1997)

The same interviewee also mentioned that IFT plays a part in media relations at some of the larger food science conferences.

Usually when there are major conferences, you'll get some wire press, like Associated Press, UPI, what have you, CNN. They'll be covering at major conferences and so forth. . . . [W]hen we had the national convention here . . . we had, good night, we must of had over 60 different agencies covering. We had CNN, we were on CNN, we were on Associated Press. We had, 20/20 came and covered part of it. . . . A lot of the various associates. And [another food scientist] here, was one of my compatriots. We were co-chairing the public relations part. . . . [T]he Institute of Food Technologists . . . also informed these of important papers that were being presented, and they would set up press conferences and things like that. (University Food Scientist, Interview, April 30, 1997)
In addition to direct linkages between media offices and sources, other sources mentioned that they hired public relations firms to help package their message, and therefore maintain their boundaries.

We . . . have an advertising, public relations firm that we use that, you know, helps in getting our message out. We, from time to time, will do morning talk shows, you know, like . . . in New Orleans. We'll do programs for a couple stations around the state. We appear on those from time to time about, with information about the seafood industry. And, another thing that we're actually looking at now, as a matter of fact I have a report on my desk, is something called the video news release, where there are companies, one is in New Orleans, with offices in New York and other places, that we can provide them with footage of our own, and audio, of what we want to say, and it is up-linked via satellite to literally every TV station in the country. So, we will be using the video news release as well as the other traditional means of contacting the media and getting our word out. (Industry Spokesperson, Telephone Interview, May 27, 1997)

While a media office may have a mandate to be proactive, public relations personnel are also expected to handle potentially damaging media inquiries. In the case of food irradiation and safety, reports of food poisonings, such as the E. coli outbreak in the Pacific Northwest in 1993, can stimulate inquiries from reporters.

I found that more often than not we would get irradiation questions following some sort of problem with the food supply, you know a contamination problem, something like an E. Coli problem or a Cyclosporeae problem, something of that nature. (U.S. Government Spokesperson, Telephone Interview, May 14, 1997)

When the media gets wind of something like a death caused by eating oysters, they'll call this office. (State Government Health Official, Telephone Interview, May 14, 1997)

The last time we had some communication was, again, there was a national story about some foodborne illness outbreak, and since we have
been linked to those stories in the past by national news, they would still continue to link us, and say, 'Well could you've prevented it,' or 'What is your take on that,' and we share it with them whether we could have been a resource or not. So, there, we apparently have become a resource to national news for things related to foodborne illness. That's, I think, the key word that triggers communication with us nationally. (Industry Spokesperson, Telephone Interview, May 15, 1997)

These examples illustrate the wide distribution of cultural capital, which, in turn, highlights the importance of controlling and managing these types of resources. As with economic capital, when there is an abundance of this type of capital, its utility value decreases, forcing actors to invest more time and energy into gaining more cultural capital for the same payoff (inflation). Cultural capital, while widely used by sources in constructing linkages to reporters, is not the only type of capital used for this purpose. Economic and social capital can also play a part in source-reporter interactions.

**Economic Capital.** It could be argued that much of what was categorized as cultural capital in the preceding section was made possible by control over economic capital. After all, the argument would go, it takes time and money to organize and attend demonstrations, operate a media relations office, and print and send press releases to newspapers. The point this argument misses is that someone has decided that the economic capital in and of itself is not the best way to gain media attention. Instead, economic capital has been converted into cultural capital. In other words, if the story about interactions between a source and reporter is embedded in strategies of knowledge, then the resource utilized to make the linkage is cultural capital. If the story
consists of bribes and/or advertising, then it is a story of economic capital. This is not to downplay the importance of economic capital, but to emphasize the difference between links that are constructed around cultural capital and links constructed around economic capital. The difference is that cultural capital is more ephemeral, while a source that pays for advertising is guaranteed a place in the newspaper.

I did expect to discuss advertising with spokespersons for grocery store chains who had been contacted about their positions on food irradiation, but advertising did not seem to be a part of their interactions with reporters. This could be due to the fact that when a person or organization buys advertising, they do not deal directly with a reporter, so no direct link is made — or discussed — between the spokesperson, the reporter, and the advertising. Still, according to writers such as Bagdikian (1992), advertisers do influence reporting. One industry spokesperson did mentioned advertising, though in trade magazines, while another mentioned how the advertising dollars of others had impacted media attention on the poultry industry.

TT: Do you think the mass media should be covering food irradiation, and what have you done, if anything, to promote its coverage?
IS: We've taken out a number of ads in trade magazines. We also do a lot of conferences, like the NRA, which is the big restaurant association meeting. There's another one in Chicago, and one in Florida that we do every year. Also, TV programs like 48 Hours and 20/20 have done shows on food safety and food irradiation, which have helped in gaining popular support. (Industry Spokesperson, Telephone Interview, July 15, 1997)

...I know the executive officers of every major meat packer in the country. I know the executive, I mean personally, I know them all in the poultry industry. And, they're PR people, don't give a damn. They . . .
you know, we can. There was a show one time — I wasn't in it — it was on CNN a few years ago, talking about the dangers of poultry. It's scheduled to be run at eight o'clock that night, so it didn't run, so I called up there, and the gal said, "[sir], I'm madder than hell." She said the advertising agency for the national broadcast called that if we ran that show they were going to cancel all their advertising. (Industry Spokesperson, Telephone Interview, May 15, 1997)

In addition, the economic muscle of a major grocery store chain is implicit in the following exchange.

TT: Why would [the supermarket chain you work for] be contacted in the first place?
IS: Well, I think part of it is due to the fact that we are very open with the media. We don't hide things. I don't know about other stores, but I think we are very honest and open. Also, [this supermarket chain] is a large chain of stores and our decisions affect a lot of people, including customers, employees, and suppliers and producers. (Industry Spokesperson, Telephone Interview, May 28, 1997)

It should also be noted that a paid advertisement from an anti-irradiation group was the basis for at least one story in The Florida Press, although the spokesperson for the group did not discuss this particular situation. The advertisement, according to the newspaper story, said that irradiated food might kill you — an example of converting economic capital into cultural capital. The spokesperson did mention that the group had bought television advertising in Hawaii, which was also gaining media attention.

...currently right now there's all kinds of media going on about us because we just released a TV spot in Hawaii where we're, they want to build a facility. (Telephone Interview, May 23, 1997)

Social Capital. Social capital refers not only to other individuals and groups with which an identity is linked (Bourdieu 1984, 1986), but the strength of those
relationships, measured in terms of trust and confidence in reciprocal action (Putnam 1993). Reporters and sources obviously depend on each other for their livelihoods, and given the inclination of reporters to rely on specific sources, I was interested in seeing if this practice evolved into social capital. In other words, did reporters and sources get beyond knowing each other only as reporters and sources? Whereas a number of sources acknowledged that they did know reporters on a first-name basis, and that they were friendly with many reporters, I found that strong parallel ties were uncommon. Only two of the sources I spoke with had strong, personal relationships with reporters.

Now, there's nothing that precludes my buddy [a TV reporter] from calling up and saying 'hey, I need a story on food irradiation.' Or let's just say that something breaks in the paper, Associated Press sends a press release out and it's covered by the local media and [he] will call up -- I go to church with [him], so I know [him]. . . . And he would call up and say 'Hey, let's do a story on this. I read about it, it's come over our lines, and can you tell us about it?' (University Food Scientist, Interview, April 30, 1997)

Well, my best friend, we grew up together. . . . who is a [newspaper] reporter. . . . You know, we were in one another's wedding, he's the godfather of my son, and you know, this all. So, it's real close there. But, that started when we were small children. (State Government Spokesperson, Interview, May 14, 1997)

Weaker social linkages, such as ties made while holding office, could be found in some cases, such as a government official who had held local political positions and was then elected to a state office. The following is from a person holding a media relations position in a state government office in which an elected official had been contacted by reporters on food irradiation.
TT: Are there reporters he will talk to more readily than other?
GSP: Oh, yeah, though that is not a major factor. There are reporters he knows from his hometown area, where he was sheriff and mayor.
(Government Spokesperson, Telephone Interview, June 11, 1997)

Other sources were quick to note that they had come to know, or at least recognized reporters with whom they had frequent contacts. While this may lead to friendly phone conversations, it did not necessarily mean that sources would give reporters inside information, especially when that information was being controlled by someone other than the source. A U.S. Government spokesperson was quick to point out the political nature of media relations.

TT: When something did come along . . . that, say, you thought was important and you weren't hearing from some of your, you know, media contacts, would you ever make a phone call, or try to contact them and say, 'Hey, I've got something for you that you might be interested in?'
USGS: No. No, that was almost forbidden, unless there was, unless there was a feature type thing. . . . The reason that didn't happen very often, and probably doesn't today, is because of the politics. You have to understand the [service] is directly under the [department]. And I'm telling you, whether there are Democrats or Republicans, it doesn't matter which party is in office, whichever party is in office it wants to blunt any negative, any criticism whatsoever, and the public affairs function in [this office], where I was and where I can speak of, became so political, so politicized, that every time a major reporter called me to discuss a food safety issue, I would have to write a memo and send it up to the [Secretary], his or her political henchmen. There is so little freedom for press officers, because of the politics, and you have to understand, whenever a new administration, and this, regardless of whether it's a Republican or a Democrat, because I saw it happen for fifteen years, as soon as the new kid came on the block, whether it was a Republican or Democrat, those, and the nucleus that surrounded that new Secretary, they all looked at us, the career people, as the enemy. It was just really disgusting. I got used to it, I got very cynical about it, but it
was. So, all the career people wanted to do was to answer questions that reporters asked to benefit the American public. And the political people around the Secretary, all they wanted to do was blunt any kind of publicity that isn't, that isn't favorable. And, so, no, very seldom would you see a press officer or a director of media relations picking up the phone, say, 'Hey, have I got a great one for you.' (Telephone Interview, June 9, 1997)

This type of response was common among sources working for government agencies, as they were aware of the need to protect the integrity of their respective agencies. Sources which were outside these agencies typically did not have strong ties with reporters, though one grocery story owner/manager did give a reporter some inside information, though, again, this was not a typical situation.

...we started handling irradiated fruits and vegetables about, oh, conservatively, two years before [poultry]. And, at that time, we had gone through, and I kind of kept it quiet, and then we started getting some calls from reporters shortly after doing that, primarily industry type reporters. And, there's one reporter in Chicago that writes for [a] ... little weekly business newspaper that comes out in Chicago, and he had written some, you know, real good articles about our business. So, I figured I'd give him a call and let him know that we were doing it, in case it was something that, so kind of like a pay back, you know, some real good stories for us, so I let him know that we were involved in this and it seemed to be generating quite a bit of interest, so I called him. But, that was the only time I ever let anybody know that we were, you know, in advance. (Telephone Interview, May 29, 1997)

Linkages based on weak social capital, such as being on a first-name basis with a reporter or knowing a reporter from a former position, typically dissolve once a source leaves the position where s/he had controlled cultural capital. In other words, linkages which could be thought of as based on social capital (good rapport between a source and a reporter) is usually not enough to maintain a linkage once control over cultural
capital is relinquished, such as a position with a title (professor, an ambassador, CEO, spokesperson) except in the case of specific expertise, in which case reporters working for a trade publication may try to maintain the linkage, which was the case with one former government scientist.

TT: Since you've left the [agency], do you feel that you have made more contacts, less contacts with reporters?
GS: Again, with the general press, I've had very few contacts. I've had, continued to have contact with scientific journalists and with journalists for trade publications. I mean, I've had several articles published or information attributed to me that was published in these, in these publications. But, not in the general press. (Retired Government Scientist, Telephone Interview, June 12, 1997)

It should be noted that social capital could play a role for sources prior to their becoming a source. In one case, for example, a university medical researcher, who considers himself to be a mild opponent to food irradiation, had been asked by an activist group to read their material and comment.

