

Ferment In Our Field: Viewing Agricultural Communication Research From a Social Science Perspective

Mark Tucker
University of Missouri

Follow this and additional works at: <https://newprairiepress.org/jac>



This work is licensed under a [Creative Commons Attribution-Noncommercial-Share Alike 4.0 License](https://creativecommons.org/licenses/by-nc-sa/4.0/).

Recommended Citation

Tucker, Mark (1996) "Ferment In Our Field: Viewing Agricultural Communication Research From a Social Science Perspective," *Journal of Applied Communications*: Vol. 80: Iss. 4. <https://doi.org/10.4148/1051-0834.1332>

This Research is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in *Journal of Applied Communications* by an authorized administrator of New Prairie Press. For more information, please contact cads@k-state.edu.

Ferment In Our Field: Viewing Agricultural Communication Research From a Social Science Perspective

Abstract

About 10 years ago, The Journal of Communication published a special edition titled "Ferment In the Field" in which communication scholars discussed the discipline's history and future in a changing intellectual atmosphere.

Ferment in Our Field: Viewing Agricultural Communication Research From a Social Science Perspective

Mark Tucker

About 10 years ago, the *Journal of Communication* published a special edition titled "Ferment in the Field" in which communication scholars discussed the discipline's history and future in a changing intellectual atmosphere. Philosophical uncertainties now gaining more attention in the communication literature have roots in an emerging paradigm crisis in the social sciences that has cast doubts on the traditional methods and objectives of social research. Over several decades, agricultural communication research has been built almost exclusively on theoretical approaches that have been recently critiqued by scholars throughout the social sciences. This paper argues that agricultural communication must confront and rekindle its relationship with contemporary social theory or reconsider its description as a social science.

Introduction

In one of the final issues of *The ACE Quarterly*, Padgett (1987) shared colorful and often passionate accounts of the agricultural research being conducted at the turn of the century. Written by college administrators and scientists themselves, these early bulletins "display the personalities of the writers and the excitement and frustration of developing the disciplines of the new agricultural disciplines," (p. 15), Padgett wrote.

The slow and uncertain beginning of the land-grant complex is also described by the late Bryant Kearl in his address commencing the 1983 national ACE conference in Madison, Wisconsin.¹ The challenges involved building a research base as well as public confidence in a fledgling institution. Evans and Salcedo (1974)

Mark Tucker, an ACE member, is assistant professor and coordinator of the Agricultural Journalism teaching program at the University of Missouri. An early version of this paper was presented at the 1994 ACE International Conference in Moscow, Idaho.

write that "a new kind of faculty member" (p. 17), — information specialists — became necessary in the first decade of the 1900s. But, it would be at least a few years before land-grant administrators and scientists would recognize the true value of university agricultural communicators, despite the fact that a lively profession had developed in the private sector by the turn of the century (Lee, 1965). It is informative to turn again to Professor Kearl's amusing but accurate depiction of early land-grant agriculture. He writes that the creation of editorial offices in colleges of agriculture was based on clerical necessity and that the early agricultural *communicators* made contributions as "scribes and secretaries, not translators," (p. 3).

These descriptions are interesting because they illustrate the challenging, difficult circumstances from which land-grant agricultural communication first developed. Although agricultural communication remains very much an applied craft, we should recognize that it was solely an *activity* in its earliest academic form, and not a science-based discipline. This is because American communication theory and research were not yet an organized academic endeavor when the first university positions in agricultural communication were created in the early 1900s.

As a social science research base grew, however, agricultural communicators began to draw from it to support their efforts in disseminating research-based information. Today's research in agricultural communication borrows largely from the methods and theories developed in mainstream communications and social science. In fact, it is our reliance on social-science theory that defines and focuses agricultural communication research in the land-grant complex. But while the social sciences grapple with a paradigm crisis that has substantially altered their theory and methods in recent years, agricultural communication continues to build its research base using the traditional theories and methods that have recently been called into question.

This paper argues that agricultural communication must re-establish its relationship with contemporary social theory or reconsider its description as a social science. The paper starts with a considerably condensed history of communication and social theory, followed by a brief overview of agricultural communication as a developing discipline. Some observations are then offered regarding the current state of agricultural communication, followed by a list of implications for the future of agricultural communication as an academic enterprise.

