

Micro/Meso/Macro Levels of Analysis

Joshua B. Barbour

The University of Texas at Austin

barbourjosh@utexas.edu

Word Count

6,024 (does not include abstract, bio)

Abstract

Understanding the interplay between micro-, meso-, and macrolevels of analysis is a fundamental problematic of organizational communication scholarship. These terms are typically used to locate the researchers' analytical focus (e.g., on individuals, teams, organizations) relative to superordinate contextual phenomena and subordinate compositional phenomena. A focus on multiple levels of analysis at once or on the influence of one on another has important conceptual and methodological implications. Organizational communication scholarship offers multiple theoretical and analytical approaches to the multilevel study of micro-, meso-, and macrophenomena.

Main Text

Organizational communication inherently involves multiple levels of human experience and, therefore, it involves attention to multiple levels of analysis. They are typically referred to as micro-, meso-, and macrolevels of analysis; although, these terms have slippery theoretical and methodological meaning. Thinking of organizations as composed of nested levels nonetheless reflects commonsense ideas about how organizations work. Most who have worked in organizations realize, for example, that organizations are comprised of individuals working together toward shared purposes (though perhaps fragmented and contested purposes). We work in teams. We work for, in, and as organizations of all sizes. We collaborate with others doing the same.

A concern for the multilevel character of organizational communication is at least as old as scholarship on the relationships between communication and context informed by, for example, scholarship on bureaucratic organizational forms, the oddities of collective behavior, and interaction between how organizations and other social systems are structured or are structuring over time and space. Understanding organizational communication as multileveled also reflects a core idea of systems theory: Systems are formed of subsystems that are formed of subsystems and so on, and any system is itself part of a larger supra-system. These systems may be conceptualized as neatly stacked by those interested in formal hierarchies or chaotic by those interested in self-organizing teams. Regardless, understanding the interplay among levels of human experience has ever been and will likely continue to be a principal concern of organizational communication theory and research (Jones, Watson, Gardner, & Gallois, 2004; Kuhn, 2012).

For example, a prolific early organizational communication research tradition focused on superior-subordinate communication, which involves a concern for hierarchical communication where managers have a span of control over aggregations of individuals and groups. Research in this domain has typically focused on explaining interpersonal processes in organizational contexts including upward and downward communication, feedback seeking and giving, and

social influence. Research on supervisors is relative to the data from subordinates with which they interact or to the organizational system within which supervisors are constrained and contextualized. Although interest in particular phenomena may ebb and flow, the impulse to explain the effects of context and the emergence of organization persists. This impulse involves by definition an effort to link phenomena at different levels of analysis.

The following entry provides an introduction to micro-, meso-, and macrolevels of analysis as a concept of theory and method for organizational communication scholarship. The entry begins by defining these levels of analysis while emphasizing their relative character. The entry then turns to a selection of theoretical issues of importance to those interested in multiple levels of analysis and approaches useful in the study of multilevel phenomena.

Defining Micro-, Meso-, and Macrolevels of Analysis

Methodologically, *level of analysis* typically refers to the location of a unit of analysis (typically individual, dyadic, group, organization) though communicative units of analysis (e.g., messages, frames, discourse) defy orthodox distinctions (Kuhn, 2012). Messages circulate and have influence at multilevel levels of human experience (Fairhurst & Putnam, 2004).

Nonetheless, in organizational communication research, macrolevel has typically referred to phenomena encompassing multiple organizations (e.g., interorganizational communication), the influence phenomena external to the organization in focus (e.g., institutional influence on organizational phenomena, Lammers & Barbour, 2006), or organizations acting as the interlocutors or producers of communication for other organizations or publics (e.g., organizations as macroactors, Taylor & Van Every, 2000). The organization is the principal focus or unit of analysis. Microlevel, arguably the most common domain of focus, has typically referred to phenomena occurring within organizations including message production and interpretation, and conversations among organizational members (Jones et al., 2004). The individual is the principal focus or unit of analysis. Mesolevel has typically referred to a the focus on interaction among micro- and macrophenomena. Ballard and Seibold (2003) argued that “meso research centers around the routines and activities that link various organizational units and as such, lends itself to a multilevel analysis” (p. 382). Teams and networks are the principal focus or unit of analysis.

These levels of analysis are relative to each other, and conceptualizing one has implications for the others. The choice to locate a particular level of analysis typically involves a choice about the unit of analysis. A researcher interested in individuals’ communication behavior on teams might reasonably treat individual traits and behaviors as microlevel, team composition as mesolevel, and the situation of teams in organizations as macrolevel. Therefore, although the unit of analysis choice is typically dictated by theoretical and methodological commitments, the choice is arbitrary to the extent that a different researcher with a different question could take a different focus or array the levels differently.