I was asked to participate in a local debate by [the head of an activist group], whom I had known prior to this debate. I was joined by one opponent of irradiation on my side from Roswell Park, and two members from, one from industry and one from the American Council on Science and Health in New York City, to debate the issue. (Telephone Interview, May 12, 1997)

These stories of getting and controlling action highlight the role of resources in getting and controlling action in the newspaper arena for sources. Cultural capital is the most widely used, but does not guarantee action. I now turn my attention to the stories of reporters, using the same classification scheme of cultural, economic, and social capital, to compare their experiences with the experiences of their sources.
Reporters

Cultural Capital. The knowledge of elements, categories, and boundaries was largely manipulated and controlled by reporters through the use of telephones, which should not be too surprising given the wide geographical distribution of potential sources. Interactions which are mediated by the telephone, though, mean that only a limited number of people can be involved in the process, and access phone numbers must be available to the reporter. From the source's standpoint, these numbers can be given in press releases or directories, and reporters do use these tools, such as when they want to talk with a local source.

I try to find a local person [for a story]. A lot of times what I can do is call, [the groups issuing press releases] will have a contact phone number on it, and they will have on that, as, you know, they'll say here's an expert to talk to available. Usually they'll say here's an expert available, and they're available for interviews, and so you can call them if you want to, and a lot of times I might, but usually what I'll do instead is call the number, the contact number who put out this release, and say, 'Do you have anybody available locally to take your position on this?' Also, the Extension Service, which is partially funded by the Department of Agriculture, the U.S. Department of Agriculture, and also has state funding, every state has that, it's, it's, I mean, it was mandated a hundred or so years ago, the Extension Service is an excellent source for contacts. They know what research is done within the state, they know who is participating, if there's any kind of a pilot project going. On most issues, they can find out something for you and give you some local names. (Interview, May 13, 1997)

One drawback of using the telephone is that the contact organization has control over the routing of the inquiry. The reporters I spoke with were clear that they did not
try to conceal their identity as reporters when talking to sources, but that did not mean they would automatically tell a secretary or receptionist who they were.

If I know the name of a CEO, or a scientist I want to speak to, I won't necessarily identify myself to the secretary or to the person answering the phone. . . . I would then say, let me speak with John Smith. But, once I had John Smith on the phone, there's no question about identifying myself as a reporter, and automatically that happens. (Telephone Interview, June 12, 1997)

The importance of contact phone numbers has led newspaper organizations to set up research offices which can track down the names and contact phone numbers of sources from past articles. Reporters may also call upon other reporters who have covered the issue in question in previous articles. The following is a typical response about reporters on the resources available to track down sources.

Well, see, because of our electronic library we know who [other reporters] used before. . . . [W]e could also search by, by the topic or the, you know, the name of the company, or whatever. So, I would've been able, in doing this, to find, to see everything else that we had previously been written about food irradiation or about Vindicator. And then, in looking at that, I'd see people quoted in there, and like, 'Oh, well, that might be a good person to talk.' And so, then, then if it's some, there's, you know, various ways of finding people, but the easiest is to ask your co-workers, 'Do you still have their phone number?' (Telephone Interview, May 19, 1997)

The above quote is also an indication of how sources can have extended careers as spokespersons for groups or issues based solely on the fact that they had been used as sources in previous coverage. This not only echoes previous research (e.g., Shepherd 1979), but also substantiates the insight of a source who said that reporters will continue to use the same sources across time and issues. If a source or organization is cognizant
of this tendency and interested in media attention, they should put a heavy emphasis on
gaining media attention as soon as possible.

A few of the newspaper articles dealing with food irradiation were about
demonstrations. When covering a demonstration, at least among reporters whom I
spoke with, reporters tried to talk with a number of people to get a feel for the story.
One reporter went so far as to say that she was aware of the potential biases of such
coverage.

R: ... [E]verybody brings their own particular bias to a story. ... They
haven't done a lot of research on how reporters pick people to talk to, but
I know they've done research on how teachers pick students to talk to,
and they tend to pick students who are going to cooperate, and who are
going to somehow mirror their presentation. And I think reporters also
have the same kind of, the same kind of programmed response to a
crowd, so what I always try and do is be aware of that when I go into a
crowd, and try and pick a pretty broad representation of people. So, it's
not uncommon, and I remember that day, because I remember standing
by a chicken counter for a few hours and just stopping everybody, and in
that case it was just everyone who came through. 'Hey,' you know,
'what brought you out here? Where are you from?' And, the other story
with the protester it would be the same kind of a thing where you kind of
want to avoid just picking, you know, one or two people, you know, who
may be the wrong people or may not represent the larger group. So you
kind of do enough people until you start to kind of get a sense of the
theme, you know, or a sense that there is no theme, you know.

TT: ... When you walk into a protest, or when you walk into a store and,
do you, are you visible enough as a reporter that people come to you and
say 'hey, I'm the person you want to listen to.' ...

R: No, I make myself as invisible as possible. I do nothing to draw
attention to myself. I try and keep, you know, I mean, the tools of the
trade are a pen and a notebook, and the notebook's not that big. ... I
don't have billboards around, anything that would have people running.
You know, I don't have lacquer blond hair, or anything that would make
anybody think I'm media, with all due respect to television. (Telephone
Interview, May 15, 1997)
I want to emphasize that while on-site reporting did take place, the majority of reporter-source interactions were conducted over the telephone. The role of communication technology in mediating reporter-source interactions should not be overlooked. To reiterate, two typical recollections of reporter-source interaction follow, the first by a reporter who covered food irradiation in some detail, and the second by a reporter who was asked to add a local angle to a wire service article.

[The grocery store] faxed [the press release]. I called them up, as I recall. . . . I had either been playing phone tag with [the grocery store] and they said, you know, 'we're going to reach a decision in a few days,' or they may have put out a press release. . . . [A]nd they just said, 'Look, all we're going to do is read you this statement.' And, they did fax me the statement, too. And, they just refused to say anything beyond what was in that statement. (Telephone Interview, May 7, 1997)

At the time I was working the night desk, so I was handed whatever came along. In that story [after calling it up on the computer], which was an Associated Press and Reuters story, I would have been asked to call up local contacts who had shown some concern about the process. (Telephone Interview, May 12, 1997)

Economic Capital. While advertising is the driving force behind the popular press, and many argue that it has an enormous influence on news content (Bagdikian 1992; Mitroff and Bennis 1989; Schiller 1989), others, such as Gans (1979), have found that reporters deny that advertising has much of an impact on their day-to-day activities. In the case of food irradiation, reporters did not talk about advertisers in the sense that they were swayed by any type of advertising, though a radio commercial bought by an activist group opposed to irradiation, as mentioned before, did provoke a story, which was recalled by the reporter who wrote that story.
I realized that their science was very loose, and that they were using scare tactics, and I think I illustrated that pretty clearly in the long article that I wrote. The quote from [the activist group's leader], when he says, you know, 'it's a soft sell when we say ir-Radiate', you know. So it's, I think it was fairly clear that they were using scare tactics. On the other hand, I couldn't really ignore them, because they were managing to scare people. (Telephone Interview, May 7, 1997)

While both proponents and opponents did little in the way of direct advertising, except for the above example, certain grocery store chains were called (by the Florida reporters) because of their economic importance to the area.

...because [a grocery store chain] is a dominant chain there, and I might've even called another, I might've even called other grocery stores, but, I mean, obviously, that would be a question -- 'when I go into my grocery, is the food that I'm buying affected by this thing that I'm reading about in the papers?' So, that's definitely why I would've called. . . . (Telephone Interview, May 20, 1997)

...because they would be big chains in our area that people would, you know, a lot of people would shop in. And, you know, probably, there's, there's [four grocery story chains]. There's only four that are big in this area, and [one of them], the people are real jerks, and they never talk to you about that. (Telephone Interview, May 19, 1997)

**Social Capital.** Social capital played an even less significant role for reporters than it did for sources, except in the case of reporters asking other reporters for contact numbers, which would have played only an indirect part in the actual reporter-source interaction. Of the twelve reporters I spoke with, there was no mention that any of the sources they used in their coverage of food irradiation were friends or acquaintances, although many of them remember having good rapport with some of their sources.
Weak social capital did play a part for one reporter, though, who called upon sources that had been used in previous articles dealing with topics other than food irradiation.

TT: . . . In that long story of yours, you had two [rural Florida] growers talking about the, their strawberries. . . . Were those names given to you, or did you just pick them out of the hat?
R: No, these are growers that I knew from my previous coverage of the strawberry industry. I had been covering the agriculture industry out there for, you know, a good six months or a year. (Telephone Interview, May 7, 1997)

Another example of the use of social capital in constructing a story was a reporter to have contacts with a reporter at another newspaper, although this was not common among the reporters whom I interviewed. Reporters may move from newspaper to newspaper, and call on contacts from time to time at these other newspapers. In addition, there is the possibility of having a strong social tie with another reporter, such as the following.

My husband worked at [another] paper at the time, and that would've been a lot, it was a lot closer to them. And, they wrote about it. And, we got [that] paper at home. And, you know, because he worked there he was aware of what they were doing. It might have been a case, there were several times when I worked in that bureau where I got story ideas from just, from [that] paper. Because of my husband, I knew, because I read it, I knew what they were doing. And, I thought, 'oh, that's a story interesting enough for us to go outside of our usual geographical boundaries.' (Telephone Interview, May 20, 1997)

While social capital may have played a large role in the initial stages of constructing the coverage of issues and finding sources, it was rarely a factor in the stories of the actual interactions between reporters and sources. As with sources, the most prevalent type of capital was cultural, in that reporters and sources both used their
knowledge of the others' systems to gain access to those systems. For sources, this meant packaging their material in ways that would be deemed newsworthy, while for reporters this meant having access to contact numbers for newsworthy sources. This reliance on cultural capital has both strengths and weaknesses for those involved in the newsmaking process, and I now turn to interpreting this process in terms of capital and ties.

**An Interpretation**

In the preceding sections I examined the data collected from the interviews in both a descriptive and analytical manner. Descriptive in the sense that a number of excerpts from different interviews have been presented with little editing on my part (except to protect confidentiality), and analytical in the sense that I have grouped these stories into categories based on the types of capital which anchored the stories. I now turn my attention to interpretation, although I want to point out a possible weakness with this interpretation. By focusing on actors who were involved in the coverage of food irradiation and the resources they controlled, I have neglected to include actors who may have tried to gain access to these newspaper arenas but failed. Why these actors, if there were any, were denied access is unknown, so the following is only a partial story because I cannot speak to the resources, or lack thereof, which these actors controlled.

**Distribution of Capital.** To begin, I want to argue that of the three types of capital used by reporters and sources to gain access to each other cultural capital is the most
widely distributed. Knowledge concerning the elements, categories, and boundaries which comprise culture is easily accumulated, though not necessarily easy to control or manipulate. As Cohen (1985) has contended, symbolic and material boundaries in modern society have not crumbled in the face of capitalism and commodity-fetishism, but have, in many cases, been reinforced by those whose identities they are meant to protect. In fact, there seems to be a proliferation of boundaries in some cases, such as the growth in specializations in numerous professional and semi-professional fields, the social sciences, medicine, and even professional sports.

The argument that more, not fewer, boundaries are being constructed is part of the reason why control and manipulation of cultural capital can seem so difficult. Members who control valuable elements within cultural boundaries may be able to control others within these boundaries, but unless they control resources deemed valuable by other cultural groups, their spheres of control will be limited to their own boundaries. This insight should not be overlooked as it gives us a framework from which we can investigate the value of resources and the function of cultural boundaries. In addition, it offers a perspective from which to study marginal groups which do not have enough resources to protect their own livelihoods, and so are subordinate to, and affected by, their marginal existence to a more powerful cultural group.

