LANGUAGE & SOCIAL PROCESSES

Judith Green, editor

hildren as Researchers of Culture and Language in Their Own Communities

Ann Egan-Robertson and David Bloome (eds.)

onstructing Critical Literacies

Peter Freebody, Allan Luke and Sandy Muspratt (eds.)

onstructing Gender and Difference: Critical Research Perspectives on Early Childhood

Barbara Kamler (ed.)

arly Childhood Classroom Processes: A View through an Ethnographic Lens

Rebecca Kantor and David P. Fernie (eds.)

rogs and Snails and Feminist Tales: Preschool Children and Gender (Revised edition)

Bronwyn Davies

ender in Japanese Preschools: Frogs and Snails and Feminst Tales in Japan Bronwyn Davies and Hiroyuki Kasama

iterprofessional and Family Discourses: Voices, Knowledge, and Practice Marleen McClelland and Roberta G. Sands

iultidisciplinary Perspectives on Literacy Research (Second Edition)

Richard Beach, Judith Green, Michael Kamil, and Timothy Shanahan

reschoolers as Authors: Literacy Learning in the Social World of the Classroom

Deborah Wells Rowe

1ards of Glass: Children Reading and Writing Beyond Gendered
Identities

Bronwyn Davies

eaching Cultures: Knowledge for Teaching First Grade in France and the United States

Kathryn M. Anderson-Levitt

'riting Ourselves: Mass-Observation and Literacy Practices Dorothy Sheridan, Brian Street, and David Bloome

rthcoming

iscourse of Opportunity: How Talk in Learning Situations Creates and Constrains

Lesley A. Rex (ed.)

Multidisciplinary Perspectives on Literacy Research

Second Edition

edited by

Richard Beach

University of Minnesota

Judith Green

University of California, Santa Barbara

Michael Kamil

Stanford University

Timothy Shanahan

University of Illinois



Tharp, R., & Gallimore, R. (1988). Rousing minds to life: Teaching, learning, and schooling in social context. New York: Cambridge University Press.

Toulmin, S., Rieke, R., & Janik, A. (1984). An introduction to reasoning. New York: Macmillan.

Valdes, G. (1996). Con respeto: Bridging the distances between culturally diverse families and schools. New York: Teachers College Press.

Vygotsky, L. (1978). Mind in society: The development of higher psychological processes (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, eds.). Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1981). The genesis of higher mental functions. In J. Wertsch, The concept of activity in Soviet psychology (pp. 144-188). Armonk, NY: Sharpe.

Wertsch, J. V. (1981). The concept of activity in Soviet psychology. Armonk, NY: M. E. Sharpe.

Wertsch, J. (1991). Voices of the mind: A sociocultural approach to mediated action. Cambridge, MA: Harvard University Press.

Wertsch, J., del Rio, P., & Alvarez, A. (1995). Sociocultural studies of mind. New York: Cambridge University Press.

Zinchenko, P. I. (1981). Involuntary memory and the goal-directed nature of activity. In J. V. Wertsch (Ed.), *The concept of activity in Soviet psychology* (pp. 300-340). White Plains, NY: Sharpe. (Original work published 1962)