Communication and Social Science: Their Origin and Development

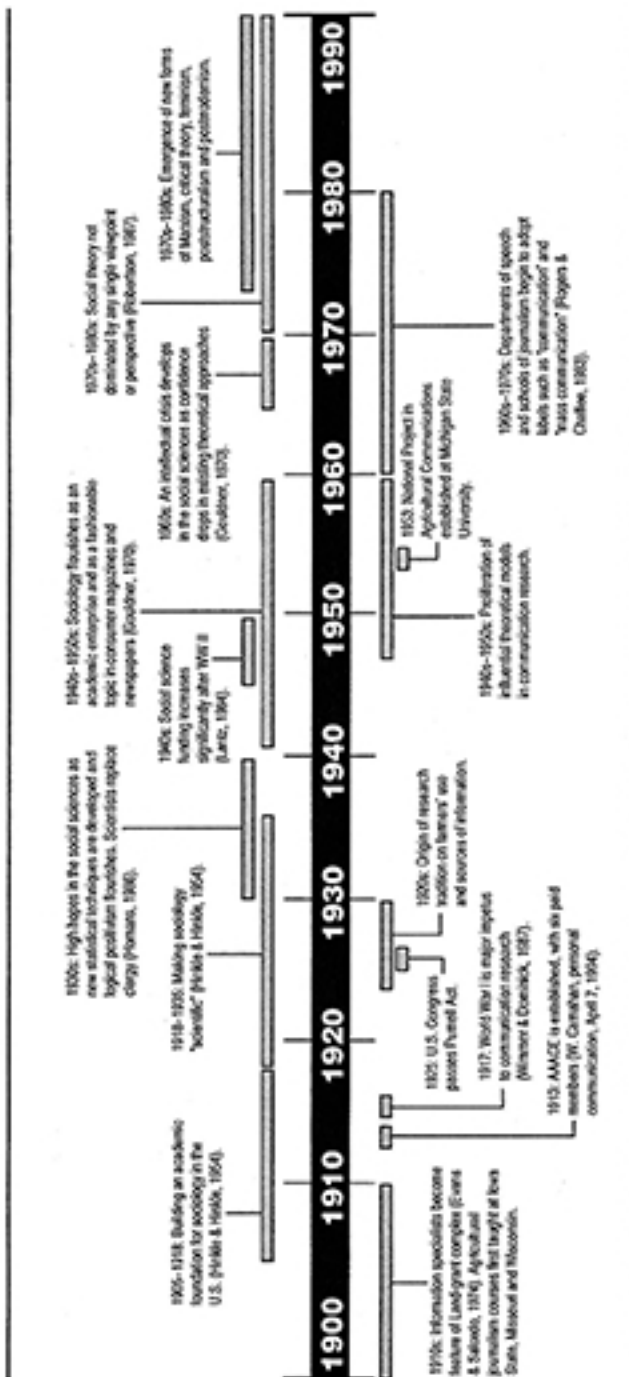
Communication theory and research had no clear-cut academic home in the early days of the land-grant university. Anderson (1987) points out that the academic division of labor surrounding communication was shared by departments of English, speech and journalism, with the latter two eventually taking the lead. Speech set itself apart from its communication counterparts by adopting science as an epistemology. Journalism created an academic niche by building a strong professional component that continues today. Despite the fact that researchers were beginning to specialize in and prepare graduate students for this new academic field for its own sake, communication research remained a truly multidisciplinary activity throughout the early 1900s.

While scholars from such fields as sociology, psychology and political science were particularly important in establishing the early directions for communication research,² McQuail (1985) and others (Holz & Wright, 1979) have argued that sociology, among all the social-science disciplines, has made the most contributions to recent work in mass communication. Not surprisingly, the development of communication as a social-scientific enterprise reflects the growth and maturation of sociology during the mid-1900s, as illustrated in Figure 1.

Hinkle and Hinkle (1954) indicate that the period between 1905 and 1918 was one of building an academic foundation for the study of sociology in the United States. They identify the period of 1918 to 1935 as an era in which the primary concern was with making sociology *scientific*. Homans (1986) characterizes the 1930s era of sociology as a time of great hopes and optimism, where new statistical techniques were developed and logical positivism flourished. This was a period when scientists began to replace clergy as working sociologists.

Lantz (1984) points out that funding opportunities for social science research increased significantly after World War II, stimulating a host of studies on social change and transformation. Spanning the decades of the 1940s and 1950s, sociology flourished not only as an academic enterprise, but as a recognizable, even fashionable, topic in consumer magazines and newspapers. Gouldner (1970) discusses the period of the 1940s to the 1960s as an era in which sociology, and the social sciences, were accepted into popular culture.