While cultural capital is the most widely dispersed, this does not mean that it is relative in the sense that all knowledge has the same exchange value in society. Knowledge of financial dealings (stock market, bond market, futures, etc.) is typically
more valuable in exchanges than knowledge of how to operate an automobile. While both may have major consequences for the actors engaged in the exchange relationships, and are gained through experience, the exchange value of the knowledge is not equal. In the case of the newsmaking process, many people may understand that a demonstration can gain media attention, but not all actors control the knowledge of how to contact reporters, which media outlets may be interested in covering a demonstration, where and when to demonstrate, and how to conduct the demonstration.

Social capital follows cultural capital in its breadth and depth of distribution, although we begin to see a wider gap in the meaning or ability to mobilize resources between different groups. As Uehara (1990) shows, while people in ghetto areas may have just as many social contacts as someone in a wealthy suburb, there is a difference between the resources which flow through these contacts. In addition, as Granovetter (1973) and White (1992) have shown, the strength of ties can make a difference in the type and amount of information flowing through them, and the number of additional networks which are tapped.

Finally, economic capital is the least evenly distributed of the three types of capital (Bourdieu 1984). This is understandable, given that we define class and social position by control over economic capital. It is also the most tangible of the three types of capital, which is not a trivial distinction. By its tangibility, economic capital, in the newsmaking process, cannot be manipulated to the same extent as the other types of
capital. In other words, advertising and bribes are typically based on the exchange of money, not on the promise of this exchange.

**Ties.** The ties which are embedded in these types of capital can be categorized based on the locus of power. To reiterate, ties, according to White (1992), are linkages between identities which are problematic in some sense. If we approach these problematic linkages from the standpoint that they are embedded in different types and levels of capital, then we can begin to understand the complexity and variation of ties which make up social space.

Again, beginning with cultural capital we can see that the locus of control typically resides with the reporter. A source’s control of cultural capital, or the knowledge of what might be considered newsworthy, does not necessarily determine how a reporter and/or his or her editor will interpret this knowledge, as Gitlin (1980) discovered in his study on (and experiences with) media coverage of the anti-Vietnam movement. The following examples illustrate the dependency of sources on the interpretative processes carried out by reporters. The first exchange is with an activist who is recalling a protest which was not about food irradiation, but shows how a news report can be framed in unforeseen ways, while the second quote is from a reporter who had her own opinion of both the protests and protesters.

TT: How often do you do protests, collective behavior sorts of stuff?
A: There's no set thing for it. Our folks do it often. Our members do it often, and we support them in any way that we can. You know, but there's not like, you know, we do it once a month. It depends on the issue.
TT: Has there ever been a situation..., is there ever a situation where you did a protest or you talked to someone or whatever, and then you found out it went in the papers, not knowing there were reporters there? Or does that happen?
A: Occasionally. Occasionally, yeah. Or, you might have a protest and they pick out something that you wouldn't have them cover, if you know what I mean? . . . I'll tell you a frustrating thing that happened two or three weeks ago. We were part of a national tombstone. . . . It's a 12-foot tombstone dedicated to the 15,000 people who die prematurely from bad air, basically. It's the ambient air standards. Well, we hauled that tombstone to [a Senator's office], right out in front. We had probably 20-25 people, we sang, we sang "We Shall Have Clean Air" to "We Shall Overcome." We had flowers. We had two TV cameras. The written newspaperman came and said he couldn't find us. We never got a picture of the tombstone in the paper. Really frustrating, we called four times. It's not every day I have a 12-foot tombstone. It's a pretty damn good picture, if you ask me. It's not every day we can haul that, right? And, we went to [the Senator's] office with a letter of asking him to not weaken the Clean Air Act. He had a letter, he and [another person], had a letter to weaken the Browner Standards. OK, that doesn't matter, I guess. What they picked up was the letter. So, it is sort of, you just kind of do it, and it's out there. Because, it is not objective. It is subjective when you really think about it. And, it's that reporter's viewpoint in how he sees it. (Activist, Interview, July 7, 1997)

I do remember that the protests, the one's that I covered, they, and it was, this is another difficult thing, they tended, oh, I think I remember, yeah, they tended to attract fairly small numbers of protesters, and almost like your usual suspects. I mean, I, you know, I mean I'm, I'm really stereotyping here, but the people impressed me as being the same people who think that, you know, fluoridation in the water is a communist plot. You know, so, and yet that there would be enough people to get on television, so this is where you really had the snowball effect. I mean, that's why I really tried to focus in my longer piece on the PR battle, because you had just enough people carrying signs that they would make it onto the television news, and that was just enough that these supermarket chains, and some of the growers, were getting nervous. You know, they were saying, 'oh my god, we're going to be boycotted.' You know, 'we better not go near this irradiated fruits.' So, it, it was impossible to ignore them because they were, you know, getting this reaction, and, at the same time, you know, I don't think they were really
typical, or I don't know how typical they were in their opinions. 
(Telephone Interview, May 7, 1997)

These were not atypical responses, as even scientists and regulatory agency 
spokespersons felt that reporters did not always get the facts straight. As sources rely 
on cultural capital to gain access to reporters, reporters position themselves in the 
middle of controversies so as to play competing sources off one another. Whether this 
is done to satisfy the norm of objectivity among reporters or for entertainment value, it 
gives the reporter a centralized position within the interchange. This centralized 
position gives the reporter control over sources, in that they can find other sources to 
use if they feel that their current sources are not up to the task. The reporter, the central 
actor, controls the information flow not only between reporters and sources, but to the 
public as well.

In addition to the locus of control lying with reporters in ties embedded in 
cultural capital, the wide distribution of capital means that sources who want to gain 
access to reporters must go to extreme measures to make their causes newsworthy. As 
noted previously, the number of press releases and phone calls which are directed at 
reporters can be staggering, which means that individuals interested in gaining 
reporters' attention but only control cultural capital must manage that capital 
effectively. In addition, the boundaries that arise from cultural capital are noticed by 
opposing sources. Consider the following examples given by different sources.

... obviously any article, any good journalist is going to list pros and 
cons, but I think they also face it off of the, you know, integrity or the
substance that they can use to put behind it, so that's always been in every article. But, it tends to, the cons, you know, since there isn't a whole lot of real reputable opposition, you know, where they're objecting to it for scientific reasons, I mean it's easy to object to something because they feel that the government is trying to, you know, sneaking something by the people, or some hidden danger here. 'We don't know what it is, but there's a hidden danger here,' you know. I mean, so when they get that type of report, certainly they put their views in there, but they don't, you know, it's not like 50 percent of the article is pro and 50 percent of the article is con. (Grocery store spokesperson, Telephone Interview, May 29, 1997)

. . . as far as the history is concerned, none of the anti's have any credentials, scientific or educational credentials, and in the case of most of the statements they make, nor do we. So it's really, is just, it's just stirring up bad conversation. It's not doing anything useful, so our suggestion, our determination internally is that any time that any of these inflammatory emotional statements are made by any group, that we refer the response to someone who has credentials, that is an authority to what [the reporters] are asking. It just makes much more sense to us to do it that way than it, and you get an authority debunking it, and don't add an extra step. It's just, that's the only . . . modification to our communication. That's the only thing that we've done internally intentionally, is try to direct responses to inflammatory statements to authorities in those areas. (Industry Spokesperson, Telephone Interview, May 15, 1997)

If you're looking at the media standpoint, I guess that I do, I have a, a burning desire to give out truth. And, when I see wrongs being done, which it is, it's, it's absolute wrong for somebody's pocketbook to be filled at the cost of, of, of a plant that is so destructive to so many people. That it is not for the good of our society to do this, and it, when we say we're feeding the millions of the world, with what? You know, irradiated wheat that hurts all these children? I'm just sighting one of thousands and thousands of bad cases. As a matter of fact, the United States Army itself experimented with, experimented with irradiated food in the '50s, and, and just threw it out because they said it's no good. And, it never has been, and never will be. And, because it's going against nature. We need to, we need life foods for life. And, not just myself, but many other nutritionists spoke in that way, and then many, many, many on the environmental issue, which is really a bigger issue with some
people. The fact that they would allow an irradiation plant being built in Florida was unthinkable, because it's the way our, our waters to be so easily polluted... (Nutritionist Activist, Telephone Interview, May 13, 1997)

Again, I want to caution the reader that without information about people who tried but were unsuccessful in getting their message to reporters, an interpretation of these data may not be complete. Still, I think it is safe to say that ties embedded in cultural capital will be controlled by those whose position is higher in the cultural production hierarchy, which in case are the reporters and others within the newsmaking organizations.

The locus of control in ties embedded in social capital arises from two aspects of social capital. First, the value placed on the tie by the identities connected will have an impact on the locus of power. An identity which places a great deal of value on a social tie will put more effort in maintaining that linkage. I am speaking here of social ties that go beyond acquaintance. Friendship, as noted by Feld (1991), is a yardstick people use to evaluate their own self worth. If a reporter-source tie is considered to be on this level, the locus of control will not be anchored so heavily with the reporter.

Secondly, the power of the reporter can also decrease when the reporter must depend on a second- or third-person source for information — a distant tie, such as a media office. The media office, as noted above, is a form of cultural capital from the standpoint that it has been constructed for the purpose of regulating the flow of information from the source organization to the mass media. From the standpoint of the
reporter, though, contact with this office involves social capital in the sense that the information given to the reporter may not be from the person who constructed the information, but is flowing through another person, and that person must be trusted to pass along the appropriate information. In other words, the tie between the source and reporter is partially embedded in social capital, in that the reporter is only allowed to speak with a spokesperson. In this way, source organizations are able to control some of the power in the interaction, though not all. Reporters who are denied access to a specific source can say that the source would not talk to them, and, therefore, frame the source in a negative manner.

Note that in the preceding section dealing with the control sources have over types of capital, I argued that sources which work through or from a media office are dealing with cultural capital, in that they understand that a media office may give them better maintenance, and possibly access, to mass media outlets. Now, when considering the reporter, I interpret this office as a form of social capital. My interpretation may be better understood if I put it in terms of the cultural production process.

Every production process has an upstream and downstream component. Upstream is the term used for moving closer to the point of origin, while downstream means one is moving away from the point of origin. For example, an automobile is the downstream product of a number of processes, including the production of steel, plastic, leather, vinyl, and other products. From the perspective of an organization or other identity in a downstream position, the automobile will look quite different from the
perspective of an upstream position. In other words, once an automobile has been built (downstream), it makes sense that the different upstream components all came together to make the automobile, while the origins of the different components (upstream) will see the automobile as only one possible outcome of their efforts.

In the newsmaking process, information coming from a source organization's media office is the end-product of one process — the packaging of information within that organization, and to get that end-product to a reporter, they must rely on some type of capital, which in this case typically involved cultural capital. For the reporter, on the other hand, the information gained from a media office is one part of another product -- the news article, and both cultural and social capital may play a part in the interaction between the reporter and the source, as when a reporter and spokesperson know each other, or when the reporter is not allowed to speak to a specific person within the organization. When social capital, from the reporter's perspective, is used in combination with cultural capital, then some of the power moves from the reporter to the source organization. This shift of power is easy to overstate, as with Nelkin's (1995) interpretation of the New England Journal of Medicine's (NEJM) editorial position that any article which appears first in a popular publication will not be accepted for publication in NEJM; that is, a person or group interested in publishing an article in NEJM would have to refuse all reporters' requests for information concerning their research, even those reporters to which the person or group is socially tied.
In the case of ties embedded in the exchange of economic capital, while not a major factor in any of the stories of ties between reporters and sources in this study, it could be argued that such an exchange would move the locus of power to the actor making the payoff. This is especially true if we move beyond the newsmaking process and include advertising, although advertisers still do not necessarily have full control over such variables as placement and adjacent materials. In addition to the argument that advertising offers sources much more control over the presentation of their message in the mass media, I would also contend that ties between reporters and sources based on monetary exchanges (bribes, payola) would allow the source to hold more control over the reporter. Bourdieu (1984) has summed up the power of economic capital by arguing that it is economic capital which gives people the opportunity to pursue other interests and accumulate other types of capital, if that is their desire. In fact, Bourdieu distinguishes between factions within the high and middle classes based on their control over economic and cultural capital. In both cases, the more dominant fraction is the one with the most economic capital.

