Archival Research Methods

Marc J. Ventresca and John W. Mohr

To Appear in: Companion to Organizations.

Edited by Joel A. C. Baum.

Forthcoming from Blackwell Publishers.

— May, 2001—

The order of authors is reverse alphabetical; both are full contributors.
Acknowledgements: We thank Lisa Amoroso, Lis Clemens, Barry Cohen, Marie-Laure Djelic, Diane Burton, Bob Freeland, Roger Friedland, Candace Jones, Peter Levin, Mike Lounsbury, John W. Meyer, Trex Proffitt, Marc Schneiberg, Sarah Soule, and participants in the Workshops on Organizations, Institutions, and Change at Northwestern University for early comments on this chapter, for direction to relevant exemplary sources, and for sharing their wisdom about archival methods in organization research. Craig Rawlings deserves special acknowledgement for superb research assistance on the project. We owe a special debt to the editorial wisdom and collegial spirit of Joel Baum. We also acknowledge with appreciation research support from the Department of Sociology, and the Institute for Social and Behavioral Research at UCSB and from the Kellogg Graduate School of Management, Northwestern University.
Archival research methods include a broad range of activities applied to facilitate the investigation of documents and textual materials produced by and about organizations. In its most classic sense, archival methods are those that involve the study of historical documents; that is, documents created at some point in the relatively distant past, providing us access that we might not otherwise have to the organizations, individuals, and events of that earlier time. However, archival methods are also employed by scholars engaged in non-historical investigations of documents and texts produced by and about contemporary organizations, often as tools to supplement other research strategies (field methods, survey methods, etc.) Thus, archival methods can also be applied to the analysis of digital texts including electronic databases, emails, and web pages.

As such, the methods we discuss in this chapter cover a very broad sweep of organizational analysis and include a wide range of other more specific methodological practices – from fundamental historiographic skills and strategies for archival investigations to formal analytic techniques such as content analysis and multidimensional scaling. The theoretical topics and substantive areas of investigation to which these methods are applied are broader still – perhaps as broad as the domain of organization science itself. In sum, archival methods can be thought of as a loosely-coupled constellation of analytic endeavors that seek to gain insights through a systematic interrogation of the documents, texts, and other material artifacts that are produced by and about organizations.

**CONTRIBUTIONS OF ARCHIVAL METHODS TO ORGANIZATION SCIENCE**

In his discussion of the characteristics of modern bureaucracy, Weber noted that “(t)he management of the modern office is based upon written documents (the ‘files’), which are preserved in their original or draft form, and upon a staff of subaltern officials and scribes of all sorts” (Weber, 1968, p. 957). Yates (1989) highlights this dimension of organizational life in her study of the rise of the large-scale modern organization. Yates demonstrates how the evolution of official document genres—such as the office
memo—provided necessary infrastructure for the emergence of modern forms of control-at-a-distance and administration.

The linkage of text and power is not new. As Giddens (1987) reminds us, written texts have long been associated with forms of administrative power; writing systems were originally invented in response to the need to count, survey, prescribe and control the activity of others across both time and space (Goody, 1986; Latour, 1987; Ventresca, 1995). But it is in the modern bureaucratic organization that the production and use of files comes into its most full and powerful expression. Indeed the production of written documents may well be the most distinctive quality of modern organizational life. Few official actions of any sort are conceived, enabled, or enacted without having been written down both in advance, in retrospect, and invariably several more times in between. As the telltale email messages from the Iran-Contra hearings, or more recently, the emergence of incriminating archival records in tobacco arbitration cases demonstrate, even questionable or illegal organizational activities have a tendency to be textually recorded by those who inhabit modern organizations.

Organizations are fundamentally systems of ‘talk’—more or less formalized, more or less direct, more or less freighted with power. Organizational texts thus represent forms of social discourse—literally, ways of communicating, producing, and enacting organizational life (Riles, 2000; Smith, 1984). As Smith (1984) has argued, written texts play an especially significant role in organizations because they codify in a potent fashion, that which has been said and thought. Once it is written down, organizational talk takes on new dimensions of veracity, credibility, and efficacy—an authoritatively instrumental life of its own—often travelling well beyond the intent or expectations of the author.

This makes organizational files — the embodiments of sedimented, accumulated talk — an especially appealing data source. These texts enable researchers to view the ebb and flow of organizational life, the interpretations, the assumptions, the actions taken and deferred from a range of differing points of view as events unfold across organizational
space and time. Archival materials provide unobtrusive measures of process for the study of contemporary organizations (Covaleski and Dirsmith, 1988; Jermier and Barley, 1998) and invaluable means of access in historical investigations (for the obvious reason that archival materials are among the few resources we have available for learning about past events). The examination of archival materials is thus important because they are ubiquitous, consequential and strategically useful.

It is especially through the shifting character of historical research, shaped in fundamental ways by alternative approaches to archival materials, that these methods have had their most profound impact on organization science. The investigation of organizational practices as they occurred in a different time allows scholars to gain a sense of perspective of how shifting social and historical conditions affect the character of organizational life (Kieser, 1989; 1994). Archival work provides a basis for defining key questions, establishes a base of evidence, and supports debate about familiar forms and mechanisms (Zald, 1993). Particular practices, ideologies, or social arrangements can be better understood by exploring their origins, what Piore and Sable (1984) describe as the key historical “branching points” or path dependencies. More than this, historical study allows for the analysis of organizational change in increments of time that captures significant institutional processes (what Braudel, 1980, refers to as the long durée).