Indeed, although the usage for the terms given above is typical for much organizational communication research, this explication obscures important complexities if for no other reason that others map the terms differently. For example, scholars of conversation analysis interested in organizational discourse may treat the analysis of particular language use within turns as the microlevel referring to the structure of entire conversations as macrolevel. The terms are used to orient the analyst to the focus at hand and to define how like units of analysis are related.

Research and theory may be conceptually multileveled without operationalizing concepts at multiple levels of analysis. For example, a researcher interested in macrophenomena may refer to the micro- and mesolevels as a way to describe related issues that are out of focus or out of

scope. Macrolevel research on healthcare organizations may focus on the rise and decline of hospitals over time or the communication among healthcare organizations involved in providing particular sorts of care. The interactions between particular providers with particular patients no doubt contributes to the success or failure of healthcare organizations and intersects with interaction among the organizations' representatives, but the macrolevel focus may preclude the study of the connections either because of lack of interest or because of the inherent difficulty in the study of large scale, simultaneous study of microlevel and macrolevel phenomena. Likewise, a researcher interested in provider-patient interaction may acknowledge the constraining forces of the financial and social health of the hospital as an organization without making it the focus per se. As yet another alternative, a researcher may study macromorphic phenomena such as physicians as professionals while only considering the microprocesses wherein physicians enact what it means to be a professional. Being a professional is macromorphic in the sense that it is connected to macrolevel phenomena but it plays out in the actions of individual professionals.

A researcher interested in the simultaneous analysis of multiple levels of analysis might use the terms to organize the phenomena under study wherein (a) the macrolevel includes structural, relatively more fixed phenomena that have contextual effects and is composed of lower level activity, (b) the mesolevel involves interaction between the levels, and (c) the microlevel includes the more fluid, communicative moves. In sum, levels of analysis are relative to each other and the focus of analysis.

For organizational communication scholars, defining levels of analysis is also interwoven with conceptualizations of the relationship between communication and organization (Fairhurst & Putnam, 2004; Taylor & Van Every, 2000). The concern for macro- and mesophenomena has coincided with the recognition that scholarship may treat the organization as a container for basic communication processes (cf., communication accommodation between providers and patients, interpersonal influence between superiors and subordinates), as a producer of messages (cf., organizational rhetoric, public relations, public affairs), or as a communicatively constituted epiphenomenon where communication *is* the organization (e.g., the communicative constitution of organizing, CCO). Criticisms about the relative strengths and weaknesses of these metaphors aside, conceptualizations of levels of analysis should also reflect an understanding of how communication and organization relate. Choices about levels of analysis are therefore related to but distinct from conceptualizations of communication as, for example, transmission or as constitution. Though a researcher might study the influence of contextual forces on transmission or in constitution, an interest in the bottom-up formation of macrophenomena implies a constitutive view to a degree.

Relatedly, conceptualizing micro-, meso-, and macrolevels of analysis also involves wrestling with conceptualizations of the boundaries of analysis and the connections between phenomena within and outside of those boundaries. For example, an organization's information environment is typically ascribed to the macrolevel of analysis, and in the study of interorganizational communication other organizations' members are considered outside the boundary of a particular organization under study (Shumate & O'Connor, 2010). Network research makes choices about boundaries particularly important, but it also makes clear that traditional boundary assumptions may be more fluid than we typically conceptualize them (Monge & Poole, 2008). For example, depending on the definition of network relationship under study, an alumnus might be conceptualized as inside *or* outside the boundary of a the university. Defining what counts as membership has implications for what counts as a level, as it ascribes

who or what is in a level. The entry turns now to an exploration of the theoretical implications of the conceptualization of micro-, meso-, and macrolevels of analysis.