**Participants: Judges and Contestants.** If we place the above interpretation within the arena perspective I have put forward in the previous chapter, we can use it to differentiate between the different participants within the newspaper arena. If decisions concerning alternative approaches or objects are being made within this arena, then we must have both contestants -- those who are being ranked or backing the objects or approaches being ranked, and judges -- those involved in shaping the order of the
alternatives being judged. If cultural capital is the most common type of capital used within the newspaper arena, and reporters construct centralized ties by manipulating this type of capital, then we come to the conclusion that reporters are more likely to play the role of judges, while sources will be relegated to the role of contestants. From this perspective, reporters become the more dominant actors in the newspaper arena. This is not to say that reporters are omnipotent, but to point to the discrepancy in power when the different participants enter the arena. When there is a discrepancy in power between groups, as noted by Dahrendorf (1959), it becomes the center of a power struggle. In the case of newspapers and other channels of mass media, the best alternative for disgruntled sources would be to gain control through ownership, as they can rarely have complete control over the newsmaking process – i.e., editorial practices – while occupying a position outside the newsmaking organization.

Another point that should be made concerning the control efforts of sources and reporters is the visibility of the media outlet being studied. In this study, reporters and sources were confined to regional papers, with distributions of the news stories held to local areas. Some sources, such as the President of the United States or a powerful CEO, would more than likely be able to have greater control over reporters at these newspapers than the sources with whom I interviewed. If we move to media outlets at the national level, such as the major television networks, or The New York Times and Washington Post, the control which these powerful sources had over the local reporters would more than likely diminish. So, while I have proposed an interpretation in which
reporters are able to construct centralized ties, therefore giving them power over
sources, generalizations from this study would need to include the standings of both
sources and reporters, and their respective organizations.

Conclusion

I have made the argument that arenas are social spaces in which distinctions
concerning the purity or value of alternatives are constructed. In the newspaper arena,
this involves not only the framing of issues but the choice of what issues will be in the
media spotlight. The choice of issues is often based on interest in previous selection
processes (Hilgartner and Bosk 1988). Once inside the arena, opposing sides confront
each other, typically mediated by a reporter, in an effort to sway public opinion. This
contest involves the getting and blocking of action, which, in turn, is embedded in
resources controlled by the participants. Resources, though, are not evenly distributed
or of equal value, so the power of the arena participants will vary according to the
resources they control.

In the newspaper arena, or at least the coverage of food irradiation on which I
have focused, cultural capital is by far the most prevalent type of capital used. Given
the wide distribution of cultural capital, action based on cultural capital is tenuous, and
efforts must be made to control and manage these resources. While press releases can
gain attention, Pseudo-events, such as demonstrations and press conferences are
considered to be more newsworthy. Organizations interested in gaining even more
control over their interactions with reporters can establish a media relations office, for
which the purpose is to direct and contain the cultural capital flow between the source organization and reporters.

Social and economic capital provide more stability for sources in source-reporter interactions, though these types of capital were not as widely used as cultural capital. Direct social capital, such as found in parallel ties, gives the source more stability through anticipated reciprocation in other situations. Indirect social capital, such as found in distant ties, does not confer the same amount of stability, but by utilizing a spokesperson, a third person (a potential source) is able to provide information without having to directly confront the reporter. This gives consistency to a story from the source organization, but does little to insure that the information will be framed in a specific way by the reporter. Economic capital provides the strongest base, as interactions grounded in economic capital will typically involve stipulations concerning specific goals or expectations before the economic capital is transferred. If those stipulations are not met, we can assume that persons on the receiving end of a tie embedded in economic capital will take the necessary measures to assure the transfer.

In spite of the importance of power within reporter-source interactions, my findings of mutual agreements on all sides that the coverage of food irradiation has been basically fair and well-balanced suggest that these interactions are not necessarily coercive or highly confrontational but involve a great deal of consensual negotiations. I want to make this point because I feel that prior research has focused too heavily on the contentious nature of reporter-source interactions, especially in the case of reporter-
scientist interactions (e.g., Dunwoody and Ryan 1985; Nelkin 1995), although some researchers have argued that this is changing (de Semir 1996). My findings show that while disagreements and misunderstandings do occur between most sources (not just scientists) and reporters, the importance for sources of gaining access to the arena seems to outweigh the risk of being misquoted. Reporters, on the other hand, are cognizant of the fact that they would have a difficult job if they alienated sources. I think it is imperative that we approach these negotiations from the standpoint that, like most social negotiations, the level of commitment to and consensus about these interactions will vary widely across the social landscape, so while reporters construct centralized ties with many sources, there are also numerous parallel ties where reporters and sources know they depend on each other for their livelihood. In addition, it needs to be understood that scientists are not the only sources used to frame scientific issues.

The findings presented in this chapter not only point to the role of resources in getting and blocking action in arenas, and the need to understand that levels of consensus must be reached for the arena to be productive, but that there is also a degree of exclusivity in these stories. Newspaper arenas are assumed to be public arenas (Hilgartner and Bosk 1988), based on the notion that the information provided is high visible and widely distributed. Many of the stories presented here, in addition to the importance of resources in getting access to and controlling the arena, suggest that not all who may be interested in entering these arenas reach this goal. The next chapter
focuses more specifically on stories of the private and public aspects of the newspaper arena.
CHAPTER VI:
STORIES OF STRUCTURE

Introduction

The mobilization of resources, which was the focus of the previous chapter, has been well documented in studies of arenas (e.g., Kitschelt 1985; Renn 1992). That resources have to be mobilized to get and/or block action within newspaper arenas highlights the possibility of challenging the notion that these types of arenas are public. My aim in this chapter is to extend our understanding of the larger structural components which develop in and around all arenas. This will involve defining the terms public and private, and examining in more detail the reporters' and sources' stories of their experiences which will elucidate the public and private aspects of the newspaper arenas in which they have been engaged.

Public and Private

In Chapter IV, I argued that we could distinguish between public and private arenas by the presence of an audience (a public arena would be characterized by the presence of an audience), the permeability of boundaries between audience members and arena participants, including the flow of information (a public arena would be characterized by weak or nonexistent boundaries), and the amount of prior knowledge between arena contestants (low prior knowledge among contestants would be characteristic of a public arena). At this point it is necessary that I define the terms
public and private, which will lay the foundation for the presentation of the stories that will be told.

The concept of public has been used in various ways, such as the dispersion of consequences beyond a specific transaction (Dewey 1927), groups with shared interests (Blumer 1969; Shibutani 1966), policy/governmental spheres, (Habermas 1976), and access (Price 1992). Two definitions pertinent to my interest in newspapers are drawn from Shibutani (1966) and Blumer (1969:195-208), who argued that publics are groups of actors who have a common stake in some event or crisis, and, secondly, I will use one of the earliest meanings of the term, in which public places are considered to be areas where there is common or open access for a population (Price 1992:7). By defining public arenas along the lines of access and shared interests, the structural components I have chosen to emphasize — audiences, boundaries and prior knowledge — are well-suited to be markers of the public-private aspects of arenas. Stories from reporters and sources will again be drawn on to support my argument.

Sources

In considering the experiences of sources in the newspaper arena, I will focus on the impact that an audience can have on the framing of an issue, the flow of information

---

1There are a variety of structural components that could be included in this study, such as expertise, geographical location, and temporal constraints. My choice of audience, boundaries, and prior knowledge is based on the idea that these are basic aspects which not only encompass other structural elements, but force the researcher to stress the private-public aspects of arenas.
from source to reporter, the boundaries which sources construct to maintain their role as sources, as well as the boundaries they build between opposing sides, and the amount of prior knowledge they have of one another and reporters. Given the part played by contestants in an arena — to have their ideas or commodities chosen as most pure, it is important that we pay attention to their efforts at controlling as many aspects of the arena as possible.

**Audiences.** Sources with whom I spoke were aware of the presence of an audience involved in the newsmaking process, as most sources felt that newspaper coverage of food irradiation was important in educating consumers. In addition, some sources had experienced direct feedback in the form of telephone calls following a report, though the number of calls and callers’ opinions on food irradiation were not necessarily consistent among sources, as the following illustrates.

TT: You say the public doesn't know much about [food irradiation]. Do you ever get calls from just people in the general public? Or, maybe not you, but the department get called from the general public wanting to know more about it?
FS: Not too much. Not too much. They read something, maybe, about the west coast and irradiating mangoes, or something, coming in from Hawaii, get rid of the Mediterranean fruit fly, or something like that, you know. And, we'll get a few questions as a result of the story. And that's about it. (University Scientist, Interview, May 1, 1997)

...I was talking with [an industry spokesperson] one time on the morning that an article ran on food irradiation. The person told me that the phones had been ringing off the hook with infuriated callers. I asked the person if the article had been written in such a way as to bring out that kind of response, and they said no. They said that it was about a seafood irradiation conference, and the article was pretty much geared towards discussing the conference. I think when you mention irradiation, people
get scared. (University Spokesperson, Telephone Interview, July 21, 1997)

While such examples illustrate the existence of audiences, my aim is not to emphasize that there is an audience for newspaper reporting; the newspaper would not exist without an audience. Rather, my goal is to assess the impact an audience can have on the packaging of messages. For example, given the number of times media relations offices were mentioned by interviewees, it is obvious that different source organizations understand the importance of having a unified strategy concerning information flowing to reporters. And, while I cannot be absolutely certain that these media relations offices have been created around the need to present consistent images to mass media consumers, there is good reason to suspect that this plays an important part in the construction of press releases and other proactive media contacts. The following stories from sources illustrate different concerns about the mass media's role in disseminating information to the general public.

... certainly we're well versed in the technologies and what they mean, but we try not to be real technical when we have campaigns around these issues. I think a lot of them, we try to zero in on the common sense problems of these technologies. I mean, exposing food to nuclear waste, I mean, you know, you really don't need to go much beyond that for most of the American public for them to realize that it's really kind of crazy idea. You know, do we, we have the data on cesium-137, Cobalt-60, and the NRC regulations on these facilities, and the histories of the problems, and the environmental degradation ramifications, and the vitamin -- nutrient depletion, and, you know, unique radiolytic products. I mean, all of that stuff we've got that in our heads, but I think the technical side can get in to your way, particularly when you're working with the media. (Activist, Telephone Interview, May 23, 1997)
... what we do is we draft something here. We run it by the experts and then, you know they tell us where we’ve gotten it right, where we’ve gotten it wrong, and what we need to do to get it right. And then it’s run by the policy people higher up. And, you know, the process is initiated at different times by different people. Sometimes it’s by us anticipating something that may be of interest to the press and the public. Sometimes it’s initiated by the scientists because they’re aware of something that they think is significant and they want to let the world know about it. So, it’s again, the initiative can rest with different parts of the agency, but in the final analysis all the some major players have to be involved in the final product. (Government Agency Spokesperson, Telephone Interview, May 14, 1997)

... we decided that any time we were asked by any press to discuss the, any anti-group or contrast what they were saying with what we knew, we would refuse. We would say, we'll give you resources, but if you've gotten something to deal with the anti-group, we don't want to be the quoted person, we want you to quote the researchers and the scientists. And that was, that's the only modification to our communication. If someone says, well this groups says that it causes cancer, what do you think, I would say that I have no opinion about that, call these research people, or call the FDA, call the USDA. Get it from the authority. To publish us is of no use. Then you're just, you're just starting some kind of a nonsense war, and that's not, we decided not to participate in that. That's the only modification. We don't response to any article or anything having to do with something an anti-group has said that's inflammatory. (Industry Spokesperson, Telephone Interview, May 15, 1997)

Each quote illustrates different concerns. For the activist, the major goal was to make consumers aware of the dangers of irradiation, while the government spokesperson was mainly concerned about creating a unified strategy in areas felt to be of interest to the public. The industry spokesperson was under the impression that the audience was being unduly influenced by polemic debates, and his organization could be hurt by such discussions, and so the decision was made to direct inquiries dealing
with health-related issues to other sources to allow audience members to hear from "experts" on these issues.