But the use of archival materials is never innocent or transparent. The conditions of their production and of their persistence mean that materials often offer partial or contradictory evidence for an interpretation. Recognition of the inherently political and residual features of archival material is thus a central methodological concern, the basis for significant decisions about design and analysis. The skillfulness of scholars’ abilities to master this ambiguity is a distinguishing feature of exemplary research in this tradition (see for example Baron et al 1986 and the methodological commentaries by Jennings et al, 1992; Guillén, 1994; Casadesus and Spulber, 2000). Moreover the complexity of the task leaves open an especially wide space for intellectual disagreement. Thus Fligstein’s (1990) archival work leads to a reconsideration of Chandler’s (1962) classic arguments regarding the sources of the modern multi-divisional form. And so too do the alternative
accounts in Freeland’s (2000, 2001) detailed archival study of GM, Yates’ (1989) analysis of the rise of communication and control infrastructures within the firm, Roy’s (1997) analysis of the contested origins of the modern corporation in the U.S., and Djelic’s (1999) comparative study of the rules and resources shaping the spread of the multidivisional form in France, Italy, and Germany. In short, as researchers turn to archives and put them to different uses they make possible alternative kinds of insights about the nature and character of organizational events, structures, and processes.

MODES OF ARCHIVAL RESEARCH
Three very different approaches to archival study can be distinguished in organizational research. The first is the historiographic approach. We include here the traditions of historically-oriented work that found their way into the canon of organizational research through the mid-1970's and early 1980's. Up until this time the use of archival materials to study organizations was still relatively rare (Daft, 1980; Scott, 1965; Stablein, 1996).

Two streams of historiographic research were notable. One was the work of the original institutional school in which scholars employed historical materials to study the emergence of distinctive institutional arrangements. Selznick (1949) investigated the history of the TVA, Zald and Denton (1963) studied the transformation of the YMCA and Clark (1970) followed the histories of individual colleges as a way of understanding the emergence of distinctive institutional arrangements. The second stream includes the work of business historians such as Chandler (1962; 1977) who used archival materials to examine the origins of modern business practices (see Galambos, 1970, and Jones, 1997, for the legacy of Chandler’s work among business historians). This group was complemented by a more radical contingent of labor historians and organization theorists who used archival materials to explore the origins and character of class conflicts and control in the work place (e.g, Braverman, 1976; Clawson, 1980; Stark, 1980; Perrow, 1991).

The distinctive character of the historiographic tradition was its attention to the rich details of organizational life, rendering what were essentially ethnographic studies of
organizations conducted through the medium of archival materials. Particular individuals were identified, their lives and careers chronicled, mindsets and ideologies interpreted, and conflicts, contests and power relationships revealed. Explanations were sought for the creation of particular institutional configurations, modes of operation, and management styles. A wide range of archival materials was typically employed, including organizational documents, internal office memos, public announcements, and personal narratives. Most often the materials were read and notes taken, but little formal measurement or quantitative analysis conducted. These efforts were influential and widely discussed, although they nonetheless represented a relatively small proportion of the research work being conducted in organization science then and since (Kieser, 1994).

In the mid-1970’s, however, a new tradition of archival research based on ecological analysis established a foothold. The methodological shift was dramatic. In place of the more traditional engagement with historical materials, ecological research ushered in an era of archival studies in which small amounts of information gleaned from the life histories of large numbers of organizations was marshaled to tell a story about the dynamics of organizational environments and organizational populations (see Baum and Amburgey, this volume; Rao, this volume). Inspired by Stinchcombe’s (1965) suggestion that we turn away from the study of particular organizations toward an analysis of historically-embedded classes of organizations, or “organizational forms,” this shift in focus opened a novel approach to archival research.

Hannan and Freeman (1977; 1984) were the first to link this conceptualization to a viable methodology. Their focus was on the development of formal models in the tradition of demography and a substantive argument about ecological variation and change mechanisms in organizational populations. The ecological approach diverged dramatically from prevailing research designs, requiring samples of historically complete organizational populations, rather than conventional representative random (or convenience) samples of diverse organizations.
The new institutionalism in organizational analysis also emerged during this period, a second stream within this larger archival tradition. Although Meyer’s early work (Meyer, 1977; Meyer and Rowan, 1977) focused on theoretical foundations of collective orders and cultural analysis, his collaboration with Hannan (Meyer and Hannan, 1979) on studies of education and national development connected the new institutional stream to the ecological strategy in archival analysis. The institutionalist studies of this period coded and analyzed small amounts of information on a large number of organizations sampled over time. The arguments focused on how authority and expertise drove field-level structuration and organizational change, tested over the years on a wide variety of organizational populations —schools (Meyer, Scott, and Strang, 1987), juvenile justice institutions (Sutton, 1988), firms (Edelman, 1990; Mezias, 1990; Suchman, 1994; Sutton and Dobbin, 1997), and nation states (McNeely, 1995; Thomas, Meyer, Ramirez, and Boli, 1987; Ventresca, 1995; see Palmer and Biggart, this volume; Strang and Sine, this volume).

In contrast to the historiographic tradition, the ecological approach is far more formal in its orientation. The empirical strategy is not based on nuanced readings of the actions, understandings, or careers of individual persons, groups, or organizations. Rather, the measurement of the degree of similarity and difference of specified structural characteristics among a large number of organizations provide evidence and insight. Measures of variation are used to support broader interpretative schemas about the logic of macro-organizational processes. As the institutional and ecological research streams gained professional momentum, the use of archival materials overall became widely accepted in organization science and reliance on archival methods grew. A count of articles published in the Administrative Science Quarterly confirms this point. Figure 1 shows the proportion of articles published between 1970 and 1998 in ASQ that employed some form of archival methods. The graph shows a clear and sustained increase in the use of these methods from the mid-1970’s to the present period.