Theoretical Implications of Multiple Levels of Analysis

Any unpacking of the theoretical implications of a focus on micro-, meso-, and macrolevels of analysis should acknowledge an important caveat: Organizational communication research need not encompass multiple levels of analysis. Although the study of organizational communication inherently implicates multiple levels of analysis to a degree, discussions of level of analysis are most pressing when researchers are particularly interested in analysis across levels or in understanding the implications of phenomena at one level in another. Kozlowski and Klein (2000) argued, "Micro theorists may articulate theoretical models capturing individual-level processes that are invariant across contexts . . . or that have no meaningful parallels at higher levels. Similarly, macro theorists may develop theoretical models that describe the characteristics of organizations, distinct from the actions and characteristics of organizational subunits (groups, individuals)" (p. 13). However, very few organizational phenomena are inherently, solely micro-, meso-, or macrolevel. Still, the categorization of phenomena at particular levels of analysis reflects more the choices and standpoints of analysts than the inherent properties of organizational communication phenomena (Fairhurst & Putnam, 2004). For example, even turn-by-turn conversational utterances may be understood as reflecting institutional forces, and even interorganizational relationships may be understood as composed of the emerging interaction of organizational representatives over time.

As such, organizational communication research needs to take care to avoid biases that may occur by ignoring the importance of its multilevel character. For example, macro and micro research may overgeneralize, underestimate cross-level effects, or reify organizational structures. Overgeneralization refers to the fact that macro and micro research cannot assume that concepts and process are the equivalent at different levels of analysis. Individuals and organizations make decisions, but the decision-making processes are not the same though they may be related in important ways. Research should also not underestimate the influence of processes across levels of analysis. Research that fails to recognize the multilevel nature of organizing may be criticized as reifying organizational structures. For example, the language used to describe organizational aggregations (e.g., groups, teams, units, divisions) are themselves to a degree constructs created to facilitate sensemaking. Micro research on the other hand has typically been conducted in a single organization, which leaves macrophenomena unvaried and also typically unconsidered. However, rather than categorizing phenomena, this review emphasizes the implications of an interest in micro-, meso-, or macrolevels as part of a broader concern for organizations as multilevel or involving multiple levels of analysis.

Top-down and Bottom-up

Organizational communication theory and research motivated by an interest in micro-, meso-, and macrolevels of analysis should conceptualize and account for the flow of influence among levels of analysis. Kozlowski and Klein (2000) termed them top-down and bottom-up processes, which are cousin to contextual and implicative forces (Cronen, Johnson, & Lannamann, 1982); structure and action (Poole, Seibold, & McPhee, 1985); and text and conversation (Taylor & Van Every, 2000). Top-down processes encompass the enabling and constraining of lower level phenomena by higher levels; and bottom-up processes encompasses the formation and (re)production of higher level phenomena at lower levels. Context may act directly on lower-level processes and outcomes or by moderating relationships among phenomena at lower levels (Kozlowski & Klein, 2000).

Historically, organizational communication scholarship concerned with cross-level forces has emphasized the constraining influence of context. Macrolevel influence was seen as isomorphic wherein shared contexts beget similarities (Lammers & Barbour, 2006). Jones et al. (2004) argued for the particular necessity of mesolevel research, research that would shift focus to the macrolevel of analysis, and research focused on communication beyond organizational boundaries. Recent organizational communication scholarship has focused balancing the historical emphasis on the constraining force of context by seeking to understand the compositional, constitutive, and implicative in communication (Ashcraft, Kuhn, & Cooren, 2009). A concern for emergence reflects an interest in understanding how actors draw on, for example, established forms of knowing and knowledge, structures, or interpretive repertoires to serve their own ends in ironic or unorthodox as well as established or faithful ways.

Composition and Compilation

Theory focused across levels should specify how phenomena behave at each level of analysis. Doing so requires conceptual and operational decisions. For example, in a multilevel confirmatory factor analysis using data from individuals nested in organizations, the researcher must specify the measurement model at the individuals *and* organizational levels of analysis (Barbour & Lammers, 2015). Doing so requires choices guided by the theory of the phenomena under consideration, and these choices require different model specifications.

Kozlowski and Klein (2000) argued bottom-up processes involve two markedly different types of emergence: (a) *Composition* “based on assumptions of isomorphism, describes phenomena that are especially the same as they merge upward across levels”; and (b) *compilation* “based on assumptions of discontinuity, describes phenomena that comprise a common domain but are distinctively different as they merge across levels” (p. 16). For example, the influence of monetary motivations may be the same for individuals and team (composition). Decisions that involve a single ideal outcome would be the same regardless of whether the individual or team arrived at that single ideal (composition). On the other hand, a team’s shared mental model of a communication process (e.g., captured in standard operating procedures) may differ a great deal from the models held by each individual (compilation) and both versions may have different effects on how the teams interact.