Participating in Emergent Socioliterate Worlds

Genre, Disciplinarity, Interdisciplinarity

Charles Bazerman
University of California, Santa Barbara

Paul Prior
University of Illinois, Urbana

This chapter presents a new view of literate interaction and the role of the texts that mediate such interactions. It is a view that places genre at a central nexus of discourse practices and that sees discourse practices as a key constituent of social practices. It is a view that has appeared in varied fields, including developmental psychology (e.g., Dore, 1989; P. Miller, Hengst, Alexander, & Sperry, 2000), speech pathology (Hengst & Miller, 1999), sociology (Bergmann & Luckmann, 1994; Devault & McCoy, 2001; Guenthner & Knoblauch, 1995; Luckmann 1986; D. Smith, 1990, 1998), and anthropology (e.g., Bauman, 1992; Duranti, 1994; Hanks, 1987, 2000). However, it has been particularly central to literacy researchers across varied contexts (e.g., Bazerman, 1988, 1994b, 1999a, 2000a, 2000b, 2001b, 2001c; Berkenkotter, 2001; Berkenkotter & Huckin, 1985; Berkenkotter & Ravatos, 1997; Besnier, 1995; Bhatia, 1993; Chapman, 1994, 1995; Dias, Freedman, Medway, & Pare, 1999; Freedman, Adams, & Smart, 1994; Freedman & Medway, 1994; Kamberelis, 1999, 2001: Kamberlis & Scott, 1992; C. Miller & Selzer, 1985; Prior, 1998; Russell, 1997; Schryer, 1993;

Swales, 1990, 1998; Winsor, 1999). As in any emergent view, there are substantial differences among the details of the various theorists and investigators, and even a single expositor's view will vary or be elaborated from one text to another. The version presented here represents only a view negotiated between the two authors for the current text, but should give some of the flavor of the enterprise. This view of genre has drawn deeply on several fields, especially linguistic anthropology, sociolinguistics, phenomenological sociology, and sociocultural psychology. However, the value of this perspective has arisen most clearly out of historical challenges facing two fields related to literacy education—second-language education and composition-rhetoric.

The role of language theory, research, and pedagogy in varied contexts of literacy education entered a period of creative tension in the 1970s. The rise of Chomskyan linguistics in the 1960s had fostered great interest in questions of language; however, Chomsky's theories had addressed national languages (like English) only in their most abstract and structural senses (Chomsky, 1965). Educators who sought to apply this new science of language to their classes and researchers who sought to understand language as it was being used in specific cultural contexts quickly ran up against the limits of such abstract, structuralist accounts of national languages. Responding to a complex of forces, second- and foreign-language educators began to turn their attention from describing and promoting general language competence to a concern for the specific varieties of language in use in specific situations, to exploring how the resources of language were organized to achieve certain social functions (like promising, requesting, asking for information) and express certain cultural notions (like expressing feelings, talking about time or politics). With accelerating globalization, special purpose language courses blossomed at all levels, not only courses in restricted language domains such as maritime English, but also in complex and open-ended disciplinary knowledge domains, like medical English and English for academic purposes (EAP).

During roughly the same period, the teaching of writing in U.S. higher education underwent an institutional and disciplinary resurgence. As a modern descendent of European traditions of rhetorical education, composition programs in U.S. colleges had assumed an ongoing responsibility toward instruction in academic writing throughout the 1900s, with a particular growth during the post-World War II expansion of the university population. In the late 1960s and early 1970s, the size and diversity of the student population in higher education increased, bringing urgency to instruction in writing and an increasing sense of professionalism to the task. A new discipline especially oriented to college writing instruction, mainly within English departments, drew on classical rhetoric, psychology, and linguistics to inform its practice, theory, and research. Early attention was

focused on the textual characteristics of student writing (Shaughnessy, 1977), the rhetorical situations and purposes of academic writing functions carried out by writing in academic and professional settings (Bitzer, 1968; Booth, 1963; Corbett, 1965), and the characteristics of academic and other texts that identified them as good writing (Christensen, 1967; Shaughnessy, 1977).