Insert Figure 1 about here.
Much of this growth can be attributed to the increasing rate of publication by scholars who identified directly with the institutional and ecological theoretical traditions. Carroll and Hannan’s (2000: 86-88) review of the research design features of articles published in the *ASQ* supports this interpretation. Their analysis showed a marked increase in the use of representative samples (up from 3 in 1960s to 17 in 1990s) and in homogeneous population-specific samples (up from 2 to 18 over the same period). The most dramatic change, however, was in the lengthening of the observation periods. Although the number of empirical studies covering relatively short time spans (≤ 5 years) increased from 5 to 14, the number of studies with timeframes spanning more than 25 years increased from 1 to 25.

While these data rather dramatically demonstrate the increased prevalence of the ecological approach to archival materials, other kinds of archival studies were also on the rise during this period. Indeed, in our analysis of *ASQ*, we found a substantial increase over time in the number of archival articles that relied exclusively on qualitative methodologies (including more than a third of all the archival articles published after 1992; see Locke and Golden-Biddle, 1997). In some cases, researchers returned to traditional historiographic methods as a way to supplement or respond to questions raised by the ecological tradition. Langton (1984), for example, used an in-depth analysis of a specific, historical case — the Wedgewood pottery company — to answer questions about ecological change. Others went to the archives to more closely investigate the kinds of change processes that had been demonstrated with quantitative methods by the new institutionalists. Westney (1987), for example, investigated the coupled processes of imitation and innovation that resulted from Meiji reformers’ efforts to incorporate “modern” organizational patterns from the West. DiMaggio (1991) used traditional historiographic methods to explore struggles among organization forms in the field of art museums.

But something else is also afoot in the contemporary legacies of this archival work. A new archival approach in organization science has emerged over the last decade. Like the ecological strategy before it, this “new archivalism” is steeped in the ethos and
methods of formal social science. However, its practitioners dissent variously (at times, vigorously) from the methodological conventions of ecological research. Indeed, the new archivalists tend to share key sensibilities with the historiographic approach, including the concerns for exploring the meaning-laden, action-oriented foundations of organizational processes. We turn now to a more detailed discussion of this emergent archival tradition.

EXEMPLARS OF THE NEW ARCHIVAL TRADITION

New archivalists, like their predecessors, are a heterogeneous lot. They come from different theoretical traditions and pursue different empirical agendas. But they nonetheless partake of a common vocabulary of research strategies and goals that together comprise a new set of principles for archival work. These include: (1) reliance on formal analytic methodologies, (2) focus on the measurement of social organization and its constituent elements rather than on organizations themselves, (3) emphasis on the study of relations rather than objects or attributes, (4) concern with measuring the shared forms of meaning that underlie social organizational processes, (5) focus on repertoires and grammars of action, and finally, (6) interest to understand the configurational logics that tie these various elements together into organized activity.

Take the first of these principles. A defining feature of the new archival project is the premise that archival materials can and should be treated as data to be analyzed. The new archivalists, like the ecologists before them, are aggressively social scientific. They enter the archives in search of datasets, they rely on formal methods to reveal features of social life that would otherwise be difficult if not impossible to perceive and they put their analytic findings up front, at the core of their interpretive endeavor. In this respect, the new archivalists are direct heirs of the ecological turn in archival analysis.

However, they quickly part company with the ecological research strategy in a number of fundamental ways. Perhaps the most significant is the turn away from an organization-centered approach to the study of social organization. Whereas organizational ecologists
talk a great deal about broader social phenomena such as legitimacy, these elements of social organization are generally not measured directly. Rather, organizations (and their features or behaviors) are measured and used to infer the existence, the effect, and the transformation of broader social organizational processes. Many studies in the new institutional analysis of organization reported through the early 1990s continue this research strategy (Schneiberg and Clemens, 2001). Isomorphism and structuration are highlighted in the theory (and in the discussion sections of published research articles) but it is the attributes of organizations that are measured and compared to one another in the analyses.

In contrast, work in the new archivalist tradition consistently theorizes and measures social organizational processes directly. In this work, organizations become a feature of the landscape, not the entirety of it (Mohr, 2001; Scott, 2001). Consider, for example, the research by Baum and Oliver (1991, 1992) on childcare centers in Toronto. These papers exemplify an early shift away from the standard ecology tradition. They employ archival materials in the ecological spirit but incorporate relational data coded from public agency registries to distinguish among unit-level organizations. Baum and Oliver use these data to measure institutional linkages in order to test arguments about the nature and consequence of public authorization on the survival and founding of organizations. The papers represent early efforts to augment the indirect measurement of legitimacy and competition with direct, varied measures that test empirical variation in linkages of social structures of authority and resources on organizational form dynamics.

The Baum and Oliver papers also point to a second distinguishing characteristic of this new archival tradition, the shift away from analytic projects that emphasize organizations as independent objects towards the measurement of relations among objects and the inherent connectivity of social organization. The ecological tradition begins from a demographic perspective in which every organization is treated as a discrete and distinct observation within a larger population. Organizations are thus treated as a scatter of data points arrayed across time. The new archivalists have been reluctant to accept this approach, preferring instead to attend to the ways in which elements of a broader social
organization are related to one another in distinctive and patterned ways (Dacin, Ventresca, and Beal, 1999).

This is most clear in papers such as McLean and Padgett’s (1997) network analysis of economic markets in fifteenth century Florence. Inspired by contemporary debates in institutional economics, McLean and Padgett explore whether market exchanges in this early capitalist arena were strictly arms-length transactions or embedded within relatively enduring social relationships. With evidence preserved in the Florentine municipal tax archives, they set about the painstaking task of piecing together a coherent map of the economic transactions which linked (nearly) all of the active companies in the core of the Florentine economy in the year 1427. They coded detailed information on more than a quarter of all the transactions (sales and purchases) which occurred during that year (including information on some 60% of the total value of debts and credits). With these data, they model the exchange networks between firms in order to assess the principles guiding firm strategy and behaviors—choosing exchange partners according to considerations of price alone, as neoclassical economic arguments would contend, or whether the firms worked through ties of social familiarity.