Levels of Analysis Over Time

Conceptualizations of top-down and bottom-up processes should consider how these processes may occur over different time scales or with differences in pacing. For example, revealing the operation of bottom-up processes may in particular require a longitudinal angle to capture the building up of higher level phenomena over time. Kozlowski and Klein (2000) argued that “over time the relationship between phenomena at different levels may prove bidirectional or reciprocal” (p. 22). Indeed, even the level to which a researcher ascribes a given phenomenon may reflect more an “assumption about the current time point in a stream or cycle of events” than an inherent property (p. 22). Ballard and Seibold’s (2003) mesolevel model of organizational temporality conceptualized the enactment and construal of time as central to the communicative emergence of group processes. The multilevel nature of organizing is associated with the “the multiple and overlapping ‘nows,’ or activity cycles, within which organizational members find themselves engaged—from very brief activities with little task variability to deeply extended activities that may be inherently unknowable” (Ballard & McVey, 2014, p. 193). For example, Weber and Monge’s (in press) analysis of changes in the newspaper industry over time revealed the differential influence of individual and organizational action in organizational transformation. The adoption of a particular organizational strategy may be

painful at the individual-level time scale even though it may eventually produce success for the organization over time.

Nested and Crossed Levels

Organizational communication theorizing and research motivated by an interest in multiple levels of analysis must also contend with the fact that the nesting of superordinate and subordinate levels of analysis may not be neat and discrete. Individuals may belong to more than one group or feel that they do, as research on the multiple targets of identification and the fragmentation of identity make clear (Scott, Corman, & Cheney, 1998). Communication phenomena in particular defies neat assignment to any particular level of analysis. Communication operates at different levels of aggregation in different ways (Kuhn, 2012).

Multilevel Theory and Metatheory

There are many exemplars of organizational communication research that take a multilevel approach or focus on micro-, meso-, or macrophenomena with a concern for another level of analysis. Indeed, the contributions are so many that any list will necessarily be incomplete. For example, organizational communication theory borrows a great deal from structuration theory, and its metatheoretical focus on the duality of agency and structure (Ashcraft et al., 2009). Examples include adaptive structuration theory (Poole et al., 1985) and the structuration model of identification (Scott et al., 1998). Related work on identity tensions and multiple targets of identification recognize the multilevel character of organizing by considering respectively how identity work engenders organizational culture or how identification may be directed at different levels of aggregation. The resurging interest in occupational and professional identity involves too an interest in explaining organizing as multileveled, because these identities are at once about individuals, organizations, and institutions. Social network theory (and its concomitant methodological contributions) addresses that most fundamental “problem of social order: how autonomous individuals can combine to create enduring, functioning societies” (Borgatti et al., 2009, p. 892). Efforts have also emphasized an explicitly mesolevel approach including, for example, the aforementioned mesolevel model of organizational temporality (Ballard & Seibold, 2003). Applications of institutional theory to organizational communication are an attempt to conceptualize macromorphic phenomena for study at micro-, meso-, and macrolevels of analysis. Theorizing in this vein includes, for example, the macro-focused symbiotic sustainability model (Shumate & O'Connor, 2010) as well as research focused on enabling and constraining force of institutions at lower levels of analysis (Barbour & Lammers, 2007). Scholarship focused on the communicative constitution of organizing has been fruitful in connecting micro- and macrophenomena, including efforts such as the theory of four flows, the work of the Montreal school, and the general theory of social systems (Kuhn, 2012). Applications of theories of evolution to organizing (e.g., Weber & Monge, in press) reflect efforts to explain how individual and organizational phenomena comprise macromorphic patterns in populations of organizations and organizational discourse (Monge & Poole, 2008). This incomplete list of exemplars demonstrates the breadth of organizational communication theorizing focused on micro-, meso-, and macrolevels of analysis.

Analytical Approaches

Multilevel analysis, social network analysis, and discourse analysis are three important exemplars of analytical approaches to multilevel phenomena in organizational communication. Their treatment here is necessarily brief. For detailed reviews of each approach, readers should consult the references, further readings, and related entries in this volume. It should also be

acknowledged that this is an incomplete list of analytical approaches. Of course, an innumerable body of scholarship focuses on one level while referencing a concern for another. Theory and analytical approach are leveled in related but distinct senses of the terms. Research can involve multilevel theory but collect data at only one level of analysis. Likewise, many techniques other than those discussed here offer resources for the study of micro-, meso- and macrolevels of analysis. Multilevel organizational communication scholarship may involve integration of these approaches or mixed methods. However, multilevel analysis, social network analysis, and discourse analysis each emphasize a focus on multiple levels as integral to the approach.