In its initial phase, research and theory in composition moved from a language- and text-based approach concerned with sentence form and textual organization (current-traditional rhetoric) to a process approach allied with personal expression, cognitive processes, and literacy development. With cognitive psychology providing the initial theoretical and methodological framework for the study of process, the development of a strong research agenda on writing processes turned attention away from the form and functions of the written text and to an isolated, individual process (Flower & Hayes, 1981, 1984). Such studies also turned attention away form the social contexts within which texts operated, as researchers attempted to identify general characteristics of novice and expert writers (Flower & Hayes, 1981; Geisler, 1994). By the mid-1980s, however, social and critical approaches to literacy began to supplant studies of cognitive processes in laboratory settings (see Nystrand, Greene, & Weimelt, 1993). Critical approaches pointed to the complexly intertwined links of ideology, power, and identity with literate practices and values (Bartholomae, 1985; Berlin, 1987; Bizell, 1992; Lunsford, Moglen, & Slevin, 1990; Street, 1984), whereas social approaches began detailed examination of the varied processes and contexts of writing in naturalistic cultural settings schools, laboratories, workplaces, home, and community (e.g., Barton & Ivanic, 1991; Brodkey, 1987; Heath, 1983; Herrington, 1985, 1988; Michaels, 1987; C Miller & Selzer, 1985; Paradis, Dobrin, & Miller, 1985; Rymer, 1988; Taylor & Dorsey-Gaines, 1988). Pedagogically, cross-curricular language programs in colleges (especially the writing-across-the-curriculum movement in the United States) began to feel tensions between generic advice about style, organization, process, and discipline- and workplace-specific practices. Because of their dual orientation to preparing students for future workplaces and course work in technical and scientific disciplines, technical writing programs became particularly concerned about how literate practice was specific to particular forms of professional practice.

In both applied language studies and the teaching of writing, general approaches to language and literacy education encountered an expanding domain of complexly differentiated language use in academic disciplines and the workplace. The historical emergence of this domain first became evident in the 18th century (Foucault, 1970; Hoskin, 1993; Hoskin & Macve, 1993; Luhmann 1983; A. Smith, 1976), but grew in intensity in the 20th century (Geisler, 1994; Pickering, 1993; Prior, 1998).² The closing

decades of the 10th century, however, also brought blurring, cracking, and interpenetration of disciplinarity most often labeled interdisciplinarity (Geertz, 1983; Klein, 1990, 1993, 1996; Prior, 1997).

136

The fracturing or fissioning of disciplines into new specialities has been the dominant pattern of knowledge growth in the twentieth century. Yet there have been more breakups and recombinations throughout the sciences over the past three decades than in the previous millenium. Moreover, innovative scholars increasingly cross the boundaries of formal disciplines. (Klein, 1993, p. 192)

Paradoxically, Klein pointed out, as knowledge and disciplinary formations become increasingly specialized, they are also attaining greater global reach and displaying relentless permeations and mixings at the boundaries "that separate one discipline from another (physics from chemistry, history from anthropology), disciplinary groupings (hard versus soft, pure versus applied), and larger institutional constructs (the university, industry, government, and society)" (p. 186).

The expansion of disciplinarity-interdisciplinarity and expertise was accompanied by changes in participation-not only the increased movement of varied social groups into systems of (higher) education but also internationalization of both education and disciplines. New workplaces were increasingly geographically dispersed (a trend now referred to as globalization), textually mediated, and enmeshed in a growing array of media technologies (Bazerman, 1999a; Bolter & Grusin, 1999; Hoskin & Macve, 1993; Orlikowski & Yates, 1994; Yates & Orlikowski, 1992). These developments called for theoretical and methodological tools that would be sensitive to the varieties of language used in specific sociocultural settings, that would address the many dimensions of difference as well as the broad commonalities of language in use. For literacy theory, research, and instruction, this need has most often been addressed since the 1980s through an exploration of genres and their situated use. Genre, in short, has become not merely a central site for recognition of disciplinary and other social difference, but a site where the sociohistorical effects of the expanding domains of disciplinarity are being registered.

Although genre may first have been viewed by many as simply conventional text types, as genres began to be examined more deeply they came to be seen as signaling much deeper multidimensional differences of situation, interaction, and meaning. This new understanding starts from the recognition that texts are as interactional and social in character as any utterance (e.g., Brandt, 1990). Mediation of the utterance in written form creates possibilities for interactional displacement across space and time as well as multiplication of sites of appearance. A single text may mediate numerous