Of course McLean and Padgett were not the first to analyze these types of social relations—their work is moored in a long tradition of archival research on organizational networks, a tradition that provides one analytic foundation for the new archivalists (see Burt and Lin, 1977; Aldrich and Whetten, 1981; Schwartz and Mizruchi, 1988). But unlike traditional network analysts, the new archivalists are generally reluctant to limit themselves to the formal analysis of social networks. Rather they are interested in the full range of relational systems that operate to produce forms of social organization, including the forms of knowing, styles of understanding, and sets of shared beliefs that constitute organizational activity (see Mohr, 2000).

This concern links the new archivalists to yet another stream of archival work in organization science which has focused on the application of content analysis to annual reports and other corporate documents. Some of this work follows in a tradition
pioneered by Salancik and Meindl (1984) who used a content analysis of annual reports to identify and test claims about attributions of blame for losses, reduced earnings, or other turbulence in shareholder expectations. Recent developments in content analysis techniques and software (Pollock, 1998) make more varied uses of these data possible. For example, a stream of papers by Porac, Wade, Pollock and colleagues extend traditional content analysis to investigate industry-level models of rivalry and meaning (Porac et al, 1995) and broader field-level frames of understanding that give meaning to the justifications for CEO compensation (Porac et al, 2000) and dominant managerial logics in high growth firms (Porac, Mishina, and Pollock, 2000).

This use of formal methods to analyze shared systems of meaning is one of the most intriguing and vibrant sectors of the new archival tradition. Increasingly scholars are finding innovative ways to use formal methods to extract the same kinds of interpretative readings of archival texts that had once been the sole purview of the historiographic tradition. For example, Shenhav (1994, 1995, 1999) uses a content analysis of professional engineering and union publications at the turn of the century to understand the engineering origins of modern management concepts and practices. Barley and Kunda (1992) code data from the academic literature on research strategies to provide evidence of alternating periods of “design and devotion” in management ideologies. Studies by Abrahamson (Abrahamson, 1991; Abrahamson and Fairchild, 1997) analyze journal articles over a 20 year period to explore variations in the diffusion of conceptual innovations such as quality circles and TQM. Guillén (1994) uses content coding to help explain the diffusion of management ideologies in Great Britain, Germany, Spain, and the U.S. And Orlikowski and Yates (1994) analyze an archive of over 1,300 email messages from a virtual community of computer language experts to identify a repertoire of communicative genres — standardized ways of communicating that facilitate shared understanding — in distributed organizational initiatives.

Part of what is so exciting about this work is that it allows us to understand the details of how things are accomplished, of how things get done. Orlikowski and Yates’ explication of the emergence of repertoires of communicative genres explains this in the context of
how stylized conventions enable communication. But it is also important to see how organizational activities are themselves bundled in standardized packets of what Charles Tilly (1979) has called repertoires of action. Clemens (1993; 1997; 1999) does exactly this, borrowing from Tilly and social movement theory to explain the institutional changes that foster the emergence of alternative repertoires of organizational action. She shows how late nineteenth century U.S. women’s activism, blocked from expression by the existing system of political parties, drew upon alternative organizational models (founded on women’s social movement organizations) to contest and ultimately supplant the existing institutional structures of politics, paving the way for the development of modern interest group politics.

Pentland and Rueter (1994) report a kindred accomplishment at the level of the firm. They use archival materials taken from a software manufacturer’s call-tracking database to understand the basic repertoires of action that are deployed to manage calls for software service and assistance. Individual "calls" may comprise many actual phone conversations and other actions, which they code as a sequence of activities or moves. They analyze a random sample of 335 calls from an archival software database to identify the set of action sequence, or “moves,” that constitute what they refer to as the “grammar for [the firm’s] software support process” (1994:490); that is, they explain through a systematic analysis of empirical data precisely how and in what manner organizational activity happens. ¹

Each of these concerns represent a part of the puzzle which the new archivalists are seeking to assemble. That puzzle concerns the assembly of the basic building blocks of organizational life, the ways in which sets of practical activities and shared systems of understanding combine to make up a recognized area of institutional life (Meyer and Rowan, 1978). It is the combinatorial logic itself, of how sets of practices fit together

¹ Van de Ven and colleagues (Van de Ven and Garud, 1993; 1994) developed an “event analysis” research strategy to describe key infrastructural processes in industry, organization, and technological change. This work draws from the unstandardized data sources characteristic of the historical approaches, but reaches toward more formal analysis and thus can be seen as an important antecedent to this project.
with particular ways of understanding, which reflects a final set of concerns that are constitutive of the new archival project. Friedland and Alford (1991) clearly articulate this agenda in their conception of institutional logics, which they defined as "a set of material practices and symbolic constructions" which provide the governing principles for a given field of organizational activity (1991, p. 248).

Several papers in the new archival tradition have sought to give empirical substance to this notion of component assembly. Mohr and Duquenne (1997) do this in the context of nineteenth century social welfare organizations. Their goal is to trace how particular organizational practices (e.g., social investigations, giving advice, food or money, providing job training, employment, temporary shelter or long-term asylum) were matched to and defined by different conceptual categories of the poor (the distressed, destitute, fallen, deserving, homeless, indigent, misfortunate, needy, poor, strangers, and worthy). By mapping out precisely how different categories of the poor were treated in New York City over a forty year period, Mohr and Duquenne are able to offer concrete interpretations of how and why alternative professional ideologies emerged. And, central to the preoccupations of the new archivalism, they are able to measure the degree of institutionalization and structuration within the organizational field by assessing the levels of structural congruence between meanings and practices.