Fig. 1. Ninety Years of Development: Selected Milestones in the Social Sciences



The 1940s to the 1960s constituted a critical period of development for communication research. In the late 1940s, a number of influential communication models were developed and diffused throughout the scholarly literature. For example, in 1948, Lasswell framed the study of communication in a single, classic question: "Who says what, in which channel, to whom and with what effect?" (Lasswell 1971, p. 84). This seminal question is credited with helping spawn several traditions of communication research, including gatekeeping, content analysis, audience analysis and diffusion studies (Severin & Tankard, 1979). Another noteworthy development occurred in 1949, when Shannon and Weaver published their groundbreaking mathematical model of communication.

Beginning in the late 1950s and continuing to the 1970s, departments of speech and schools of journalism began to adopt labels such as "communication" and "mass communication." During this period, communication research began to move from departments of sociology, psychology and political science to the first new departments dedicated primarily to the study and teaching of communication (Rogers & Chaffee, 1983).

It was also during this period that a theoretical approach known as structural functionalism enjoyed status as the dominant paradigm in social theory. One of the major tenets of structural functionalism is a view of the world as a system of interconnected parts, each serving a necessary function to society, as tissues and organs do to the human body. As a theoretical approach, structural functionalist sociology is concerned with maintaining social order, or keeping the social system running smoothly. Structural functionalism had its origins in the works of such classic writers as Comte, Spencer and Durkheim, each of whom made analogies between social and biological structures and processes (Turner et al., 1989).

In the post-WWII years, structural functionalism flourished as the major theoretical paradigm in the social sciences. A number of communication research models and traditions emerged during this period, all of them influenced by structural-functionalist thought. According to Hardt (1992), the trademark of theoretical communication models developed during this period was a preoccupation with functional aspects of communication and the avoidance of questions about the self-serving motives of commerce and governments.

Despite the entrenchment of structural functionalism in the social sciences during this period, the literature indicates that a number of competing theoretical approaches did enjoy some popularity and growth among rival factions. A number of "radical" groups³ emerged in response to academic sociology's widespread adoption of structural functionalism, although the McCarthy atmosphere present in higher education generally did not encourage criticism of American society or its institutions (Lantz, 1984).

A group of critical theorists, who collectively comprise what has become known as the Frankfurt School, are of special interest to students and scholars of sociology and communication. Theodor Adorno, Max Horkheimer, and Herbert Marcuse were the founding members of the Frankfurt School, and their objections to the aims and methods of social science in the 1930s and 1940s provided the foundation on which modern-day critical theory has been built.

Kellner (1989) points out that critical theorists recognized this period as the birthplace of a truly "mass" media, which included the emergence and popularity of cinema, cheap fiction, comic books, and Roosevelt's effective use of radio for political persuasion. Critical theorists viewed culture as an imposed form of ideological domination and referred to a "culture industry" frequently in their early works, referring to the control exerted by mass media, government agencies and big business (Ritzer, 1996). Marcuse, in particular, viewed mass media as "dominant agents of socialization which were displacing the primacy of the family" (Kellner 1989, p. 137). Marcuse's classic 1964 work titled *One-Dimensional Man* conveys a dark side of progress, where society's domination over the individual was greater than ever before. Where structural functionalists would celebrate social order and integration, critical theory would seek to expose deception and manipulation (Kellner, 1989).

It is important to note that more recent schools of critical theory maintain that it is neither possible nor desirable to produce invariant laws of human behavior, as believed by the founding scholars of the social sciences. At the same time, these later writings in critical theory are less guarded on the potent dangers of mass communication in society, arguing in fact that media might play a potentially *emancipatory* role by furthering public participation in social and political issues (Braaten, 1991).

Gouldner (1970) argued that in the late 1960s sociology was facing an intellectual crisis due primarily to social-science theory's failure to cope with the complex international and domestic issues

of the 20th century. The "crisis" referred to perceived social changes that were proceeding rapidly and threatening to bring sharp conflict and tension to the academic community studying them. Structural-functionalist approaches to conceptualizing society no longer seemed capable of providing new insights into a host of emerging problems, such as increasing rates of violent crime, deepening cycles of economic depression, and domestic tensions aggravated by the civil rights movement and the Vietnam war. Meanwhile, increasing numbers of social scientists began to question the premises on which structural functionalism was based. The most common, and ultimately damaging, criticisms of structural functionalism involved its maintenance of the status quo and its lack of a framework to conceptualize social change. The theory has also been criticized for failing to recognize divergent groups, minorities, and others whose views may clash with more powerful interests.