Multilevel Analysis

Multilevel analysis involves modeling that decomposes the variability into at least two levels of aggregation. It addresses levels of analysis issues by assigning particular variables to particular levels. As an analytical approach, multilevel techniques have proven broadly useful in communication scholarship for those interested in understanding contextual effects, but they are particularly useful for organizational communication research (Park, 2011). Organizational communication scholarship frequently involves data that are nested by design or by virtue of the simple fact that we often collect data from individuals in context. Organizational communication scholars have a strong interest in the influence of context. Typical examples model individuals nested in groups (Yuan, Fulk, Monge, & Contractor, 2010) or organizations (e.g., Harrison et al., 2011). Others have modeled, for example, repeated measures over time (Flanagin, Park, & Seibold, 2004) or knowledge areas (Huang, Barbour, Su, & Contractor, 2013) nested within individuals within groups or organizations.

Modeling the nested structure of data allows the researcher to understand differences as composed of individual and organizational components as well as unexplained error. It also provides a remedy for problems of data independence. Observations of nested data are by definition not independent from one another, which violates the assumptions of many orthodox analysis approaches. For example, students' experiences in the classroom reflects their own behavior, but also their shared experience with other students and the influence of the teacher on the class as a whole. Physicians' beliefs about their professional identity and communication behaviors are likely due in part to individual factors and shared practice in the same settings, which may also reflect extra-organizational dynamics (Barbour & Lammers, 2007, 2015). Multilevel analysis models difference among individuals (students or physicians) as well as (and separately from) differences between the groups (classes or practices). That is, for any given variable, each group has its own group score that varies from the overall or grand mean just as each individual has a score that varies around the overall or grand mean and the mean of their group. The decomposition of these differences (of this variability) into multiple levels is useful, because it offers a straightforward way of operationalizing how much observed differences depend on individual or group or organizational factors.

Multilevel analysis addresses the micro, meso and macro character of organizational communication in many ways. First, multilevel analysis allows for controlling for nesting even when the phenomenon of interest is at a particular level. Barbour and Lammers (2015) modeled measures of professional identity, which they conceptualized as an individual-level construct, controlling for organizational setting. Second, multilevel analysis can disentangle the influence of variables of substantive interest at different levels of analysis on subordinate outcomes by making clear how, for example, individual and group-level variables contribute to the individual and group variance of outcome variables. Myers and McPhee's (2006) study of firefighting crews modeled the differential effects of individual (e.g., acculturation, proactivity) and crew

variables (performance) on multiple measures of member assimilation (e.g., involvement, trust, commitment, acceptance). Third, multilevel analysis also allows for the exploration of how interactions among variables at different levels of analysis may not only explain variance in the outcomes of interest, but also the relationships between variables of interest. For example, Myers and McPhee found that the relationships between individual-level variables and individual-level outcomes varied from group to group, and that this variability could be explained in part by variations in group-level performance.

A principal weakness of multilevel analysis techniques is that they model top-down processes well, but offer limited resources for the analysis of bottom-up processes. Multilevel modeling assumptions reflect top-down assumptions. The explanatory power of variables at higher levels on variables at lower levels may be captured but not the reverse. Social network analysis and discourse analysis offer resources for the consideration of both processes.

Social Network Analysis

Social network analysis is another approach particularly useful for conceptualizing and studying the multilevel character of organizational communication. Social network analysis encompasses not just an analytic approach to data, but it is also a distinctive approach to theorizing organizing (Borgatti et al., 2009). Monge and Contractor (2003) defined communication networks as the “patterns of contact that are created by the flow of messages among communicators through time and space” (p. 3). Social network analysis addresses level of analysis directly by conceptualizing *and* operationalizing not just the properties of the unit of analysis (attributes) but the connections among them as well (relationships). The network is by definition a multilevel construct.

Network analysis focuses on patterns of relationships (e.g., communication frequency, advice seeking) among nodes (e.g., team members) and offers distinctive analytical techniques for doing so. Network analysis includes analysis of inherent node properties (e.g., who or what a node is), node properties that exist by virtue of the network (e.g., closeness centrality, typically the average distance from a given node to the other nodes in the network) and network properties (e.g., centralization, the degree to which a network is as a whole more or less dominated by central nodes). Network analysis puts questions of aggregation at the fore prompting questions about (a) clusters of nodes and the relationships among them, (b) the multiplex of relationships among nodes, and (c) the fluidity boundaries between systems and between levels of analysis.