A recent article by DiMaggio and Mullen (2000) provides a second example. The paper focuses on the events of National Music Week in 1924. Using data on types of celebrations that occurred in 419 different cities and towns spread across the United States, DiMaggio and Mullen raise the question of how the kinds of civic rituals that occurred in these localities reflected (and constituted) alternative institutional logics. They focus on three analytical dimensions — the types of actors involved (churches, schools, recreational associations, professional groups, etc.), the types of actions taken (lectures, slide shows, recitals, parades, etc.), and the objects of action (or types of audiences) that were targeted (children, members of particular church or ethnic communities, the general public, etc.). What they discover is that there were clear differences in the logics according to which different communities organized their ritual
activities. Some rituals were constructed in such a way as to ratify the existing social order while others were organized so as to draw citizens into either a broader civic mass public or into alternative corporate identities.

In this discussion we have used examples from recent books and articles to highlight the basic principles of what we see as a significant, still emergent new archivalist tradition in organization science. We turn now to a more focused discussion of the kinds of practical decisions and research strategies that are involved in conducting archival research on organizations.

**DOING ARCHIVAL RESEARCH ON ORGANIZATIONS**

Researchers who use archival materials to study organizations have tended to use three broad strategies that we have labeled historiographic, ecological, and the new archivalists. These divisions reflect basic differences in how research is designed, archival materials are selected and data are analyzed.

**Types of Archival Designs**

Four distinctions in how archival research is designed strike us as being fundamental. The first two concern how researchers approach archival materials. The next two pertain to how researchers interpret their data. Table 1 shows how these distinctions map onto the three major modalities of archival analysis.

*Insert Table 1 about here.*

*Few vs. Many.* This refers to basic differences in the level of analysis that conditions the type of materials that one chooses to pursue. The ideal-typical distinction is between studies that make intensive use of archival materials from a single or a few organizations in contrast to studies that make use of small amounts of information taken from a large number of organizations. Historiographic research is typically restricted to the careful and detailed scrutiny of the archival materials of a few organizations. Ecological projects
use information from many organizations, while the new archivalists have used both types of research designs.

*Read vs. Measure.* A second basic distinction has to do with how the data are collected — the input method. In historiographic investigations, the researcher reads through large amounts of archival information (often from unstandardized sources) in a disciplined fashion as a way to gain insights, make discoveries and generate informed judgments about the character of historical events and processes. This method relies upon intensive note-taking and a carefully managed pattern of strategic reading. In contrast, archival materials can be used to enable more conventional social scientific measurement by “coding” them as data. This approach depends upon a careful assessment of the relevant variables that are implicitly embedded within the material and a systematic method of recording the constituent information in order to apply formal methodologies. Insights here stem from attention to systematic variations, patterns, or configurations within formally measured data fields.

*Descending vs. Ascending.* Other differences occur in how the data are put into the service of a particular analytic agenda, a distinction that says something about the implicit theory of causality that a scholar brings to the materials. One important distinction in this regard is whether the researcher uses a more macro-historical interpretative framework to motivate the data gathering process or whether she seeks to identify local constellations of practices and interpretations that can be used to build up a larger narrative interpretation. Foucault (1980) describes this as the difference between a “descending model of analysis” in which more macro patterns of social life are expected to explain more micro processes, and an “ascending model of analysis” in which local practices and logics of action are presumed to develop in their own fashion after which they are incorporated at higher levels of social organization. The latter is the approach most valued by the new archivalists who are concerned with identifying and specifying the nuts and bolts of institutional life, the modes of understanding, the grammars of action, the relational networks that tie elements of organizational life together. It differs in this sense from the tendency to embrace a grand explanatory narrative which is then
applied to generate interpretations of archival material. In this sense, both Chandler (1962) and, in their own way, the organizational ecologists are more likely to embrace a descending explanatory model.

*Objects vs. Relations.* A final analytic distinction concerns whether the archival data are employed chiefly as a means of learning about individual social objects or used in the service of understanding the relations among objects. This is a distinction that speaks to the implicit theory of measurement that is brought to bear upon the data. In an object-oriented approach to the data, the distinguishing characteristics of people, organizations, and other social entities are seen as central to developing an adequate explanation. The primary analytic issue concerns which features, traits, or characteristics of the objects in question can and should be used to explain the adopted behavior or stance. Analysis focuses on connecting attributes to outcomes. In contrast, a relational approach tends to look at the relations that connect individuals, organizations or elements of a discourse system together into some larger, more systemic whole. In this model it is the features of the relations, rather than the characteristics of the objects, that are expected to yield explanatory value. It is the social network tradition which has most vigorously advocated an approach to social scientific measurement that privileges relations over objects (see Emirbayer, 1997). However, it is also a basic tenet of semiotic theory and structural linguistics more generally that meanings are constituted through systems of difference and it is through the application of relational methods that formal methods can be most fruitfully brought to bear on interpretative problems (Mohr, 1998a; 2000). The new archivists have been especially interested in paying attention to how organizational activities, meanings, and logics of action are linked together as relational systems.

**Types of Archival Materials**

There are two more specific methodological questions that arise when designing a study using archival materials. The first is “What types of materials will be chosen for analysis?” The second is “How will those materials be analyzed?” It is difficult to give an answer to either question in general terms. We have already noted the great diversity of methodological approaches that are associated with archival research. An even greater
diversity exists in the types of archival materials that might be employed in organizational research. Indeed, one could say that there are as many kinds of archival materials as there are types of organizational talk. A quick (and incomplete) inventory of some general categories of organizational talk would include, for example, how organizations talk about: who they are, what they do, what happened, what they want, what’s ahead, who other organizations are and what they do, and on and on. Moreover this talk may be generated as a result of the routines of administrative data production (Burton, 1995, 2000), reflexively instrumental forms of rhetoric (Hirsch, 1986; Kunda, 1992), or in response to extraordinary demands (Vaughan, 1996).