Despite the proliferation of alternative social theories during this period, none seemed capable of providing the level of confidence and consensus in social thought that had existed in prior decades. Robertson (1987) indicates that social theory of the 1970s and 1980s was not dominated by any single viewpoint or perspective.

Additional philosophical approaches have begun to take root in the last 20 years or so, gaining more visibility in peer-reviewed journals and, in some cases, giving rise to new outlets of scholarly activity. These new theories question the normative assumptions associated with positivism, such as conducting science in the absence of the individual researcher's presuppositions. Critical theory, mentioned earlier, along with such theoretical schools as feminism, poststructuralism, and postmodernism, would significantly reframe the content and methods of social science. For example, postmodern sociology is marked by a view of the world as incurably pluralistic, with a multitude of sovereign units possessing no vertical or horizontal order (Bauman, 1992). For these writers, society is not in crisis, but in a new historical epoch. They argue that this new period requires a new social science, one not indicted in the errors of structural functionalism (Agger, 1991).

While the alternative theories spawned in the past 25 years vary greatly in many regards, many share the view that social science theory and methods developed in the early and mid-20th century are based on flawed reasoning and in need of significant revision. The new theoretical approaches would significantly reframe social thought and recast the concepts and constructs that comprise our

theories of communication and society. In addition, they would question the validity of years of research based on structural functionalism and other theories. Finally, they would challenge the merits of positivist science, including both quantitative and qualitative methods.

Theory in Agricultural Communication

The most common theoretical orientations in agricultural communication generally have mirrored those of mainstream communication and sociology, retaining a heavy emphasis on structural functionalist thought. Agricultural communicators' heavy reliance on structural-functionalist theory is not surprising given our role within the land-grant complex. In its defense, we should note that such research has served us well in providing useful, practical data to evaluate the performance of our print and electronic communications products and programs.

One of the strongest points of evidence for the value of early agricultural and mainstream communication research was the establishment and success of the National Project in Agricultural Communications (NPAC, 1960), described recently by Miller (1995, p. ii): NPAC's purpose was "to study, stimulate and apply communication research and knowledge to the field of agricultural communication." To this end, a series of practical publications was published from 1955 to 1961 highlighting various research findings of interest to agricultural communicators and suggesting additional areas of inquiry. A number of communication clinics, workshops and short courses were sponsored around the country.

NPAC also funded the work of graduate students and researchers who were among the first to contribute to a systematic, scholarly literature in agricultural communication. For instance, the now-famous diffusion research tradition was given early attention by NPAC. This literature grew rapidly in the 1960s and 1970s and constitutes some of the most widely adapted social-science theory of this century (Fliegel, 1993; Rogers, 1983). Its principles continue to be used broadly in agricultural communication.

NPAC also helped fund research that explored the characteristics and development of undergraduate coursework in agricultural journalism. The master's theses of William Mitchell, University of Florida, and Clyde Duncan, University of Missouri, both examined the academic and extracurricular experiences required for success in agricultural communication work. Jim Evans and his colleagues from the University of Illinois made significant contributions to this

literature in the 1970s and 1980s, while Ann Reisner from the University of Illinois and Curt Paulson and his colleagues from Ohio State University have made more recent contributions.⁴

NPAC devoted a considerable amount of attention to such critical topics as readability and comprehension of various styles of writing. Various agricultural journalism faculty from the University of Wisconsin were cited widely for their important work in this area (Powers & Kearn, 1968; Bostian & Byrne, 1984; Bostian & Thering, 1987).

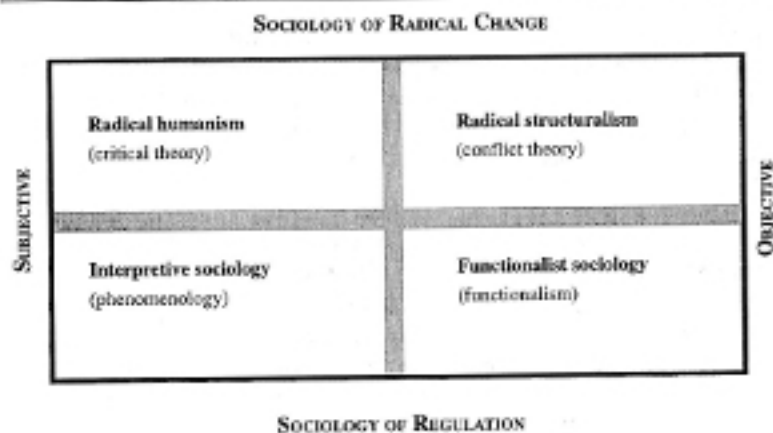
The variety of methods and substantive areas examined by agricultural communication researchers over several decades appears to reflect the diversity of communication research that developed in the structural functionalist era. Agricultural communication, like mainstream communication and the social sciences in general, built extensively on structural functionalist thought in the mid-20th century. But, whereas the social sciences began to grapple with deeper questions as to the means and ends of social theory and research beginning in the mid- to late 1960s — with questions that placed structural functionalism in an increasingly untenable position — agricultural communication has continued to build its research literature within this paradigm.