Social network analysis allows for the consideration of top-down and bottom-up processes. Factors at higher levels of analysis may be positioned as constraining lower level network structures (e.g., patterns of links between nodes). At the same time, the analysis of node characteristics and network structures may be conceptualized as reflecting processes of emergence. Social network analysis offers multiple approaches for dealing with the lack of independence between observations and investigating the substantive interests therein. Of course, social network measures may be transformed for orthodox multilevel modeling (e.g., Huang et al., 2013). Social network data may also be analyzed using approaches such as exponential random graph modeling that allow the researcher to predict network structures with multilevel variables including individual actor, shared actor, and network characteristics (Contractor, Wasserman, & Faust, 2006; Shumate & Palazzolo, 2010). Likewise, social network theory may also provide a theoretical conceptualization of levels of analysis for research that employs interpretive or mixed methods (e.g., Doerfel, Lai, & Chewning, 2010; Weber & Monge, in press).

Discourse Analysis

Discourse analytic approaches conceptualize and operationalize micro-, meso-, and macrolevels of analysis by examining how conversations, narratives, rhetorics, and tropes constitute organizing from the bottom-up and how those forms reflect broader discursive moorings. “The basic hypothesis that most discourse analysts endorse is that language depicts, denounces, or reveals something critical about organizational functions, regardless of the form that discourse takes” (Putnam & Cooren, 2004, p. 324). Discourse analysis addresses levels of analysis issues by consideration the operation of communicative phenomenon at multiple levels of analysis. For example, individuals create texts alone and together (e.g., an office’s copier use policy). Texts may circulate within organizational boundaries (e.g., posted in the copy room) and outside them (e.g., borrowed by a neighboring organization). Discourse analysis is particularly focused on issues related to bottom-up processes or “scaling up” (Putnam & Cooren, 2004).

Discourse analysis has developed along side the growing interest in theories of the communicative constitution of organizing (Kuhn, 2012). Fairhurst and Putnam (2004) conceptualized three discourse-organization relationships—discourse as an *object* of organizations, discourse as formational in organizations’ *becoming*, and organization/discourse as *grounded in action*. Whereas the first (object) and second (becoming) stances conceptualize the levels as discrete but related, the third (grounded in action) dissolves the levels altogether by treating each as comprised of social practice: “Within the grounded in action orientation, no macro- or microdistinction exists, only the continuous flow of conduct” (p. 20).

Discourse analysis is useful for understanding the oddity of communication in the context of questions of levels of analysis (Fairhurst & Putnam, 2004). Communicative phenomena do not sit neatly in a single level of analysis. Texts circulate among levels, and texts may themselves exert a certain sort of agency in organizing (Putnam & Cooren, 2004). Discourse analysis may involve the collection of data at or across multiple levels of analysis (e.g., observations of conversations; memorable messages solicited through interviews; document analysis of memos, PowerPoint decks, or press releases; news accounts of organizational action). For example, in Fairhurst, Cooren, and Cahill’s (2002) analysis of the discursive construction of contradictions in organizational downsizing, they gathered in-depth interviews, observations of company-wide meetings, reviews of the videotaped speeches from the meetings, and organizational documents that included, a “1993 communication audit, a 1999 site audit commissioned by Congress . . . numerous (local, regional, and federal) DOE planning documents, contractor planning documents, company newsletters, newspaper articles, and site Web pages” (p. 510). This rich body of data allowed the researchers to select examples of discourse to support their analysis at multiple levels. The analysis offered insights into organizational downsizing strategies, individual strategies for managing the contractions emergent in the downsizing, and the interplay across levels over time wherein previous downsizing strategies “were not only a function of the mission and resource contradictions that actors sought to manage but also the unintended consequences of previous downsizings that actors sought to avoid” (p. 533).

Future Directions

For organizational communication scholarship, the theoretical interest in the distinctions between levels of analysis and the interplay among them will no doubt persist. Indeed, the nature of communication itself offers a promising if challenging direction for future research (Kuhn, 2012). Research and theory must contend with the idiosyncrasies of communication as a distinctively multilevel phenomenon. Messages, conversation, and networks do not fit neatly into discrete levels of analysis. The same message may have affects at multiple levels depending on

its flow from individual to individual or from an individual to many. Hybrid approaches that blend, for example, network and discursive approaches to consider networks that connect conversations seem especially promising.