interactions at multiple sites and times. Of course, the potential durability, mobility, and seeming fixedness of the artifact does not necessarily stabilize the meaning and interaction. In fact, meaning and interaction may be even more problematic. Because human symbolic or linguistic sense-making seems to have evolved from coordination of co-presence-that is, creatures observing or otherwise sensing each other's presence and acting with that knowledge (see Carruthers & Chamberlain, 2000; Deacon, 1997; Goody, 1995), our sense-making from language seems deeply dependent on immediate social situations and social interaction. In literate interaction, immediate co-presence can be seen in the (not unusual) meetings of collaborative writers (e.g., Cross, 1994; Lunsford & Ede, 1990; Prior, 1998) and in joint social readings (e.g., Heath, 1983); indeed, much of contemporary writing pedagogy has sought to increase the sense of co-presence through collaborative groups, student response, and similar means. Nonetheless, the social interaction of writing typically happens across time and space, with participants and their contexts imaginatively evoked and projected by individuals writing and reading a mediating text and with no opportunity for immediate mutual alignment or correction. This interactive distance of texts intensifies the need for mutual alignment of participants through aligned histories of enculturation and education (Brandt, 1990; Prior, 1998).

The one-dimensional text, when interacting with the imagination and understanding of the reader or writer, must serve as a kind of holographic plate: It must be actively illuminated to project a three-dimensional image of a social world-one with authors, readers, social motives, and referential objects. The dead words, symbols, and spaces must somehow come alive to animate relationships, communicative situations, and meaningful messages. The text must do extraordinary work, within sets of social understandings, to create co-orientation and to support activity. Moreover, this holographic evocation of interaction is extremely fragile and unstable; it may readily collapse or may transform variously within the minds of different users. Texts that manage to create relatively congruent relations and meanings across multiple readers, and perhaps multiple authors, are remarkable accomplishments, even when the texts seem to be of the most pedestrian character. In fact, that texts can be seen to be so robustly ordinary, given the delicacy and tenuousness of written communication is something that needs to be accounted for. The account we provide argues that only part of the meaning resides in the particular qualities of the texts, while much sits within the sociohistorical genesis of the social, institutional, and material systems within which the texts, users, and interactions are bound together in regularized activities. Such binding involves the building up of typifications, and a key discursive face of typification is found in genre.

GENRE AS ORGANIZED SOCIAL ACTION

Genre has been explored in recent decades from three quite different perspectives: as text, as rhetoric, and as practice. Genre has been traditionally defined primarily in terms of textual features, with a focus on language or style (syntax and lexicon) and organization. Organization in this sense operates in the interface of classical rhetorical categories of arrangement and topic. The salutation of a letter, the methods section of an experimental report, the description of an invention in a patent application—all represent both textual space (where things go and in what order) and topical content. From this perspective, the central questions rest not on what a genre is (genres are taken as the starting point), but on how genres are textually realized, especially through linguistic and organizational means (see Halliday, 1985; Halliday & Martin, 1993; MacDonald, 1994).

The second approach, genre as rhetoric, stays focused on textual features, but reads those features as parts of a sociorhetorical situation (authorial intentions, socially elaborated purposes, contextual exigencies, intertextual resources) that are made visible in the space of the text. In this approach, topics, arrangement, and other sequentially ordered features can be viewed as providing psychological pathways to guide the thought and emotions of the audience. This situated psychological view of genres has roots in classical rhetoric and poetics. This perspective also begins with stable textual forms as a given; however, it pays serious attention to the relation of those texts to their contexts. This approach, for example, considers ways a text signals who wrote it and shapes the ethos of the author(s) (e.g., Myers, 1990; Ulman, 1996), how the text addresses and invokes audiences (e.g., Gragson & Selzer, 1993), how the text enters into a history of social "conversations" (McCloskey, 1985; Swales, 1990) how it draws intertextually and interdiscursively on resources (e.g., Bazerman, 1993a, 2004), how it reflects and responds to the ideologies of the time (e.g., Brown & Herndl, 1996; Katz & Miller, 1996), and how texts structure reader experiences (e.g., Bazerman, 1988; Charney, 1993).