Another point to be made about news consumers is that much of the audience is not present during the construction of the news event, but after it has been reported. This is a temporal constraint on newspaper arenas that cannot be altered given the current structure of newspaper organizations (i.e., daily editions, competition from other media outlets). Newspaper arenas, then, are characterized by the presence of an audience and are, therefore, public, but that audience is not present at the news event but typically become aware of the event only after it has taken place. In other words, while the presence of an audience gives credence to the popular notion that newspaper arenas do have a public dimension, a better understanding of the proximity, both temporally and spatially, of the newsmaking process to the audience would require a qualification of this claim.

**Boundaries.** An additional qualification to defining newspaper arenas as public is the construction of boundaries between arena participants and audience members. An arena is not public if all audience members are not allowed access to the arena.

According to the sources I interviewed, when asked about challenges to their expertise in the area of food irradiation, most said that they would relinquish their position as spokesperson if they felt unqualified to answer the question. Efforts at control over the situation, though, are still evident, as most sources would direct reporters to specific people, often within the same organization.
There are several other of us . . . here who are perfectly capable of, and can, talk to the press about irradiation. I think the only times, one time I might have, I might have deferred when I was not here as long. And, even now, if somebody were asking a lot of information about sort of the earlier history of the regulation of irradiation before I had come to the agency, I might refer them to someone else. But, I and two others here, probably the press office knows that if any one of the three of us are available that any one of us are probably the appropriate people to have on the line if they want to have somebody to talk to about, or to talk to the press about irradiation. (U.S. Government Scientist, Telephone Interview, May 12, 1997)

Oh, if, if I wasn't available [our] . . . Director of Media Relations, his assistant, . . . and the guy that works for me, our manager of Food and Sanitation for the company, . . . any of them might make a statement if they felt comfortable and qualified to do so. (Grocery Store Spokesperson, Telephone Interview, June 9, 1997)

...if our media office asks me to take a call, generally what they'll do is call me first, and let me know that one's coming, or call me and say I will connect you up with someone else, and often, you know, I'll listen in on it. But, they'll sometimes just ask me to return a call. But, they're, we have a pretty good operation. I mean, they work through and essentially would have the realization with people to take different calls. I've taken calls on lots of other subjects besides irradiation, and I suppose if I really screw up one royally, I'll never get another one in my life. But, they're pretty good on that. Once in awhile they might call me and ask if I know about something, that they're looking for some help, and I might be able to point out somebody who would be more appropriate. But that's in an area where they're searching, and they would never refer a call over to me. They would ask me first if I was the appropriate person, or who would be better. (U.S. Government Scientist, Telephone Interview, June 13, 1997)

When sources felt that they would defer reporters' inquiries to others outside their own organizations, they typically had specific people to whom they would direct reporters. Again, efforts to control the flow of information and the construction of boundaries around specific framings are obvious.
I will give [reporters] other sources if you want to confirm or anything. [One person] out of Chicago was the ramrod in the military under the USAEC with the Department of Defense for AEC grant. And basically I worked under [another person] in public health, the Department of Public Health, under the AEC Department of Public Health on my botulism work. And, those people are around. . . . [But] the person in Chicago] is about the only other one I know that is still with irradiation, selling machines, quote. We've developed a very good rapport with Canada, under the Canadians. In fact, there will be Canadian reps, and I will arrange for Canadian reps from their Atomic Energy to be down here. (University Scientist, Interview, May 1, 1997)

. . . if [reporters are] asking me about customer perception, which comes up quite often, I usually refer them to one of the two or three researchers that have published articles on customer, consumer reactions to food irradiation. . . . And [a professor]. If its seafood, it'd be probably [another professor]. In Florida, we sometimes have some seafood issues, [another person] is a good resource for us, and we also ask him to participate in meetings in the area, he is an expert in Vibrio, in shellfish irradiation. (Industry Spokesperson, Telephone Interview, May 15, 1997)

These experiences of sources support my conclusion in the previous chapter, in that gaining and controlling access to newspaper arenas depends on control over valuable resources. The unequal distribution of resources across social spaces translates into unequal access to the arena. This unequal access, in turn, impacts the relationships among those who do have the resources needed to gain access into the newspaper arena, as even at this level the distribution of resources is not equal. In addition, an arena which is believed to be public would not be characterized by the need to control specific resources.

Prior Knowledge. In a truly public arena, contestants would not be able to fully anticipate the strategies and opinions of others, as contestants would be from a large
universe, and both proponents and opponents to the issue being contested could enter or leave the arena at any time. In a private arena, contestants would be able to anticipate the action of others, as these actors come from a smaller pool of contestants. As Morrill (1991) found, high levels of prior knowledge give sources an opportunity to shape their strategies so as to more effectively collaborate with proponents and counteract opponents' moves. The following quotes illustrate the expectations among sources of strategies of other sources who have been involved in the food irradiation controversy.

... the cons, you know, since there isn't a whole lot of real reputable opposition, you know, where they're objecting to it for scientific reasons, I mean it's easy to object to something because they feel that the government is trying to, you know, sneaking something by the people, or some hidden danger here. 'We don't know what it is, but there's a hidden danger here.' (Grocery Store Spokesperson, Telephone Interview, May 29, 1997)

... irradiating food can be beneficial. But it's also entrepreneurial. And the proponents claim to be interested in the public health aspects — some of them are — but most of them are interested in money. (University Scientist, Telephone Interview, May 12, 1997)

There's a group, the group that the osteopath ... started ... and he brought his son-in-law, though he wasn't his son-in-law when they started, and they went around the country mooching money from everyone, and the [media] exposed them as a, you know, being inaccurate in their statements. We never hear from them anymore. They still put out a bulletin every once in awhile, telling you what great people they are. (Industry Spokesperson, Telephone Interview, May 15, 1997).

I've personally have found most reporters, most of the time, are pretty well prepared, and are willing to listen. I think there has been a lot of misinformation in the popular press, but that's largely because the folks who are most vocal about irradiation are sometimes not too concerned about getting the facts really straight. (U.S. Government Spokesperson, Telephone Interview, May 12, 1997)
These are typical quotes of how sources view both opponents and reporters. In addition to anticipating what the other side is going to say, the construction of boundaries between opponents and proponents of food irradiation is also clear. Both opponents and proponents were quick to say of the other side that their science was questionable, and that they were motivated by money. Not every interaction between the different sides of this issue was anticipated, such as the following reaction to complaints from proponents of a food irradiation conference.

Those anti people . . . put out a couple press releases while I was down [at a seafood irradiation conference]. I forgot what they said. There's, that NASA was polluting the environment or something. (U.S. Government Scientist, Telephone Interview, May 27, 1997)

Boundary construction can be seen even in this comment. This scientist might not have been completely surprised by the link between serving irradiated foods on shuttle missions and environmental degradation, but by acting nonchalant about the link, he was able to allude to the idea that opposition to irradiation was unpredictable, unqualified, and not worth the time and energy needed to counter such accusations.

Reporters

In keeping with the distinction between sources as contestants and reporters as judges within newspaper arenas, I must now change my focus from stories told by sources to stories told by reporters. I will continue to provide stories told about audiences, boundaries, and prior knowledge, but the emphasis will change from the boundaries between opposing sides to boundaries between reporters and sources, and
between the different types of mass media. In addition, I will be concentrating on relationships between actors occupying structurally dissimilar roles (reporters speaking about sources), as opposed to actors occupying structurally equivalent roles (sources speaking about other sources).

**Audiences.** Newspaper reporters are aware that an audience exists which will consume their work, though the level of knowledge among reporters about their audiences (i.e., socio-demographic information) can be minimal (Gans 1979). Given the number of people that could be affected by food irradiation, I was interested in having reporters discuss why their audiences might be interested in food irradiation.

... I mean the thinking was, for our readers, they were probably more interested, I mean, an obvious question for our readers on that story was, 'Is the food that I buy going to be irradiated?' You know, I mean that's just common sense.... I mean obviously, that would be a question, when I go into my grocery, is the food that I'm buying affected by this thing that I'm reading about in the papers. (Telephone Interview, May 20, 1997)

... generally what happens is that we will get a press release... or someone will call and say... and what topic... is going to [be] address, and then... the food editor, would look over that and say, 'Yeah, I think this is something we need to cover.' And, you know, especially if it is something that we haven't written a whole lot about before. It was a topic, if I recall, at the time that people were starting to, just starting to address. There wasn't a whole lot on it, and I think [the food editor] probably would look at that as an opportunity to just try to get some information out there. Something that we hadn't done too much about before. (Telephone Interview, May 13, 1997)

The belief that an audience is present and interested in the coverage of an issue is, at times, supported by reactions from members of the audience. When asked about

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
specific feedback from audience members, one reporter mentioned that direct feedback did occasionally occur.

I do get calls on, on especially on seafood issues. You know, I get calls on seafood issues. The oyster thing was of great interest in Florida, because of the fact that they have such an elderly population who are often are on medication, so they can, and I think some of the deaths that were associated with the *Vibrio vulnificus*, tainted, you know, oysters, tainted oysters, were in Florida. (Interview, May 13, 1997)

This quote is also evidence of specific social worlds reacting to coverage of an issue, which fits with Blumer’s (1969) definition of a public as a group of people who share some common interest, though that does not mean they share common values in regards to the issue. If we were to base the notion that this lends credence to assumption that newspapers are public in that they serve specific interests, we could very easily be accused of credulity. Most popular newspapers cater to as many people as possible, supplying sections based on categories of news (e.g., regional, national, international, sports, people), not publics. In addition, stories about many issues get little or no feedback direct audience response, forcing reporters to continue searching for issues which motivate audience members to react.

. . . it's often been disheartening to me the extent to which we don't get feedback on our stories. I can assure you that when I wrote this story, I remember, I do remember it, I remember working very hard on it. I remember thinking it was a very important story, one that was very, and a very interesting story. . . . I haven't even done any follow-up. . . . It was June of '92. It was five years ago. I have no idea what's been going on with food irradiation, I'm embarrassed to say. (Telephone Interview, June 12, 1997)
Boundaries. Reporters construct boundaries around sources, between sources, and between reporters and sources. These boundaries can become obstacles to offering a public forum for marginal individuals and groups who may be interested in communicating to a wider audience. The following stories from reporters illustrate how reporters and news organizations construct these boundaries.

R: . . . the [newspaper] has a news research department. . . . It's a whole department full of people that, you know, do research for reporters for stories. And, they could easily, you know, that would be a typical question would be to call up news research and say, 'hey, I need an expert on food irradiation, can you guys find me somebody?' And, they have all kinds of, you know, they, they're like the librarian. You know, they have like reference books and dictionary of associations, I mean, you know, all kinds of stuff. . . .

TT: Do you know how much they use, or you use previous news stories for contacts like that?

R: Pretty heavily for a story like that, that would just drop on my lap out of the blue. I would, I mean, it, you know, a story that has more national implications they would probably, that would be another typical thing. I would call up, that may even, for example, how I got a hold of [an activist group] to begin with. Would call up news research, and they would go on-line or whatever, and, you know, pull up all the stories they

It should also be noted that the newspaper reporters with whom I spoke made distinctions between themselves and television reporters.