A visual representation of the major paradigms in the social sciences has been formulated by organizational sociologists Burrell and Morgan (1979). Rosengren (1983) adapted this typology for use in evaluating mainstream communication research. Shown in Figure 2, the typology provides a rough map of the theoretical orientations used in modern social science research.

Subjective theoretical approaches shown on the left-hand side of the figure emphasize the individual as the primary focus of analysis, while the objective approaches shown on the right-hand side emphasize the primary role played by society in influencing the individual. Giddens (1987) suggests that the tension between subjective and objective approaches is one of the central controversies in modern social theory. Meanwhile, the contrasting approaches in the upper and lower panels of the figure vary in their perceptions of the mission of social science, such as to foster social change or to maintain the status quo. The gray divisions between the paradigms imply the lack of clearcut boundaries delineating the four approaches.

As Rosengren (1983) concluded with communication research more than 12 years ago, we may also observe that agricultural

Fig. 2. Burrell and Morgan's Typology for Schools of Sociology, Adapted from Rosengren



NOTE: A partial summary of Rosengren's (1983) analysis of the subjective/objective dimension of social science is as follows: in epistemology, antiobjectivism/positivism; in methodology, ideographic/nomothetic. Dichotomies of the radical change/regulation dimension regard assumptions about the nature of society and include radical change/status quo; domination/consensus; and emancipation/solidarity. See Rosengren (1983) and Burrell and Morgan (1979) for a more thorough discussion of the typology. Refer to more recent textbooks and journal articles for an account of current research being conducted within each of the four paradigms.

communication has built extensively in the lower-right-hand quadrant of social theory, to the exclusion of alternative approaches. While there are limitations to Rosengren's analysis,⁵ the typology helps illustrate the heavy concentration of agricultural communication research effort within a single theoretical dimension and suggests possible areas of growth for future theoretical work.

Discussion

Although not among the earliest active contributors to social science, agricultural communicators accomplished a great deal during their first half-century of existence for both the success of the land-grant university and for their own profession. For instance, they successfully argued that government positions in agricultural communication required trained professionals with appropriate credentials, and that these positions should not be open to just any applicant (Kearl, 1983). This period saw the rapid development of agriculture as we know it today, with the birth of ACE (then the AAACE) in 1913; the passage of the Smith-Lever Act in 1914; and the Smith-Hughes Act in 1917, to name just a few of the milestones.

Like all social-science disciplines,⁶ ours faces the challenge of staying relevant in the coming century. Yet, agricultural communication has not experienced the intellectual turmoil faced by sociology and communication starting in the late 1960s and 1970s. This relative tranquility in our field is somewhat surprising given the traditional insistence that agricultural communication is in fact a social science.

While agricultural communication has, for the time being, sidestepped many of the current tensions within the social sciences, this paper argues that the discipline cannot indefinitely avoid a difficult period of self-examination that could transform the way we frame research questions and define our academic mission. Over several decades, agricultural communication has advanced almost exclusively through middle-range theory and a social-psychological orientation⁷ toward structural functionalism. This is an unlikely course of development for a discipline that has in the past drawn so heavily from the social sciences and, indeed, defines itself as a social science. Although sociology and anthropology also shared a preoccupation with structural functionalism for many decades, there is strong evidence in the literature that its position as the prominent social-science paradigm was seriously in question by the late 1960s and early 1970s.

This paper argues that agricultural communication should explore new theoretical approaches that will broaden its research base and stimulate new areas of study within the discipline. Such approaches can be used, for instance, to challenge the validity of traditional methods used to study an issue, to question the results or recommendations drawn from that research,⁸ or to use findings from a given research project as baseline data from which to launch a critical examination of a problem.