In those areas of organizational science that are well institutionalized such as organizational ecology, established conventions for choosing archival materials do exist. These conventions have been carefully developed and empirically tested. Carroll and Hannan (2000: Chapter 8) provide a comprehensive review of archival sources commonly used in ecological research. These include industry directories, encyclopedic compilations, governmental registries, census government, proprietary databases, survey data, and lists of prominent firms. Carroll and Hannan discuss trade-offs made in the choice of archival materials that affect sampling. They describe four typical errors in observation plans: organizational coverage, which refers to the inclusiveness of the sample of organizations within the definition of a population or industry; temporal coverage, which concerns the extent to which the observation period cover the critical times in a population’s history; precision in timing, which refers to the specificity and completeness of data on organizational changes and their timing; and accuracy of information, which refers to the quality and completeness of detailed data available for individual organizations such as ownership, strategy, technology, and size.

However, the same degree of clarity or convention does not yet exist in the new archival research traditions. Indeed, one of the distinguishing features of the new archivalism’s

---

Clemens and Hughes (2001) provide an alternative framework intended for social movement researchers but also useful for organizational analysts: organizational archives, government documents, newspapers, and bibliographical dictionaries.
exemplars has been the enormous creativity and convention-shattering abandon with which new sources and types of materials have been brought into empirical use.

Consider, for example, Jones’ (2001) study of the early U.S. film industry. She relies on an extraordinary dataset containing entries for every American film that was produced during these years, including information on the individuals and firms that produced and distributed the film, release dates, film length, genre and story synopsis. Her measures also include time series data on the career histories of key individuals, their relationships with others (e.g. litigation, partnerships, kinship, etc.), personal attributes (ethnicity, religion, gender), and then similar data on firms including: foundings, production function, (and changes in function, e.g. from distribution into production), name changes, mergers and acquisitions, key personnel changes, legal actions, and exits. Also included are the histories of strategic networks (information on their founding, memberships, and types of relationships within the network), and, finally, key industry events such as lawsuits, court decisions, and broader political and economic circumstances. Jones takes in the broad sweep of social organization, treating organizational forms, entrepreneurial careers, institutional rules, and cultural models as complexly interwoven, co-evolving, and equally worthy of empirical analysis.

Or, look at Guerra-Pearson’s (2000) investigation of nineteenth century custodial institutions based on her detailed tracking of the usage and design of the buildings which they occupied. Her dataset consists of several thousand observations, one for each building “event” for each of some sixty organizations. Whenever a new building is built, added to, remodeled, redesigned, sold, rented, purchased or simply put to a different use, that information is recorded. What makes Guerra-Pearson’s database especially distinctive, however, is that the entries are not simply numbers or a small sample of predefined codes, but literally thousands of pages of rich, verbatim primary archival texts. Her database is accessed through a content analysis program that returns complex sweeps of information about the architectural details of buildings, the rationale behind various decisions, the ways in which and the amounts of money spent, the architect’s comments, the practices that were embodied within the organization, classifications of
inmates, and on and on. Moreover she uses these data to show how architecture was, quite literally, the material embodiment of the ideas which both defined and fundamentally shaped the organizational character and competitive success of these institutions.

Finally, consider Kaghan, Ventresca, and Sakson’s (2000) study of e-business models using data coded from the features of electronic shopping carts (ESCs) on the websites of online retailers of books, records, and equities. This project, at the intersection of institutional theories of organizations, entrepreneurship research, and technology studies in the actor network tradition, explores ESCs (order processing systems) as empirical "boundary objects" that align and focus the activities of entrepreneurs, technologists, web designers, and venture capitalists. For the comparative study, they code over 60 websites for U.S. and European firms, extending principles of "net-nography" (Kozinets, 1999) developed by ethnographers in marketing. Their coding protocol records several layers of data embedded in the webpages including: (1) technical foundations (e.g., language), (2) analogy to design and use of physical shopping carts, (3) structure of the order process, (4) options incorporating choice for the consumer, and (5) features that enable personalization (e.g., use of “cookies”).

Our point is that it is difficult, if not impossible, to lay out specific prescriptions or strategies for the use of textual sources that will hold for all types of archival work given the enormous variety of archival materials and the ingenuity of design that characterizes archival work today. Indeed, it is difficult to say very much at all about the actual decision points and practicalities of archival research without specifying the research goals in question. Because these vary widely by theory and analytic perspective, we restrict ourselves here to those research endeavors that we have already identified with the new archivalist tradition and offer general observations on the relationship between research goals, archival materials and methods of analysis.

Matching Goals, Materials, and Methods
Above, we propose four kinds of research goals as being central to the new archivalist project: (1) concern with the structural embeddedness of organizations and their components, (2) focus on the shared systems of understanding and meanings that facilitate organizational action, (3) interest in identifying and specifying the formal grammars and repertoires of action that are deployed by organizations, and (4) understanding and mapping the institutional logics that set all of these processes in motion. Researchers have pursued each of these goals through the use of distinctive types of archival materials and methods of analysis. We will briefly review each of these in turn. The options we discuss and the conventions for addressing them are summarized in Table 2.

Insert Table 2 about here.

**Studying Structural Embeddedness:**
The research goal is to understand how individuals, organizational units, and firms are embedded within relational networks that facilitate the flow of communications, interactions, material transactions, ideas, social sentiments (and so on) through the social order. Patterns of similarity of compositional attributes can also be modeled to identify the structural positions of objects within a field. A network approach treats the relational structure as foundational. Relations and their logics effectively constitute the objects which are connected by them.