What's interesting to me is . . . the immediacy of television and how that has changed so much of what we all do, because they do the immediate coverage of an event. . . . And, so then it's up to us just to explain it. And, also, then, you know, to kind of put it in perspective. (Interview, May 13, 1997)

These boundaries might not seem important to the current argument, but, on the other hand, it elucidates the image among newspaper reporters that they need to be careful in choosing sources, and so will rely on sources which have proven effective in past coverage.
could find about the issue. And, then I'd track down the people from those stories. (Telephone Interview, May 20, 1997)\textsuperscript{3}

As a lay person, I never felt qualified to come down on one side or the other, and either say irradiation is perfectly safe or irradiation is going to give you cancer. And, I didn't feel qualified to do that, and, you know, maybe if we'd had a full-time science writer who really wanted to make that his mission, you know, maybe that would've been possible. The newspaper, you know, never chose to go that route. So, you know, that's why I pretty much covered it as a public relations war. Which, which seemed like a safe thing to do. Again, I think [a television show] did a far more entertaining story that basically knocked down [an activist group], and just made them out to be lunatics. You know, that's, that was a much more entertaining story than anything I did. I don't know that journalistically it was better. You know, I know it made me laugh. But, you know, I was pretty much trying to lay out what's going on, and then lay out, to a certain extent, you know, who these [activist] people are, and I think I did a pretty good job in portraying them as fanatics, you know, without taking a definitive stand on are they right or are they wrong. (Telephone Interview, May 7, 1997)

With the number of people that I quoted in the . . . [conference] story, I probably just took the information that they gave during their talk, expect maybe for [an industry spokesperson], who I have had a number of dealings with. . . . [T]his is such a large beat, and I have to cover it all myself . . . I have made quite a few contacts. I have a couple of Rolodex and some other files stuffed with cards and numbers. (Telephone Interview, June 18, 1997)

These stories demonstrate the boundary work which takes place among reporters concerning sources and reporter-source relations, even across types of mass media organizations, as in the second quote where the newspaper reporter talked about using

\textsuperscript{3}While I did not ask reporters and sources about the use of the Internet in the newsmaking process concerning food irradiation, I did ask one reporter about using the Internet, and was told the newspaper where she worked did not use it very extensively. I also asked a university food scientist if she had ever been contacted by e-mail, and was told that had never happened.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
the same sources that had appeared on television. Specific people and/or organizations are relied upon to offer information concerning issues, and reporters have the opportunity to make distinctions between sources based on their own opinions of those sources. Individuals or groups not part of this news web (Tuchman 1978), will be forced to struggle for attention, while being fearful that they may be framed as deviant or misleading.⁴

**Prior Knowledge.** Prior knowledge between reporters and sources can vary from the ephemeral encounter – such as during a demonstration – to frequent interactions, and there is evidence that either situation can work for or against sources. That prior knowledge can influence a reporter’s opinion about sources and how this shapes reporting is portrayed in the following stories.

. . . it's an example of a story where you didn't really resolve the questions that people had in their minds. You know, you did a, well, [the irradiation company] says this, [the activist group] says that. And, some research says this, and other research says that. And, and, you know, I think that with food irradiation I mean I got the feeling like there's sort of a gut level reaction of like, 'Oh, that sounds pretty weird,' you know, 'or scary, or dangerous.' And, I can't say honestly that in the framework of reporting for a daily newspaper that, that there was, that we really got to the bottom of that, and resolved that in people's minds in anyway.

(Telephone Interview, May 20, 1997)

I remember [an industry spokesperson] pretty clearly. He, he is kind of a character. . . . And, he is going on about all, his surgery, and, you know . . .

⁴This is not to say that some sources are forced into the spotlight, or that some groups want to be portrayed as deviant. In the case of food irradiation, though, there are advantages to being associated with one side or the other, and disadvantages to being labeled as deviant or fanatical.
There's only four [grocery store chains] that are big in this area, and [one of them], the people are real jerks, and they never talk to you . . . so that would be right at the top why they wouldn't be in there. (Telephone Interview, May 19, 1997)

You know, the supermarket chains were very much afraid of a boycott, so they were even more corporate than they usually are in their dealings with us. (Telephone Interview, May 7, 1997)

When reporters enter a situation where they do not know whom they will interview, a period of silent observing usually takes place.

I always try . . . when I go into a crowd . . . try and pick a pretty broad representation of people. . . . I remember standing by a chicken counter for a few hours and just stopping everybody, and in that case it was just everyone who came through. ‘Hey,’ you know, ‘what brought you out here, where are you from.’ And, the other story with the protestor, it would be the same kind of a thing where you kind of want to avoid just picking, you know, one or two people, you know, who may be the wrong people or may not represent the larger group. So you kind of do enough people until you start to kind of get a sense of the theme, you know, or a sense that there is no theme, you know. (Telephone Interview, May 15, 1997)

In a situation where levels of prior knowledge are high, actors come to expect certain behaviors from each other, as prior interactions will influence present framings (Goffman 1971, 1974). When the level of prior knowledge is low or nonexistent, actors must engage in a process of trying to fit past experiences into the present situation (Thompson 1991). In terms of reporters, this translates into using sources who fit the reporters' definition of the situation, or will provide information that will fit a story. If no such sources are available, reporters, working within the confines of journalistic norms, must find sources to fit their needs. In addition, prior knowledge to how past
articles have been written can impact present framings, as shown in the first quote where the reporter found that the polemic nature of their coverage never gave the reader an answer to the safety and efficiency of irradiating food, but this was how the topic was framed and the reporter could not break frame.

**An Interpretation**

Returning to my argument that we need to distinguish between private and public arenas, the interviews highlight the private aspects of newspaper arenas. Even though an audience is considered part of a newspaper arena, both sources and reporters construct boundaries which make it difficult for audience members to become participants in these arenas. In addition, prior knowledge between contestants (sources) and judges (reporters) can be very high – both between and within these groups, making newspaper arenas as much private as public, if not more so. Hence, I would argue that much of the science reporting, where only scientists and specific activists are used as sources, is a highly private matter.

If I couch this interpretation in the larger theoretical frameworks of pragmatism and arena theory, the implications become more visible. Communication is one of the basic foundations in the pragmatic approach, where “communication is a necessary condition for the shared process of inquiry...[becoming] the condition whereby sharing attitudes and experiences will lead to the realization of common goals” (Hardt 1989:422). If the arena is private, and communications are geared only toward other contestants, then the “common” goals become the goals of those with the most power,
and these actors do not have to worry about sanctions from outside interests. The arena becomes a place of negotiations, where structural conditions influence this negotiated order (Strauss 1993). These structural conditions, I would again argue, are constructed through a dialectic process of internal and external actions. If the external actions are of little consequence to the internal structure of the arena, that structure becomes more stable.⁵

**Conclusion**

In this chapter, as well as the preceding chapter, I have been concerned with exploring the possibilities of constructing a framework in which to approach the news reporting of scientific issues, specifically food irradiation. I have argued that resources must be mobilized by all participants in an arena, whether contestants or judges, and that all arenas fall on a private – public continuum. Resources vary in distribution and worth, and so control over different resources allows different levels of power within the arena. In addition, the degree of publicity given to an arena will affect the contest taking place within it, and so we must pay special attention to the amount of prior knowledge among participants, whether or not an audience is present during the arena contest, and how permeable are the boundaries between the arena and the audience.

⁵Morrill’s (1991) study of the internal dynamics of the upper echelons of a toy company echoes these ideas. For instance, a vocabulary was constructed by this company’s executives concerning different types of players and strategies used to gain advantages. This argot was used by old and new executives alike, which is symbolic of the stability of an internal structure that is not linked to outside interests.
This framework offers a perspective from which to begin to further understand the consequences of inhabiting social space where different groups have different interests. In the following chapter, I will show how this theory may be useful in other areas of sociological inquiry.
CHAPTER VII:
CONCLUSIONS

Introduction

My main goal for this study was to use the stories from interviews with reporters and sources in newspaper coverage on food irradiation to gain an insight into the role of resources in the getting and blocking of action in these arenas. This undertaking was used to set up a general theoretical and empirical framework which could be used to study reporter-source interactions, whether the issue covered was a science/technology issue or otherwise, which, in turn, could elucidate part of the newmaking process. Over the course of the interviews, I came across stories from both reporters and sources that called into question the popular assumption that newspaper arenas were public arenas. My study of the role of resources in gaining and blocking action within the newspaper arenas and uncovering the private aspects of these arenas neglected such components of the newsmaking process as the internal structures of source and newsmaking organizations and public perceptions of issues covered by the media. These have been deliberate omissions, not because they are unworthy of study, but because time and resources have not permitted a study of the former, while the latter would involve combining the arena approach with other perspectives, such as provided by the agenda-setting perspective (e.g., Dearing and Rogers 1996; Koné and Mullett 1994) or work on the knowledge-gap (e.g., Chew and Palmer 1994; Gaziano 1983). The cultural studies approach, which I will discuss below, could also be used for audience research,
although, as I will argue, its strength lies when it is used to understand processes of production and consumption of cultural items.

**Beyond Food Irradiation**

I feel that I have reached my goal of presenting an approach from which to understand how a variety of resources can be used to empower actors involved in (or potentially involved in) arena confrontations. I have used both theoretical insights and empirical observations to build and support my argument. Throughout this study, I have dealt with such general sociological concepts as power, pragmatism, culture, and structure. And, while I have cautioned against generalizations based on the information I have gathered and presented, I feel that my findings can contribute to a broader range of sociological perspectives and concepts. I have already mentioned cultural studies, and I will return to the concept of structure, in addition to considerations of the sociology of knowledge, collective behavior, and food policy from a sociological perspective.

A common theme which runs through these various sociological concepts and perspectives is power. Sociologists not only focus on power within these areas of research, but each area is characterized by struggles of power over the definition of what or how the phenomenon under consideration should be studied. Within cultural studies, for example, there is a division between those who advocate an apolitical approach, saying that cultural items, such as movies and paintings, do not carry some overarching message aimed at furthering the interests of those involved in the production of such
products, and those who argue that cultural items contribute to conditions of social inequality (Agger 1992). I do not intend to dwell on these disciplinary quarrels, other than to say they exist. Instead, my focus is on the social phenomena analyzed by each specialty.

**Structure.** Returning to Sewell (1992:19), structure is defined as “sets of mutually sustaining schemas and resources that empower and constrain social action and that tend to be reproduced by that social action.” That is, structures are social constructions which shape behaviors, although these behaviors can be either directed at sustaining or changing structural conditions, and can either fail or succeed in these endeavors. The similarities between Sewell’s approach and my own are clear, and I owe a great deal to Sewell’s work. One possible shortcoming of Sewell’s approach is the emphasis on the end result of structures, instead of the processes through which they are constructed. Emphasizing the duality of structures – that they are both driven by and reproduced through action which is embedded in resources – does little to help us understand how structures are formed. While the notion of duality of structures is explicit in my work on resources and action, implicit is the idea that both commitment and consensus must be present for the mobilized resources to have any impact on the action which stems from these resources.

Commitment, as noted by Wuthnow (1987:339), gives the researcher a way to think about the relations between persons or agents, and cultural objects. The structural approach to culture, in which culture consists of elements, categories, and boundaries,
includes individuals as elements who must be part and parcel of the cultural milieu. Unruh (1979) has constructed a typology of social world participants that taps into the notion of commitment across social space. According to this typology, there are four categories of participants – strangers, tourists, regulars, and insiders. Commitment to a social world increases as one moves from a stranger to an insider, to the point where the insider goes beyond self-commitment to recruitment of other members to ensure the longevity and vitality of the social world. Without the levels of commitment held by regulars and insiders, the presence of cultural schemas – the knowledge of how something should be accomplished -- and resources – the human and nonhuman materials needed to bring this knowledge to fruition -- would mean very little. In the case of the present study, if people felt that the negative aspects of food irradiation were not being voiced, but were not committed to taking action, the amount of cultural, social, or economic capital they controlled would be of little use.