An example of how a critical theoretical approach might be applied to existing descriptive data regards the administration of undergraduate agricultural communication teaching programs. A recurring question in this area is the ideal administrative home for such programs. Specifically, what are the implications or consequences of agricultural communication programs being housed in colleges of agriculture as opposed to schools or departments of journalism? Is it possible that students whose degrees are conferred by colleges of agriculture are more likely to seek or gain employment in agribusiness as opposed to journalism? Is the role of agricultural communication programs to serve agribusiness as well as public interests, and are these two roles compatible? Does one

administrative arrangement lend itself more to the enhancement of public education than the other? All of these are questions that lend themselves to research. The questions also lend themselves to controversy because of the competing interests within academia and the private sector.

The objective of alternative theoretical approaches in the social sciences is the same as that for all research: to discover the true state of affairs for a given phenomenon. Great potential exists for their application in agricultural communication. However, alternative theoretical approaches often require researchers to question people's motives as well as their methods. Because of their potential to challenge the status quo, they may bring repercussions from university administrators, alums and industry leaders. Clearly, their use presents dilemmas as well as opportunities. Possible barriers to their adoption are provided in the following section.

Prospects for a New Agricultural Communication Research Agenda

Although agricultural communication emerged as a discipline largely through colleges of agriculture, its research base has been developed using the concepts, theories and methods of the social sciences. Agricultural communication must continue to participate in the broad philosophical issues facing the social sciences if it is to advance as an academic discipline. However, departments of agricultural communication will have to overcome at least two barriers if they are to take full advantage of the new research opportunities.

The first barrier concerns the fact that little of our research extends beyond descriptive work. Indeed, most of us are more comfortable to describe our research in terms of methodology, such as a "content analysis" or "readership survey," than to address equally important issues of our theoretical orientation (Churchill, 1987). However, use of social-scientific techniques does not constitute social-scientific research. While some might argue that descriptive research helps us fulfill our traditional service function, it does not follow that the research base in agricultural communication should be composed *solely* of such work. It is possible that the current administrative trend in designating agricultural communication departments as non-academic units and reducing the number of tenure-track positions has also functioned to narrow the boundaries of our research (Montgomery et al., 1996).

The second barrier that could hinder prospects for a new research agenda is the lack of doctoral programs in agricultural communication. While young scholars may bring to the discipline new perspectives from other social and natural sciences, agricultural communication graduate students often must study our profession through the supervision of other academic departments. For example, a number of master's-level agricultural communication degree programs are actually administered through departments of agricultural education or other academic units. At the same time, agricultural communicators with terminal degrees are much more likely to enter administrative positions than to function *primarily* as researchers or mentors. Our few mentors and research scholars may view agricultural communication more as a gathering place than an area of scientific investigation.

Conclusions

Since the early 1900s, agricultural communicators have indeed shown their value to land-grant research and extension. We have inspired public confidence in agricultural research and personal confidence in ourselves as responsible, efficient communicators. It is clear that much more work will be needed to forge the future of agricultural communication as an academic enterprise, and significant challenges lie ahead.

The major presumption guiding this paper is that agricultural communication cannot only survive but benefit from a thorough critique of its methods and objectives. No doubt, our greatest strides will result from introspection and dialogue among land-grant communicators, social-science researchers and private industry. Let us make ACE our forum to discuss and debate these issues.

Endnotes

¹Professor Kearl discusses the profession's modest beginnings with some observations worth noting:

... Up to the start of the 20th century [land-grant universities] had made almost no original contributions to American agriculture. ... Keep in mind that before 1900, Europe already had a very lively community of agricultural scientists. ...

There was nothing anywhere near that level going on in this country. ... [S]low as we were to get started, the land-grant colleges took off like rockets between 1900 and 1930. They generated a wealth of information, they established confidence in themselves, and they began to move this country toward scientific agriculture.

²Although this decentralized study of communication attracted scholars from a variety of social sciences, some well-known communication scholars began to express serious doubts as to the field's future in the late 1950s. It is in this regard that Rogers and Chaffee (1983) cite the comments of both Bernard Berelson and Wilbur Schramm, whose articles in a 1959 issue of *Public Opinion Quarterly* convey grave doubts and disappointment in the future of communication theory and research. The articles express concerns that the field of communication was losing its innovative scholars, and no promising ideas were emerging to help the field develop further. Seibold (1979) provides a more recent critical assessment of communication research, pointing out that the National Science Foundation has resisted defining communication as a primary discipline.