The third approach considers textual practices as fundamental to generic action (see Bazerman, 1988, 1994a, 1994b; Berkenkotter & Huckin, 1995; Hanks, 1987, 1996; Hengst & Miller, 1999; Kamberelis, 1999; Prior, 1998; Russell, 1997). This perspective sees genres as fundamentally dynamic, fluid, heterogeneous, and situated. The generic quality of a text may be changed not only by the textual form but by processes of production, reception, and distribution; relations to material, social, and intertextual conditions; use within activity; or many other aspects of the situation and activity mediated by the text (e.g., see Ball & Lee, this volume; Cole 1996; Wertsch, 1998). Thus, writing an experimental report for a teacher to grade in a chemistry class is different from submitting an experimental report to

a chemistry journal. A term paper on history is different from one on optical memories for computers. An article about primate behavior based on field research is different from an article on primate behavior based on laboratory study. This kind of sensitivity to local conditions, historical processes, and the differing perspectives of multiple participants obviously involves a theory that emphasizes the fragility, plasticity, and heterogeneity of speech genres. It also points to possibilities for the dialogic interpenetration of genres themselves. From this perspective, terms like identity, genre, and situation do not name distinct elements that can simply be combined like puzzle pieces to form the whole picture. Thinking again of the metaphor of a holograph, the piece (the text that has some generic characteristic) contains a partial fuzzy image of the whole. The text with its generic qualities is partly constituted by, among other things, the identities, situations, and acts of those participating in its reading or writing, while at the same time, those identities, situations, and acts are being partly constituted by the presence and force of the text and the textual practices it indexes. From this practice perspective, we start not with genres as stable objects, but with the process of making genres, which might better be referred to as genrification, generic activity (Berkenkotter & Huckin, 1995), or genring-following the model of Becker's (1988) notion of languaging.

The practice approach to genre we present here synthesizes six lines of influence:

- 1. Rhetoric oriented to content, purpose, and situation as well as form and style.
- 2. Theories of discourse as dialogic, situated, and heteroglossic.
- Phenomenological sociology, which finds the emergent order of everday social activity resting on processes of typification and recognizability.
- 4. Speech act theory, which sees utterances going beyond conveying meaning to making things happen in the social world.
- 5. Anthropological and psychological studies of discourse practices as situated, distributed, and mediated.
- 6. Structurational sociology, which sees larger structuring of events and relations emerging interactionally from the local actions and attributions of participants.

These approaches locate linguistic and literate practice as continuous and coextensive with cognitive, social, and material practices. A focus on practice implies seeing individual practice as situated within, co-emerging with, and contributing to larger ensembles of social accomplishment and knowledge. The centrality of such larger social ensembles also suggests that

genres are properly seen not as isolated types but as constitutive parts of multidimensional systems of activity (Bazerman, 1994b). Each of these influences is elaborated here.

Rhetoric as Motivated Invention and Strategic Language Choice

Where school rhetoric in the United States had become, and to some extent still is, reduced to current-traditional concerns for the arrangements/topics of a limited set of pedagogical genres (variations on the persuasive fiveparagraph essay being the best exemplar of this tradition), a rhetorical resurgence that coalesced in the 1960s emphasized rhetorical situation, action, and purpose as well as a more complex view of topics and invention (Bitzer, 1968; Burke, 1945, 1950; Kinneavy, 1971; Perelman & Olbrechts-Tyteca, 1969). This resurgence also had the effect of encouraging the expansion of rhetorical analysis to a wider range of genres and functions (especially consideration of epistemic as well persuasive purposes). Rhetorical studies of inquiry and its presentation have focused attention on sciences and social sciences (Bazerman, 1988; Gusfield, 1996; McCloskey, 1985; Selzer, 1993), on diverse participants in environmental debates (e.g., Herndl & Brown, 1996), on workplace rhetorical practices (e.g., Bazerman, 1999a; C. Miller & Selzer, 1985), on the everyday rhetoric of street gangs (Cintron, 1997); even on that least privileged form, student writing (e.g., Bartholomae, 1985; Herrington, 1988). The range of rhetorical work is suggested by the contrasts among Bartholomae (1985), Miller and Selzer (1985), and Cintron (1997). Bartholomae read student placement essays, asking how they drew on commonplaces to construct a rhetorical position in an unfamiliar rhetorical situation. His readings examined the ways textual moves projected (effectively or not) not only the ethos of the writer but also the context itself, hence his argument that student writers must invent the university. Looking at the rhetoric of transportation engineers, Miller and Selzer (1985) also read texts (e.g., transit development plans) to identify topics, but supplemented their readings with ethnographic methods (interviewing). Their analysis highlighted the complex interaction of topics drawn from different domains (disciplinary, generic, and organizational), but also looked beyond language to other semiotic means, considering topographic maps, charts, diagrams, and mathematical analyses as central topics in these genres. Cintron (1997) undertook a long-term, intensive ethnography in a Latino/a community, especially to ask how members of the community constructed identities and sought respect under conditions of racism and alienation. Among other analyses, he explored the rhetoric of gang graffiti, examining ways that words, images, and text vectors (especially up and down directionality) were used to promote one group and challenge others. Each of these very different analyses of very different genres,