Consensus among all arena participants is another implicit assumption of the arena approach and important to understanding structure. To reiterate, consensus, much like commitment, is characterized by flexibility, encompassing both stability and change (an important aspect of any definition of structure [Sewell 1992]). In the arena, selections among alternatives (White 1992) require consensus on several levels: who is deemed worthy to judge, the inclusion of different participants in the arena, and the final outcome of the selection process. This is not to contend that a consensus is always voluntary or unanimous. Consensus can be reached through both coercive and equitable
means (Strauss 1978b), and must be reached if the selection process of the arena is to have an effect beyond the time and/or space of the arena. In the case of the newsmaking process, if consensus on the selection of food irradiation as a newsworthy topic or what constitutes a news event had not been reached, then one would expect a decrease in coverage. In fact, that The Florida News devoted considerably more coverage to food irradiation than The Capital Press could be interpreted as an outcome of a greater level of consensus within the newspaper of what constituted a newsworthy item. The proximity of the irradiation plant to The Florida Press may have been partly responsible for this difference in levels of consensus.

This emphasis on commitment and consensus does not imply that only those who reach some level of commitment and consensus are affected by structural components. Marginal groups can be affected as much by structural constraints as those who control the resources from which the structures arise. Davidson and Schwarzweller (1995), for example, found that dairy farmers in Michigan's upper peninsula (UP) were affected by the Detroit and Chicago milk markets, even though little or no milk was being shipped from the UP to these markets. Their feasibility as dairy farms rested on being able to sell milk to processors, but as the population in the UP decreased, milk processors found it more economically feasible to supply the Chicago and Detroit markets, relying on dairies closer to these cities. This forced the UP dairy farmers to find processors willing to buy and process their milk and sell it in the UP, as transportation costs for milk are prohibitive. The small population in the UP cannot
support a large dairy industry, and many farmers have been forced to close. On a more
genral level, Della Fave (1980, 1986) has argued that those in the lower classes —
people without the resources to enter many of the arenas that shape the structures which
affect their life chances — are socialized to accept their fact in life. This socialization
process does elucidate processes of consensus and commitment among those who are at
the greatest disadvantage of the structural conditions to which they are subordinate.
Their commitment to the system, even though they are not a part of the arenas through
which the system is constructed and changed, highlights the power of those who are
involved in these processes.

My purpose in highlighting commitment and consensus is twofold. First, I want
to add more flexibility to the concept of structure. By relying on a definition of
structure which is based on mental processes and resources (Sewell 1992), sociologists
are torn between abstract notions and concrete items. While both are components of
social structures, we need to understand that the level of commitment and consensus to
these structural components can, and do, shape behavior. Secondly, I want to enunciate
the importance of approaching the measurement of these concepts. Customary paper-
and-pencil surveys can provide a proxy for levels of commitment and consensus across
large sections of social space, but many structures are localized, and current
methodological approaches used to analyze surveys are unreliable with small Ns.
Instead, interviewing techniques, such as those used in this study, and observation
procedures, such as participant observations and ethnographies, are better suited for
uncovering the levels of commitment and consensus at the local level. In addition, commitment and consensus do not relegate human actors to playing the role of structural dupes, but place them in a central position from which structures are built and sustained. Even among marginal groups, studies of the level of consensus and commitment to the superordinate structures can offer an insight into the possibilities of challenging that system, or where such challenges are most likely to succeed.

The structural components I focused upon in this study – audiences, boundaries, and prior knowledge – differ from consensus and commitment in the sense that these are structural components which arena participants must take into consideration when appearing within the arena. I assumed, to a certain extent, that a level of consensus and commitment had been made by sources and reporters about the coverage of food irradiation; that it was a newsworthy issue. Once consensus and commitment has been reached at this level, arena participants are constrained by structural components which are beyond their control. If they want to be a part of the newspaper arena, then they will be playing to an audience, be confronted by certain boundaries, while trying to build their own, and have the opportunity to gain an insight into the resources and strategies of others through repeated interactions (i.e., prior news reports). In other words, in addition to studying levels of commitment and consensus which makes arena contests possible, we must also understand how the private-public dimensions impact these contests.
Collective Behavior. Much of the recent research on collective action has been focused on social movements, in which research centers on specific groups with specific goals (e.g., Larana, Johnston, and Gusfield 1994; Morris 1992). There is no fault in this approach, as long as researchers understand that social movements are only part of a larger class of phenomenon. McPhail (1991; McPhail and Wohlsteine 1983) has argued that collective behavior at all levels still provides ample opportunity for sociological research. The arena approach, with a focus on resources and structure, provides a framework for studying the different types of collective behavior.

The arena framework requires the researcher to pay attention to the internal and external structures of the arena. By focusing on the private-public dimensions of the arena, we can begin to lay open the processes of collective movements, including counter movements. During a confrontation between citizens and law enforcement, for example, low levels of prior knowledge among law enforcement officials may compel them to use repressive measures to control the situation, as law enforcement officials may be quick to take the most aggressive measures to counter the tactics of their opponents. Where police officers have constructed lines of communication with at-risk populations, the incidence of riots is lower than for those areas in which relations with the police are restrained and superficial (McPhail and Wohlstein 1983). Audiences, even when they are only virtual, can also impact collective behaviors. In a study of the effects of news reporters on protests, Wolfsfeld (1991) found that protest participants become much more active when a news crew was present. In fact, one demonstration

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
that was quite violent when filmed dissipated shortly after the television crews had left the scene. Finally, Olzak and West (1991) found that episodes of ethnic collective behavior were clustered in short time frames, and argued that this was due to the information diffusion process, in which boundaries based on ethnicity played a major role; given the smaller population of ethnic enclaves, information diffusion was quick but the number of actors that could be mobilized was relatively small. The process of diffusion seemed to differ between white and black ethnic groups, as newspapers found by European immigrant groups flourished during times of conflict while the rise of black newspapers was severely hampered. This translated into stronger opposition among the white ethnic groups to strategies originating in the host culture aimed at challenging the standing of the ethnic group. While this calls into question the generalization that media impacts all groups in much the same way, it does highlight the importance of boundaries and information flow.

The arenas of collective action, as with all arenas, are sites of efforts at control over resources. McPhail and Wohlstein (1983:594; see also McPhail 1991:168) have emphasized the part played by social capital when they argued that “there is growing evidence that during gatherings, demonstrations, and riots most individuals assemble and remain with friends, family, or acquaintances.” Cultural capital is used at such social gatherings as sporting events and political events, where specific argots, flags, banners, and other paraphernalia are used to encourage collective action amongst strangers (Holt 1995; McPhail 1991:170). Coordinated activities among factory
workers, such as work along an assembly line, are based heavily on economic capital, as the ties between owners and workers are severely threatened when wages are not paid, even though workers could still perform the activities (Thompson 1983).

Collective behavior, as noted here, includes a wide range of social phenomenon (McPhail 1991). The framework I have set out, though, should be transferable to many of these phenomena. For instance, Piven and Cloward’s (1977) work on poor people’s movements, and Gamson’s (1990) work on successful and unsuccessful social movements could be informed by a greater focus on structural components and internal interactions which constrain and empower actors in these arenas.

**Sociology of Knowledge.** As with the other fields of research discussed, the sociology of knowledge is a diverse field. I want to focus specifically on the strong programme, as put forth by David Bloor, and the social constructionist approach to knowledge (Berger and Luckmann 1967). These two approaches, as I view them, offer researchers the tools in which the knowledge of all groups can come under study. Given my emphasis on the political (power) processes which come to play in arenas, this inclusion of all groups is imperative. Again, the idea is not to offer a full review of the literature that has developed around these themes, or to lay bare the original treatises of either approach. Instead, I want to elucidate the advantages of attaching my arena approach to these perspectives.

Bloor (1976, 1997; Barnes and Bloor 1982) puts forth a relativist approach to knowledge, which he has termed the strong programme in the sociology of knowledge.
This approach consists of four basic tenets – causality, impartiality, symmetry, and reflexivity (Bloor 1976:4-5). Applying these four tenets to knowledge, Bloor argues that there is no absolute truth, but spheres of knowledge which are constructed, and should not be considered by social scientists as *a priori* true or false. Instead, social scientists interested in epistemology should focus their energies on the environment where the knowledge has been produced. In other words, knowledge, much like action, is not produced in a vacuum but in social spaces where efforts of control are continually taking place between identities.

While I find the strong programme to be enlightening, it fails in the sense that while the outcome of knowledge may be relative, the production of it is not. As Hazelrigg (1989) has pointed out, the strong programme, as constructed by Bloor, assumes a natural environment that is shared by all humans, even though different groups may not speak of it in the same way. What the strong programme fails to include are the ways in which different groups are able to manipulate this natural environment and shape the possible interpretations of everyday experiences. For instance, in their attack on mathematical logic, Barnes and Bloor (1982) fail to account for the reasons why mathematics have been embraced in some societies to a much greater extend than in other societies. Knowledge is not universal but based on local resources, which are not evenly distributed, so the construction of knowledge is not purely relative but takes place within arenas between participants engaged in selection processes (White 1992). The value placed on mathematics, then, is not based on the
internal logic of mathematics, but on the resources controlled by those who practice and rely on it. In societies where mathematical logic is utilized to construct expert systems, techniques and engineers are rewarded for their knowledge of this logic, while in societies based on linguistic traditions, storytellers and shamans rank high in the social hierarchy (e.g., Levine's [1985] research on the Amhara and their hierarchy which is based on control over language).

Berger and Luckmann (1967) present a dialectic in which knowledge is constructed through a process of externalization, objectification, and internalization of social action. This dialectic is used to illustrate the fact that knowledge and social order are outcomes of social processes. Again, not every possible social order or knowledge sphere is present in society, emphasizing the fact that this dialectic does not start anew with every individual, but takes place within a world that is already inhabited by individuals who have come to a consensus on the best way to do things in arena contests. In other words, a dialectic is functioning, but control over this dialectic is not evenly distributed across social spaces. So, when an actor externalizes an action, there are other actors who will either support or sanction that action, which, in turn, the first actor can either counter or submit, depending on his or her resources. The objectification of action, then, is not a relative process, but one which takes place within arenas where selections among alternatives have, and continue, to take place. Not all participants within these arenas are equally prepared to defend their view of the world,
and internalization across populations within and outside the arenas are driven by the distribution of resources.

I follow Berger and Luckmann (1967) in that the sociology of knowledge should be concerned with the knowledge of everyday living among all groups, not just practicing philosophers. Still, given the strong ties between the sociology of knowledge and the sociology of science, I want to briefly touch on the construction of knowledge in scientific circles. Again, my aim is not to offer an end to the discussion, but to begin a process of inquiry.

One popular account of the construction of scientific knowledge has been articulated by Collins and Pinch (1993). In their collection of the construction of big science, Collins and Pinch show how controversies over divergent explanations of scientific phenomenon, such as spontaneous generation and the sex lives of whiptail lizards, were resolved through the mobilization of resources. In the case of spontaneous generation, Louis Pasteur, who was an opponent of spontaneous generation, was pitted against Felix Pouchet, who was the major proponent at that time. Pasteur, according to Collins and Pinch, was able to defeat his opponent “by political manoeuvring, ridicule, and by Pasteur drawing on farmers, brewers, and doctors to his cause” (80). Pasteur did engage in scientific experiments to help his cause, but this was not the only reason he won the debate. Instead, success was gained through control over valuable resources.