The difficulties of conducting multilevel research that involves the simultaneous observation of multiple levels present another challenge and opportunity for future research. Research at the macrolevel has tended to gloss over microlevel processes, and microlevel research has tended to ignore the macrolevel altogether. Addressing this challenge will require changes to the structuring and support of the research enterprise to enable long term, resource intensive, multiple researcher efforts. Innovation in research methods may also help address these difficulties. For example, the ambient, computerized collection of very large data sets and the tools of computational social science may allow researchers to look for patterns in communication at differing levels of analysis if meaning can be made of data that are not always collected by design. Likewise, research that focuses on one level while operationalizing aspects of another may also help address this research challenge. We may think of this sort of research as micromorphic, mesomorphic, macromorphic—focused at one level to discover the influences of the other levels within it. Communication scholarship may be particularly useful in this regard, because it provides tools for the study of the bottom-up, communication processes that comprise higher levels of analysis as well tools for the study of the communication artifacts that those processes produce.

SEE ALSO

IEOC0061
IEOC0074
IEOC0092
IEOC0137
IEOC0143
IEOC0148
IEOC0157
IEOC0197
IEOC0199
IEOC0203

References

- Ashcraft, K. L., Kuhn, T. R., & Cooren, F. (2009). Constitutional amendments: "Materializing" organizational communication. *The Academy of Management Annals*, 3, 1-64.
doi:10.1080/19416520903047186
- Ballard, D. I., & McVey, T. (2014). Measure twice, cut once: The temporality of communication design. *Journal of Applied Communication Research*, 42, 190-207.
doi:10.1080/00909882.2013.874571
- Ballard, D. I., & Seibold, D. R. (2003). Communicating and organizing in time: A meso level model of organizational temporality. *Management Communication Quarterly*, 16, 380-415. doi:10.1177/0893318902238896

- Barbour, J. B., & Lammers, J. C. (2007). Health care institutions, communication, and physicians' experience of managed care: A multilevel analysis. *Management Communication Quarterly*, 21, 201-231. doi:10.1177/0893318907308747
- Barbour, J. B., & Lammers, J. C. (2015). Measuring professional identity: A review of the literature and a multilevel confirmatory factor analysis of professional identity constructs. *Journal of Professions and Organization*, 2, 38-60. doi:10.1093/jpo/jou009
- Borgatti, S., Mehra, A., Brass, D. J., & Labianca, G. (2009). Social network analysis in the social science. *Science*, 323, 893-895. doi:10.1126/science.1165821
- Contractor, N., Wasserman, S., & Faust, K. (2006). Testing multitheoretical, multilevel hypotheses about networks: An analytic framework and empirical example. *Academy of Management Review*, 31, 681-703. doi:10.5465/AMR.2006.21318925
- Cronen, V. E., Johnson, K. M., & Lannamann, J. W. (1982). Paradoxes, double binds, and reflexive loops: An alternative theoretical perspective. *Family Process*, 21, 91-112. doi:10.1111/j.1545-5300.1982.00091.x
- Doerfel, M. L., Lai, C.-H., & Chewning, L. V. (2010). The evolutionary role of interorganizational communication: Modeling social capital in disaster contexts. *Human Communication Research*, 36, 125-162. doi:10.1111/j.1468-2958.2010.01371.x
- Fairhurst, G. T., Cooren, F., & Cahill, D. J. (2002). Discursiveness, contradiction, and unintended consequences in successive downsizings. *Management Communication Quarterly*, 15, 501-540. doi:10.1177/0893318902154001
- Fairhurst, G. T., & Putnam, Linda L. (2004). Organizations as discursive constructions. *Communication Theory*, 14, 5-26. doi:10.1111/j.1468-2885.2004.tb00301.x
- Flanagin, A. J., Park, H. S., & Seibold, D. R. (2004). Group performance and collaborative technology: A longitudinal and multilevel analysis of information quality, contribution equity, and members' satisfaction in computer-mediated groups. *Communication Monographs*, 71, 352-372. doi:10.1080/0363452042000299902
- Harrison, T. R., Morgan, S. E., Chewning, L. V., Williams, E. A., Barbour, J. B., Di Corcia, M. J., & Davis, L. A. (2011). Revisiting the worksite in worksite health campaigns: Evidence from a multi-site organ donation campaign. *Journal of Communication*, 61, 535-555. doi:10.1111/j.1460-2466.2011.01553.x
- Huang, M., Barbour, J. B., Su, C., & Contractor, N. (2013). Why do group members provide information to digital knowledge repositories? A multilevel application of transactive memory theory. *The Journal of the American Society for Information Science*, 64, 540-557. doi:10.1002/asi.22805
- Jones, E., Watson, B., Gardner, J., & Gallois, C. (2004). Organizational communication: Challenges for the new century. *Journal of Communication*, 54, 722-750. doi:10.1111/j.1460-2466.2004.tb02652.x
- Kozlowski, S., & Klein, K. J. (2000). A multilevel approach to theory and research in organizations: Contextual, temporal and emergent processes. In K. J. Klein & S. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions and new directions* (pp. 3-90). San Francisco, CA: Jossey-Bass.
- Kuhn, T. (2012). Negotiating the mirco-macro divide: Thought leadership from organizational communication for theorizing organization. *Management Communication Quarterly*, 26, 543-584. doi:10.1177/0893318912462004