however, shares the goals of expanding the domains of rhetorical analysis and pursuing complex readings of rhetorical action.

Dialogic Situatedness and Heterogeneity of Utterances

Voloshinov's critique of structural accounts of linguistics has provided a particularly provocative framework for rethinking text-centered approaches to genre. Voloshinov's approach to language and the genred forms it takes in situated use (echoed in Bakhtin) is grounded in a dialogic unit of analysis, the utterance.3 Utterances build on prior utterances, forming chains in which "each utterance refutes, affirms, supplements, and relies on the others, presupposes them to be known, and somehow takes them into account" (Bakhtin, 1986, p. 91). Because these chains of utterances are not disembodied sentences or linguistic abstractions, but the situated talk or text of particular persons, they index personal, interpersonal, institutional, sociocultural, and material histories and are charged with affective overtones and motivational trajectories as well as semantic meanings. Utterances are also dialogically addressed, anticipating the responsive understanding of recipients, future utterances by others or the speaker herself, and future actions or events in the world. Finally, utterances are dialogic because they are co-constituted through the active understanding of recipients. The utterance is a process, a form of co-production, a circuit that is complete only when actively produced and actively received. For Voloshinov and Bakhtin, utterances are fundamentally historical phenomena. Speech genres then are genres of dialogic utterance.

Language is realized in the form of individual concrete utterances (oral and written) by participants in the various areas of human activity. These utterances reflect the specific conditions and goals of each such area not only through their content (thematic) and linguistic style, that is the selection of lexical, phraseological, and grammatical resources of the language, but above all through their compositional structure. All three of these aspects-thematic content, style, and compositional structure-are inseparably linked to the whole of the utterance and are equally determined by the specific nature of the particular sphere of communication. Each separate utterance is individual, of course, but each sphere in which language is used develops its own relatively stable types of these utterances. These we may call speech genres. The wealth and diversity of speech genres are boundless because the various possibilities of human activity are inexhaustible, and because each sphere of activity contains an entire repertoire of speech genres that differentiate and grow as the particular sphere develops and becomes more complex. Special emphasis should be placed on the extreme heterogeneity of speech genres (oral and written). (Bakhtin, 1986, p. 60)

It is also critical to understand that Voloshinov, Bakhtin, and Medvedev strongly emphasized the power of content in constituting genre. They saw content as a consequence of people's situated engagements in spheres of social activity (a view most clearly articulated in Bakthin's notion of chronotopes). Volosinov, Medvedev, and Bakhtin all saw genres as ideological constructions fostering particular kinds of meanings (see also Beebe, 1994). Bakhtin and Medvedev (1978) talked of seeing reality with the eyes of genre and suggested that "human consciousness possesses a series of inner genres for seeing and conceptualizing reality" (p. 134). Although history produces patterns of form, meaning, and context recognizable as genres, Voloshinov, Medvedev, and Bakhtin argued that when we speak or write we produce individual utterances that are never reducible to the abstract types they echo and evoke. Genres emerge in the resonance of utterances with histories of prior utterances, recognizable as the same genre.