**Cultural Studies.** There are a variety of approaches to cultural studies, including the Frankfurt school, the Birmingham school, feminism, and postmodernism (Agger 1992).
I want to focus on Agger’s (1992) invitation for a politically-motivated cultural studies and Gamson’s (1992a) ideas of cultural resonance. As Gamson does not approach sociology from a cultural studies perspective, I will have to make the connection. For this reason, I begin with Agger’s cultural studies approach.

Agger (1992:179) advocates uncovering and understanding the

...political forms and functions of popular culture, explaining the various circuitries of production, distribution, and reception conditioning the ideological nature of our lived experience in capitalism. Radical cultural studies must also conceive of itself in a way that underlines its own direct contribution to counter-hegemonic political practice.

From this standpoint, popular culture is not an innocuous ideological realm of bubble gum pop music, mind-numbing television sitcoms, and frilly movies loaded with special effects. These aspects of popular culture are the visible end-products of arenas in which differing ideological declarations are competing for attention, market share, and consumers willing to pour money into the producers’ and advertisers’ pockets (see Fiske [1992] for an account of the power of ratings and the survival of the TV sitcom Married... with Children). According to Agger (1992), a political, or critical cultural studies program would not only enable practicing scholars to see through the cloak of entertainment constructed by the cultural industry to conceal their efforts at consumer indoctrination, but empower consumers to do the same. The major goal of the cultural industry, according to Agger, is the continuation and strengthening of the institutions of capitalism. The main objective of cultural studies, then, is to shed light on the construction of the hegemonic nature of consumer ideology. My arena approach could
help in this process by laying bare the resources and processes of control over these resources practiced by the cultural production industry, and comparing these resources to those of the average consumer, and how the discrepancies in levels of control lead to an asymmetric contest in which individual consumers have little hope in overcoming cultural producers. Instead, consumers must engage in grassroots activities that pool resources which would offer a base of opportunity against the mass culture producers. This is not to say that popular cultural must disappear. As Robinson, Buck, and Cuthbert (1991) discovered, popular music can be politically motivated, as well as enjoyed for its entertainment appeal. In addition, we need to understand that even grassroots movements should be held to standards and their influence and ideologies open to scrutiny.

The role of symbols in the social landscape is key to a cultural studies program aimed at understanding the political processes which take place in constructing these symbols. Gamson's (1992a) ideas on cultural resonance can help in investigating these processes. As Gamson notes, "[n]ot all symbols are equally potent" (1992a:135). The inequality of symbolic potency is tied to the political-economic environment in which the symbols are embedded. Within a political-economic culture, groups engage in negotiations aimed at increasing the potency of their symbols (Strauss 1978b). Increased potency translates into fewer challenges over the political process. In other words, as symbols become more potent they also become more legitimate and hegemonic. It is at this juncture that cultural resonance can be used in combination with
the politically-motivated cultural studies program. If we think of resonance as consensus, we can study the spread of resonance along lines of communication, tracing the length and depth of effective communication, though we must keep in mind that consensus operates on a variety of levels. My arena approach would focus research on the patterns of resonance as tied to resources and the potency of symbols constructed in private and public arenas. For instance, Gamson’s (1992b; Gamson and Modigliani 1989) work on nuclear power would involve not only the construction of opinions through experiential knowledge, public wisdom, and media discourse, but control over a variety of resources across and between groups. When counterstatements are made, the arena approach would involve following patterns of resonance – patterns of action – across social space and time to determine if control over specific resources gives groups more or less access to specific symbols. This would allow statements to be made on the political climate in which symbolic potency and action are constructed, giving the researcher the tools needed to understand positions of privilege.

**Food Policy.** Returning to my focus on food and food safety issues, one area of policy research in which I find of interest centers on the ties, or lack thereof, between regulatory agencies and commodity firms. In our current capitalist economy, governmental agencies create regulatory policies, while industry is expected to conform to these policies. This theoretical relationship does not necessarily exist in the empirical world. The intervention of industry into the process of government policy has been studied in many cases, such as Denzin’s (1977) work on the part played by breweries...
and distillers in constructing policies concerning the distribution and sales of alcoholic beverages, and Wright’s (1993) look at genetic engineering policy in the United States and the United Kingdom. The two cases I will present concern multinational corporations (MNCs) and the advertising of breakfast cereals.

Negotiations conducted between representatives of MNCs and government regulation agencies fits nicely into the arena approach. For instance, Scoppola (1995) found that MNCs involved in the production of agricultural goods are able to manipulate their organizational structure to benefit from governmental policies that are meant to help domestic firms. When tariffs are raised to boost domestic sales, MNCs can artificially deflate intra-firm sales of goods, giving them the ability to buy either foreign or domestic goods, depending on price. Domestic firms interested in buying foreign products in a market with high tariffs do not have the same resources to call upon, and must deal with the consequences of the policy. These economic and cultural resources can also be used when actors within MNCs feel the need to communicate directly with policymakers (Frank 1980). As Scoppola (1995:21) notes, “[t]he relations of MNCs to the centers of policy-making appear to be qualitatively different from those of farmers and national industries’ pressure groups....Generally, MNCs do not need to lobby because of their great capacity to adjust to changes in the political environment.” In other words, the economic and cultural resources controlled within the MNCs affords the flexibility to affect policy, though this control typically allows them to adjust to, and take advantage of, policy decisions without direct intervention on their part.
Moving from MNCs to breakfast cereals, we move from control over the policymaking process to industry interests competing directly with government policy. Ippolito and Mathios (1990) followed the controversy surrounding the Kellogg's Company and their high-fiber breakfast cereal – All-Bran. Kellogg’s advertising for All-Bran included a message that a high-fiber diet could reduce the risk of colon cancer. This advertising campaign was in direct violation of an FDA policy which prohibited food advertising that promoted health claims. Within a year of the beginning of the All-Bran advertising campaign, the FDA had relaxed their position and allowed companies to present health claims. According to Ippolito and Mathios (1990), the economic capital controlled by Kellogg’s (and other major agricultural/food processing interests) outweighed claims of the FDA opening the door for deceptive advertising. Again, the processes of selection among alternatives in the policy arena, in which Kellogg’s participated, were heavily influenced by the resources controlled by the participants.

From Here

One goal of critical theory is to give consumers the tools they need to become more aware of their opportunities and choices, whether this involves buying a car, shopping for groceries, watching television, voting in an election, or meeting a friend for a meal. As Fuller (1993) has argued, the art of rhetoric – the ability to argue persuasively – has been lost. Whether or not this ability was ever widespread is open to question, but Fuller’s argument does stress the notion that we too often become engaged in polemics with the end result being a total victory for one side and defeat for the other.
or are unable or unwilling to enter the debate. As consumers, we are often led to believe that our options are limited. I want to argue that this state of affairs is largely due to the hegemonic landscape of modern consumer culture. The arena theory I have proposed offers 1) an alternative to the zero-sum arenas, and 2) a tool to be used to understand how our life chances are, in many cases, predetermined for us. It is also a realistic approach to social spaces. It shows us that long-term goals are often obtained through moderation and compromise; that those who hoard resources for short-term gratification are setting themselves up to be challenged by others, though if they control enough resources they will be able to successfully defend their position. Inequality will continue to be an aspect of our social environment, but the aggressions and aggravations that have accompanied this inequality can be diminished as people become aware of other avenues of negotiations and other possibilities for promoting their life chances.

My arena approach, as with all sociological theories, is not a miracle cure for sociology, although I am more optimistic about its potential than Renn (1992) who relegated arenas to metaphorical status. The methodological dilemmas of culling out types of resources must be remedied, which may involve expanding the typology beyond economic, cultural, and social capital. Quantitative measures which capture the complexity of the intermingling of resources could be constructed, and I advocate the continued use of qualitative methods. Finally, we must continue to build bridges between sociological inquiry and public knowledge, between policy and research, and between sociologists themselves. These bridges will be strongest if they can be built by
general, critical theories such as the one I have proposed, which aim to understand and amend the social inequalities we all face.
REFERENCES


Food and Water. 1990. "Objection and Request for Hearing to the Food and Drug Administration (FDA) Regarding: Irradiation in the production, processing and handling of food." Docket Nos. 86F-0507 and 86F-0509.


Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.


Pszczola, Donald E. 1990. "Food Irradiation: Countering the tactics and claims of opponents." *Food Technology* 44:92, 94-97.


Journalism Monographs 62.


Shibutani, Tamotsu. 1955. "Reference Groups as Perspectives." American Journal of 
Sociology 60: 522-529.

Press


Sage Foundation.

University Press.


being allergic to onions.” Pp. 26-56 in A Sociology of Monsters edited by John 
Law. New York: Routledge


Stinchcombe, Arthur L. 1968. Constructing Social Theories. Chicago: University of 
Chicago Press.


APPENDIX:

ANNOTATED INTERVIEW SCHEDULE

1. Name and age of respondent and length of time in current position.
   a. In situations where the interviewee as changed jobs or retired, ask how long
      they were in the position from which they spoke about irradiation.
   b. Try to build rapport by talking about experiences as radio announcer, if
      needed.

2. What is a typical encounter like between you and a [reporter/source] on the topic of
   food irradiation?
   a. Mention specific strategies of gaining attention if interviewee does not
      provide them.
   b. Probe specific strategies; i.e., how often did you use these strategies, when
      did they work or not work?

3. Here is a list of [reporters/sources] which you have been connected to in newspaper
   reports. Did encounters with any of these people differ very much from a typical
   encounter which you just described?
   a. Give interviewee name and organizational affiliation of persons being asked
      about, in addition to dates the articles were published.

4. If you needed to [get/give] information right now, how would you go about it?
   a. Probe ambiguous answers. Give specific examples if interviewee is not
      forthcoming.

194
5. Have you changed organizations or been moved within your current organization during your time as a [reporter/source] for food irradiation? If so, do you feel it has changed the way [reporters/sources] deal with you, or you with them?

   a. If the person has retired, ask about whether or not they still have contacts with [reporters/sources].

6. What kinds of strategies have been used by [reporters/sources] to try to get what they want out of you?

   a. Discuss strategies you experienced and used as a radio announcer, if needed.

   b. What strategies worked or did not work?

7. How were you chosen as a [reporter/source] for the topic of irradiation? Has your standing ever been challenged by others?

   a. Ask how questions that source interviewees felt they were unqualified to answer would be treated.

8. Do you think newspaper coverage of irradiation is important, and has it been fair? If you could change it, how would you do it differently?

   a. Changed the word “fair” to “focus” during the interviews. Interviewees seem to find that “fair” was too loaded, but asking if the newspaper coverage had been focused on the right aspects of food irradiation (e.g., consumer story vs. business story vs. technology story, etc.).
VITA

Tobias Albert Ten Eyck was born on August 25, 1964, in North Bend, Oregon. After graduating from North Bend High School in 1982, he entered Portland State University. After finishing his freshman year, he left Portland State University and began a brief career as a radio announcer. Upon completing his bachelor of science degree in Vocational Education through Southern Illinois University - Carbondale, Tobias returned to Portland State University to work on his master of science degree in Sociology, which he completed in 1994. During this time, he also taught radio broadcasting at Green River Community College in Auburn, Washington. After completing his master of science degree, Tobias, his wife, and son moved to Baton Rouge, Louisiana, so Tobias could pursue a doctor of philosophy degree in Sociology at Louisiana State University. His interests at Louisiana State University have been centered around the sociology of mass media and the sociology of science and technology.
DOCTORAL EXAMINATION AND DISSERTATION REPORT

Candidate: Tobias Albert Ten Eyck

Major Field: Sociology

Title of Dissertation: Gaining and Controlling Access to the Arena: Stories of Ties in a Technological Dispute

Approved:

[Signatures]

Major Professor and Chairman

[Signature]

Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:

March 31, 1998

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.