- Lammers, J. C., & Barbour, J. B. (2006). An institutional theory of organizational communication. *Communication Theory*, 16, 356-377. doi:10.1111/j.1468-2885.2006.00274.x
- Monge, P. R., & Contractor, N. S. (2003). *Theories of communication networks*. Oxford: Oxford University Press.
- Monge, P. R., & Poole, M. S. (2008). The evolution of organizational communication. *Journal of Communication*, 58, 579-692. doi:10.1111/j.1460-2466.2008.00408.x
- Myers, K. K., & McPhee, R. D. (2006). Influences on member assimilation in workgroups in high-reliability organizations: A multilevel analysis. *Human Communication Research*, 32, 440-468. doi:10.1111/j.1468-2958.2006.00283.x
- Park, H. S. (2011). Multilevel analysis. In V. D. Miller, M. S. Poole, D. R. Seibold, and Associates, *Advancing research in organizational communication through quantitative methodology. Management Communication Quarterly*, 25, 4-58. doi:10.1177/0893318910390193
- Poole, M. S., Seibold, D., & McPhee, R. D. (1985). Group decision-making as a structural process. *Quarterly Journal of Speech*, 71, 74-102. doi:10.1080/00335638509383719
- Putnam, L. L., & Cooren, F. (2004). Alternative perspectives on the role of text and agency in constituting organizations. *Organization*, 11, 323-334. doi:10.1177/1350508404041995
- Scott, C. R., Corman, S. R., & Cheney, G. (1998). Development of a structural model of identification in the organization. *Communication Theory*, 8, 298-336. doi:10.1111/j.1468-2885.1998.tb00223.x
- Shumate, M., & O'Connor, A. (2010). The symbiotic sustainability model: Conceptualizing NGO-corporate alliance communication. *Journal of Communication*, 60, 577-609. doi:10.1111/j.1460-2466.2010.01498.x
- Shumate, M., & Palazzolo, E. T. (2010). Exponential random graph (p*) models as a method for social network analysis in communication research. *Communication Methods and Measures*, 4, 341-371. doi:10.1080/19312458.2010.527869
- Taylor, J. R., & Van Every, E. J. (2000). *The emergent organization: Communication as its site and surface*. Mahwah, NJ: Lawrence Erlbaum.
- Weber, M. S., & Monge, P. R. (in press). Industries in turmoil: Driving transformation during periods of disruption. *Communication Research*. doi:10.1177/0093650213514601
- Yuan, Y. C., Fulk, J., Monge, P. R., & Contractor, N. (2010). Expertise directory development, shared task interdependence, and strength of communication network ties as multilevel predictors of expertise exchange in transactive memory work groups. *Communication Research*, 37, 20-47. doi:10.1177/0093650209351469

Further Reading

- Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). *Analyzing social networks*. Thousand Oaks, CA: Sage.
- Fairhurst, G. T., & Putnam, L. L. (2014). Organizational discourse analysis. In L. L. Putnam & D. K. Mumby (Eds.), *The SAGE handbook of organizational communication* (pp. 271-296). Thousand Oaks: Sage.
- Klein, K. J., & Kozlowski, S. (2000). *Multilevel theory, research, and methods in organizations: Foundations, extensions and new directions*. San Francisco, CA: Jossey-Bass.

Author Mini-Biography

Joshua B. Barbour (PhD, University of Illinois at Urbana-Champaign) is an assistant professor of Communication Studies in the Moody College of Communication at the University of Texas at Austin. His research interests center on the confluence of the macromorphic and communicative in organizational life. His past projects have focused on a toxic waste storage facility; nuclear power plants; organizations involved in disaster preparation, response and recovery; and healthcare organizations. His work has appeared in *Communication Monographs*, *Management Communication Quarterly*, *Communication Theory*, *the Journal of Applied Communication Research*, *the Journal of Health Communication*, and *the Journal of Communication*.

Keywords

Communication research methods, communication theory, organizational theory, levels of analysis, multilevel analysis, network analysis, discourse analysis