Archival materials are used to identify relational ties that link elements of a given structure together. Many different kinds of relations can be extracted from archival data. Evaluations made about others can be taken from textual narratives such as annual reports (e.g., Porac et al, 2000). Transactions that link firms or sub-units together can be taken from archives of accounting materials such as tax records (e.g., McLean and Padgett, 1997). Linkages between larger aggregates (such as product markets) can be derived from published government data (Burt, 1992). Interactions between firms can be deduced from interlocking directorate patterns (Mintz and Schwartz, 1985) or from evidence of co-membership of firm managers in clubs or associations (Galaskiewicz,
Burt and Lin (1977) describe useful strategies for creating network data taken from a variety of archival sources (organizational archives, journal articles, minutes of meetings, court records, newspaper accounts, etc.).

There is a long and well developed tradition of formal methodologies that have been built up over the years for analyzing these kind of data (see Wasserman and Faust, 1994). Often a key distinction is made between methods that rely on calculations of network cohesiveness (Aldrich and Whetten, 1981) and those that rely upon measures of structural equivalence (DiMaggio, 1986). Burt (1978; 1980) reviews this distinction.

*Studying Meaning Structures:*

The research goal is to assess relevant features of shared understandings, professional ideologies, cognitive frames or sets of collective meanings that condition how organizational actors interpret and respond to the world around them, to measure essential properties of these ideational systems and to use them to explain the strategies and actions of individuals and organizations.

A wide range of archival materials have been used to study meaning systems. The study of managerial ideologies and belief systems has often relied upon analysis of repositories of professional discourse in professional journals, trade publications, and academic literatures (e.g., Shenhav, 1995, 1999; Barley and Kunda, 1992; Abrahamson, 1997, Guillén, 1994). Archival data from organizations has also been used. For example, some studies make use of procedural documents, information gleaned from the normal flow of work in organizations (Orlikowski and Yates, 1994). Others have focused on analytic accounts that organizations are often called upon to produce — organizational directories, initial public stock offerings, annual reports, governmental accounting demands, and so on (Proffitt and Ventresca, 2001).

Another long tradition of formal methodologies are relevant. Content analysis (which dates back to propaganda analysis techniques developed in World War 2) are useful here. Two recent developments in content analysis are especially important. One is the shift in
data gathering techniques, away from basic word counts toward more context-specific treatments such as the coding of semantic grammars (Franzosi, 1989, 1990). The other development has had to do with how meanings are analyzed. Early work by Osgood and colleagues relied on semantic differential analysis (Osgood et. al., 1971). Recent developments have drawn on structural linguistics, semiotic theory, and network analysis (Mohr, 1998a). Multidimensional scaling analysis is a common analytic tool. For a review of theoretical issues and software packages see Dohan and Sanchez-Jankowski, 1998. For more general discussions of methodological strategies see Jepperson and Swidler (1994), Franzosi and Mohr (1997), Wade, Porac, and Pollock (1997), Ruef (1999) and Mohr (2000).

**Studying Grammars of Action:**

The research goal is to understand how things are done by analyzing the raw elements of organizational activity, the sequences of actions that go together, and the underlying grammars or combinatorial principals that account for these configurations. While organizational scholars have long been interested in understanding technologies as specific ways of accomplishing tasks, recent work shifts the focus more toward a relational understanding of activities organized through time.

The archival materials that are likely to be most appropriate for this kind of research either involve detailed sequences of events (Van de Ven and Garud, 1993, 1994; Garud and Lant, 1997) or the daily communications that flow within and between organizations as a natural part of organizational life. Again, Pentland and Rueter’s (1994) work on assistance calls is an example.

A relatively new strand of formal methodologies have emerged in the social sciences over the last decade and a half that lend themselves particularly well to the analytic problems defined by this research goal. Boolean algebra is a means of linking qualitative data to a more formal metric of analysis by identifying irreducible and non-redundant combinations of features which are associated with specified outcomes (Ragin, 1987). Recently Ragin (2000) has extended his method by the inclusion of fuzzy-set theory. Sequence analysis is another qualitatively oriented formal methodology which can be
used. These methods find reduced form patterns in the sequencing of events through

**Studying Institutional Logics:**

The research goal is to understand how ways of knowing and ways of acting are combined together into a broader package or logic of action. The study of institutional logics brings together the analysis of meaning structures and the study of grammars of action (Heimer, 1998; Jackall, 1988). A central presumption is that the two orders — practical and symbolic — are mutually constitutive.

The best archival materials contain classificatory statements that invoke fundamental distinctions between classes or categories of things. These kinds of classifications are especially powerful because they usually link understandings together with actions. They also tend to be fairly stable and to be organized around institutional assumptions (Mohr, 1998b; Mohr and Guerra-Pearson, 2001). DiMaggio and Mullen (2000) extract classificatory distinctions from summary reports of community ritual activities. Mohr and Duquenne (1998) draw upon categories listed in an organizational directory.

The most useful formal methodologies are those intended for the analysis of two-mode data. The goal is to highlight the relevant relations which link a set of meanings into an organized structure by seeing how they are differentially embedded within a set of activities. Correspondence analysis is probably the most well known of these methods (see Weller and Romney 1990). Galois lattices (Duquenne, 1986) and hierarchical classification models are also appropriate (de Boeck and Rosenberg, 1988). Mohr (1998a) provides an overview of these methods. Breiger (2000) demonstrates the practical utilities of each method in a comparative manner.

**CONCLUSION**

This chapter answers two key questions about archival methods — what archival materials are and how to analyze them. We have identified three traditions here — the historiographic, the ecological, and an emergent project we have referred to as the new
archivalists — and we demonstrate how they vary in terms of four basic criteria: their level of analysis (few/many), their input method (read/measure), their implicit approach to causality (descending/ascending) and their conception of measurement (objects/relations).