³Various theoretical approaches associated with Marxism became more popular among social scientists of this era, partly in response to the structural-functionalist backlash. But the internal disputes among the various sects of Marxism, as well as a deep distrust of Marxism from many quarters in higher education, served to weaken its ascendance as a viable replacement for structural functionalism. Although Marxist approaches have shown more resilience than structural functionalism in gaining new adherents (Homans, 1986), they have done so only by "rewriting" various major propositions in Marx's original formulation.

⁴For instance, see Evans (1972); Kroupa & Evans (1973); Kroupa & Evans (1976); Evans & Bolick (1982); Reisner (1990A); Reisner (1990B); Wilson et al. (1991); and Boone et al. (1993).

⁵Rosengren's description of these four approaches is insightful, but tends to oversimplify the differences between the subjective and objective approaches.

If intelligently applied, the *verstehen* approach may result in brilliant verbal descriptions and analyses that strike the reader as having an inherent quality of obvious truth. However, it does not allow for precision, falsification, and replication. ... While falsification and replication are possible for multivariate analyses undertaken within the traditional paradigm, including more than just a few variables in the analysis has been difficult. The less formalized *verstehen* approach does not encounter this difficulty. Each of the two approaches, then, seems to have its own advantages and drawbacks, more or less balancing each other. During the last decade, however this situation has changed. A dramatic breakthrough has increased the power of multivariate statistical analysis.

⁶Social-science disciplines in colleges of agriculture are no exception. In a recent professorial inaugural address published by the The Ohio State University, Barrick (1989) laments other academicians' lack of understanding of the term *agricultural education* and the external pressures that have shaped that discipline. Flinn (1982) and Friedland (1982) have discussed the opportunities and dilemmas facing rural sociology. In discussing rural sociology's relationship to mainstream sociology, Flinn writes, "Rural sociology has mirrored the failings and limitations of sociology for several decades — albeit at a distance — and the parent discipline is as much of a problem as a solution" (p. 9).

⁷Social-psychological models include the early "hypodermic needle" theory and Berlo's SMCR model of communication. Psychology-based models have long been acknowledged as inadequate in themselves to frame the spectrum of critical issues comprising mass communication research (Thompson, 1988; Holz & Wright, 1979).

⁸An example of this can be found in the diffusion research literature, which has been widely criticized by researchers working from various conflict perspectives. A number of criticisms have been leveled against the land-grant university complex and extension services for their role in developing and diffusing certain agricultural innovations. These criticisms have addressed not only the role of the land-grant university in supporting private-sector research, but also the negative social consequences of innovations developed at publicly supported universities (Rogers, 1983).

References

- Agger, B. (1991). Critical theory, poststructuralism, and postmodernism: Their sociological relevance. *Annual Review of Sociology*, 17, 105-131.
- Anderson, J. A. (1987). *Communication research: Issues and methods*. New York: McGraw-Hill Book Company.
- Barrick, R. K. (1989). *The discipline called agricultural education*. Professorial Inaugural Lecture Series, Department of Agricultural Education, The Ohio State University, Columbus, OH.
- Bauman, Z. (1992). *Intimations of postmodernity*. London: Routledge.
- Boone, K. M., Paulson, C. E., & Barrick, R. K. (1993). Graduate education in agricultural communication: The need and role. *Journal of Applied Communications*, 77(1), 16-26.
- Bostian, L., & Byrne, T. (1984). Comprehension of styles of science writing. *Journalism Quarterly*, 61(3), 676-678.