Genres as practiced then are "boundless" and display "extreme heterogeneity" because they are multiply determined. Bakhtin emphasized the capacity of genres to embed and play off of other genres in many ways. Recent research has begun to expand on and detail this recognition. Kamberelis (2001), for example, detailed the multiple domains of practices and discourses that are cobbled together in two children's joint authorship of a science report. Likewise, Dyson (1997) tracked the intricate and varied ways that mass media, community, and classroom events and discourse were deployed and indexed in children's storytelling. Prior (1994, 1998) noted the hybrid discourses and genres that were found in talk and text of graduate seminars and disciplinary work. Bazerman (1999a) examined such hybridity in Edison's notebooks. Hybridity can also occur in the multiple semiotic modes of the textual practice, potentially incorporating talk, text, bodily stance and gesture, the materiality and location of the text, graphics, mathematics, and other symbolic activity woven together in threads of interactional history (see Witte, 1992).4

Typification, Recognition, and Attunement

C. Miller (1984) integrated perspectives from speech communication and rhetoric with perspectives from phenomenological sociology to arrive at an understanding of "genres as typified rhetorical actions based in recurrent actions" (p. 159). Central to her theory were the notions of typificiation (Schutz & Luckmann, 1973) through recurrent action and of rhetorical situation (Bitzer, 1968) embodying recurring exigencies. Typification refers to social and intersubjective classifications of the complex lifeworld, whereas rhetorical situation points to discourse as motivated and responsive. C. Miller (1984) also stressed the dynamic, emergent character of rhetorical

action and typification: "the new is made familiar through the recognition of relevant similarities; those similarities become constituted as a type" (pp. 156-57). These types then also shape our imaginable motives and sense of possible actions. We conceive and seek what we perceive genres empower us to do. Miller's seminal article, her account of genres as typified communicative practices that arise under the demands of recurrent sociorhetorical situations, has been central to subsequent accounts (e.g., Bazerman, 1988, 1994a, 1994b; Berkenkotter & Huckin, 1995; Swales, 1990). Bazerman (1988) located writing as "a fundamentally historical phenomena" (p. 318). He defined genre as "a sociopsychological category which we use to recognize and construct typified actions within typified situations. It is a way of creating order in the ever-fluid symbolic world" (p. 319). The phenomenological emphasis on the need to make sense of, to order activity in, a complex lifeworld also leads to a view of genre as multidimensional, fluid, and dynamic but socially and historically stabilized. As Schryer (1993) suggested, genres are "stabilized enough for now." Generic typification is seen as not only offering the individual resources to manage complexity in the lifeworld, but as contributing to the stabilization and, thus, (re)production of social institutions and communities.

Thus, the work of locating a text in a genre for readers and writers is a multidimensional and socially distributed act of classification. As Wittgenstein (1958) argued in his discussion of games, classifications are matters of family resemblance rather than formal logic. To generate a genre then, people have to align their words and actions recognizably to the genre, which also means aligning to others who will receive it as that genre, as a recognizable but flawed attempt at the genre, or as not the genre at all. Swales (1990) argued that family resemblance alone is too fertile a process (anything can resemble anything) without some constraints. Although he noted domains of activity (like eating) as one possible constraint, he focuses particularly on the cognitive notion of prototypicality, proposing communicative purpose as a privileged feature of prototypicality for genres. A sociological perspective suggests the in situ cognitive accomplishment of resemblances is socially and historically sedimented, especially through long-term typifying alignments of persons, practices, artifacts, institutions, and natural/social worlds in coordinated and historied systems of persons, practices, and texts.