We have spent most of our energy detailing the character of the new archivalism which we see as embodying strategies and goals that are leading the field of organizational science in useful and important directions. It is these approaches in particular that we believe begin to take up a difficult challenge posed to the organizations research community by Mayer Zald (1993). In that gentle polemic, Zald suggested that organizational researchers have not yet effectively bridged the gap between the demands of the more interpretative and humanistic dimensions of organizational life and the ambitions of their enterprise as a formal social science. Drawing on his appreciation of what the humanists have to teach us, Zald proposes that organization scholars should seek to render behavior in specific time and societal contexts, attend to the coherence and the transformation of symbols and sign systems, and focus on the ways in which organizations embody substantive meanings in presentational forms such as rhetoric and narrative. To do all this and yet preserve the canons of organizational science is a tall order and one that requires innovations of both theory and method.

As we show in this chapter, the use of archival methods presents an especially rich opportunity for advancing Zald’s precepts in practical research activity. The use of archival methods and materials has frequently been the occasion through which core questions of organization theory, strategy, and practice have been confronted and reframed. Archives contain the residues of organizational life, stretched out across time and space, available for all to come and see. As we have shown with examples highlighted in this chapter, archival studies afford scholars the opportunity to do things differently, to tell new tales, to make their own path. Such is the exuberance of insight evident in contemporary archival work.
REFERENCES


Baum, J.A.C. and Amburgey, T.: (this volume), “Organizational Populations.”


Burton, M.D.: “The Company They Keep: Founders’ Models for Organizing High Technology Firms,” The Entrepreneurship Dynamic in Community Perspective,


Greve, H.R.: (this volume) "Interorganizational Evolution.”


Rao, H.: (this volume) “Interorganizational environments.”


Strang, D. and Sine, W.: (this volume), “XXXX”


Figure 1. Articles Employing Archival Methods* Published in the *Administrative Science Quarterly, 1970-1998 (proportions).

*Articles were coded at two-year intervals, starting in 1970.
## Table 1. Major Analytic Distinctions and the Three Modes of Archival Analysis

<table>
<thead>
<tr>
<th></th>
<th>Level of Analysis</th>
<th>Input Method</th>
<th>Causality Theory</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Historiographic</td>
<td>Few</td>
<td>Read</td>
<td>Both</td>
<td></td>
</tr>
<tr>
<td>Ecological</td>
<td>Many</td>
<td>Measure</td>
<td>Descending</td>
<td></td>
</tr>
<tr>
<td>New Archivalist</td>
<td>Both</td>
<td>Both</td>
<td>Ascending</td>
<td></td>
</tr>
</tbody>
</table>
Table 2. Research Goals, Data Sources and Dominant Methods for Archival Research on Organizations

<table>
<thead>
<tr>
<th>Objects of Investigation</th>
<th>Data Source</th>
<th>Dominant Analytic Methodologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural Embeddedness</td>
<td>Relational ties (Corporate interlocks, exchange agreements, market transactions, reference groups, etc.)</td>
<td>Network Analysis, Blockmodels</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meaning Systems</td>
<td>Professional discourse (journal articles, trade publications), Procedural Talk (emails), Organizational identity statements (directories, IPOs, annual reports)</td>
<td>Content Analysis, Semantic Grammers, Semiotics, Multidimensional Scaling</td>
</tr>
<tr>
<td>Grammars and Repertoires of Action</td>
<td>Event sequences, Organizational Practices (procedural records)</td>
<td>Sequence Analysis, Boolean Algebra, Fuzzy-Sets</td>
</tr>
<tr>
<td>Institutional Logics</td>
<td>Classification statements (directories, industry reports, organizational narratives)</td>
<td>Galois Lattice, Correspondence Analysis, Hierarchical Classification Model</td>
</tr>
</tbody>
</table>
BIONOTE (200-250 WORDS)

John W. Mohr is an Associate Professor in the Department of Sociology (and Associate Dean of the Graduate Division) at the University of California, Santa Barbara (CA, 93106). He has studied the history of social welfare organizations in New York City from the nineteenth century up through the New Deal period, focusing in particular on the way in which category systems operate and how new organizational forms are created. More generally, he has a longstanding interest in the formal analysis of culture. In this respect he has published articles (with Paul DiMaggio) applying Bourdieu’s concept of cultural capital to the study of social stratification among American high school students. He has also published a number of papers which apply relational (network) methodologies to facilitate the interpretation of meanings embedded within texts. These ideas are summarized in his (1997) *Annual Review of Sociology* article “Measuring Meaning Structures.” He recently edited a special double issue of the journal *Poetics* (Vol. 27/2-3) on the topic of “Relational Analysis and Institutional Meanings” highlighting developments in this style of work. He is currently working on a project concerning the politics of post-affirmative action at the University of California and he is editing a book (with Roger Friedland) for Cambridge University Press based on the “Cultural Turn” conference series that they host at UCSB every two years. He received his Ph.D. in sociology from Yale University in 1992. (Email: mohr@sscf.ucsb.edu).

Marc Ventresca is an Assistant Professor of Management and Organizations, Kellogg Graduate School of Management (and by courtesy, of Sociology, and Research Associate, Institute for Policy Research), Northwestern University, 2001 Sheridan Road, Evanston, IL 60208 (e-mail: m-ventresca@nwu.edu). His current research interests investigate the interplay of regulation and activity as sources of new organizational forms, in three empirical contexts: governance innovations in the global stock exchanges industry, the emergence of online information services, and higher education policy. Recent publications are “Ideology and Field-Level Analysis” (Research in Social Movements, Conflict, and Change, forthcoming, with Trex Proffitt), “The Embeddedness of Organizations” (Journal of Management 25, 3 with Tina Dacin and Brent Beal), and “The Institutional Framing of Policy Debates” (American Behavioral Scientist 42, 3 with Andy Hoffman). He is co-editor of Constructing Markets and Industries (Elsevier Science, 2001 with Joe Porac) and of Organizations, Policy, and the Natural Environment (Stanford University Press, 2001 with Andy Hoffman). He received his Ph.D. from Stanford University in 1995.