- Bostian, L. R., & Thering, A. C. (1987). Scientists: Can they read what they write? *Journal of Technical Writing and Communication*, 17(4), 417-427.
- Braaten, J. (1991). *Habermas's critical theory of society*. New York: SUNY Press.
- Burrell, G., & Morgan, G. (1979). *Sociological paradigms and organisational analysis*. London: Heinemann.
- Churchill, G. A. (1987). *Marketing research: Methodological foundations*. Chicago: The Dryden Press.
- Evans, J. (1972). Broadening the academic base in agricultural communications. *ACE Quarterly*, 55(4), 30-40.
- Evans, J., & Bolick, J. (1982). Today's curricula in agricultural communications. *ACE Quarterly*, 65(1), 29-38.
- Evans, J. F., & Salcedo, R. N. (1974). *Communications in agriculture: The American farm press*. Ames: The Iowa State University Press.
- Fliegel, F. C. (1993). *Diffusion research in rural sociology: The record and prospects for the future*. Westport, Connecticut: Greenwood Press.
- Flinn, W. L. (1982). Rural sociology: prospects and dilemmas in the 1980s. *Rural Sociology*, 47(1), 1-16.
- Friedland, W. H. (1982). The end of rural society and the future of rural sociology. *Rural Sociology*, 47(4), 589-608.
- Giddens, A. (1987). *Social theory and modern sociology*. Stanford: Stanford University Press.
- Gouldner, A. W. (1970). *The coming crisis of western sociology*. New York: Avon.
- Hinkle, R. C., & Hinkle, G. J. (1954). *The development of modern sociology*. New York: Random House.
- Hardt, H. (1992). *Critical communication studies: Communication, history and theory in America*. New York: Routledge.
- Holz, J. R., & Wright, C. R. (1979). Sociology of mass communications. *Annual Review of Sociology*, 5, 193-217.
- Homans, G. C. (1986). Fifty years of sociology. *Annual Review of Sociology*, 12, xiii-xxx.
- Kearl, B. (1983). The past and future of agricultural communications: Part I: A look at the past. *ACE Quarterly*, 66(4), 1-7.
- Kellner, D. (1989). *Critical theory, marxism and modernity*. Baltimore: The Johns Hopkins University Press.
- Kroupa, E., & Evans, J. (1973). New directions in agricultural communications curricula. *ACE Quarterly*, 56(3), 28-38.
- Kroupa, E., & Evans, J. (1976). Characteristics and course recommendations of agricultural communicators: An update. *ACE Quarterly*, 59(1), 23-31.
- Lantz, H. R. (1984). Continuities and discontinuities in American sociology. *The Sociological Quarterly*, 25(4), 581-596.
- Lasswell, H.D. (1971). The structure and function of communication in society. In W. Schram & D.F. Roberts (Eds.), *The Process and Effects*

- Lee, R. L. (1965). *What's new in farm magazines?* Unpublished manuscript.
- Marcuse, H. (1964). *One-dimensional man: Studies in the ideology of advanced industrial society*. Boston: Beacon Press.
- McQuail, D. (1985). Sociology of mass communication. *Annual Review of Sociology*, 11, 93-111.
- Miller, M. E. (1995). AAACE changed our lives: NPAC and agricultural communication in the '50s. *Journal of Applied Communications*, 79(3), 1-9.
- Montgomery, F. S., Donnellan, L. M., & Whiting, L. R. (1996). Why haven't you published that research (and your other ideas)? *Journal of Applied Communications*, 80(1), 29-41.
- National Project in Agricultural Communications (1960). *The first seven years: 1953-60*. Michigan State University Press: NPAC.
- Powers, R. D., & Kearn, B. E. (1968). Readability and display as readership predictors. *Journalism Quarterly*, 45(1), 117-118.
- Padgett, L. B. (1987). Clearness of style, plainness of statement: Experiment station bulletins in the early years. *The ACE Quarterly*, 70(4), 15-21.
- Reisner, A. (1990A). An overview of agricultural communications programs and curricula. *Journal of Applied Communications*, 74(1), 8-17.
- Reisner, A. (1990B). Course work offered in agricultural communication programs. *Journal of Applied Communications*, 74(1), 18-25.
- Ritzer, G. (1996). *Modern sociological theory*. New York: The McGraw-Hill Companies, Inc.
- Robertson, I. (1987). *Sociology*. New York: Worth Publishers, Inc.
- Rogers, E. M. (1983). *Diffusion of innovations*. New York: The Free Press.
- Rogers, E. M., & Chaffee, S. H. (1983). Communication as an academic discipline: A dialogue. *Journal of Communication*, 33(3), 18-30.
- Rosengren, K. E. (1983). Communication research: One paradigm, or four? *Journal of Communication*, 33(3), 184-207.
- Seibold, D. R. (1979). Criticism of communication theory and research: A critical celebration. *Central States Speech Journal*, 30(1), 25-39.
- Severin, W. J. & Tankard, J. W. (1979). *Communication theories: Origins, methods, uses*. New York: Hastings House.
- Thompson, J. B. (1988). Mass communication and modern culture: Contribution to a critical theory of ideology. *Sociology*, 22(3), 359-383.
- Turner, J. H., Beeghly, L., & Powers, C. H. (1989). *The emergence of sociological theory*. Belmont, CA: Wadsworth Publishing Company.
- Wilson, C., Paulson, C. E., & Henderson, J. L. (1991). Perceptions of master of science degree in agricultural communication by Agricultural Communicators in Education (ACE): A national study. *Journal of Applied Communications*, 75(2), 21-29.