Attunement to others is central to phenomemological sociology (Garfinkel, 1967; Luckmann, 1992). Although the actual material circumstances of the universe may exist apart from human consciousness, and although individual attention may wander far, only those aspects of material and social context that are indexed in the shared discourse and other actions of participants become relevant to the ongoing social activity. That is, only those things we somehow indicate to each other through gesture

and embodied action, word, glance, or otherwise as immediately relevant and worth attending to is part of our shared interactional space. When I say, "Do you hear that bird?" or noticeably perk my ears to a distant sound, I have changed the world I am sharing with my interlocuter. Hanks (1990, 1996) took this indexical structuring of attention one step further by suggesting that the specific perception of objects attended to is further shaped by the interactional means used to index it. Where the inside of a house meets the outside, where private and personal find boundaries, how far there is from here, are all determined by cultural understandings invoked by gesture and words, interactionally. In a scientific article, the theories, prior literature, methods, objects and ideas mentioned and implied; the roles of author and reader; the specific experimental actions chronicled; the results reported; and interpretations offered all enter into the interactional space of shared attention. Further those objects are attended to in just the way that discipline characterizes those things, so that if color is characterized by wavelength as in physics or by hue and saturation as in descriptive archeology, it is those articulated aspects that are part of the discursive reality. Thus, as suggested by Bakhtin's (1981) concept of chronotope, a genre carries with it an expected world of objects, actors, actions, events, and atmospheres that one attends to in that space.

Utterance As Typified Speech Act and Social Fact

Genres can be seen not only as conveying recognizable meanings, but as carrying out recognizable acts. A letter can request, or complain, or mollify. A filled-in form can make application, comply with a regulation, or report on an event. An article can oppose or support, set out a new perspective or raise questions on an old, excite hopes or diffuse concerns. Austin (1962), following Wittgenstein's view of language as a move in a game, developed the idea that utterances accomplish things in the world, whether declaring a state of affairs, making a demand, committing oneself to a course of action, or asserting a truth. He further identified "felicity conditions" that must be met in order for the speech act to be successful. Searle (1969) continued the analysis of general speech act types and the general conditions of their success. Austin (1962), however, near the end of his analysis, suggested that ultimately the conditions of success depend on local situational and institutional histories and conditions: "The total speech act in the total speech situation is the only actual phenomenon which, in the last resort, we are engaging in elucidating" (p. 148).

Although Austin and Searle were concerned with short spoken utterances (of the length and character of "I bet you that..." and "I declare you guilty of the crime of..."), longer written texts can be understood as carrying out social actions as well, though some cautions and qualifications are

necessary in carrying out the details of analysis (see Bazerman, 1994b). Genre then would provide means for typifying and recognizing action as much as textual form. From a sociocultural perspective we can see genres as mediators of social activities. It is the mediating artifact that gives shape to the activity and affords particular relations and accomplishments. Furthermore, the mediating artifact becomes part of the way people think in the situation and activity as they come to use and understand the artifact in particular ways and as they see the mediating artifact as an extension of their own action. As with all mediating artifacts that serve as tools for accomplishing participants' objects, although genres may suggest and support particular typical objectives, they can be used flexibly depending on each participant's personally framed objects (Cole, 1996; Wertsch, 1998).

In this mutual alignment achieved through the mediating artifact, speech acts are accomplished, for people come to some sense(s) of agreement on the meaning, interactional force, and consequences of actions. The acts accomplished by genred utterances in turn establish social facts of what has been accomplished as well as supporting social facts in the meanings, situations, and orientations. Social facts are those things people believe to be true, and therefore bear on how they define a situation and act within it. The sociologist W. I. Thomas stated it so: "If [people] define situations as real, they are real in their consequences." Thus, the worlds successfully evoked and enacted in the genred utterances can become a kind of self-fulfilling prophecy (Merton, 1968) or deictic evocation and shaping of a life world (Hanks, 1990, 1996).

That documents create social facts is most easily seen in texts like contracts, applications and business orders. In such cases the text provides the basis for further action (e.g., job interviews will be scheduled and products will be shipped) and holds parties accountable for the commitments made in the text (e.g., that I will complete the contracted work or that I will accept delivery of the product ordered). However, less obviously behavioral statements can also be seen as acts and consequent social facts. As Austin and Searle both pointed out, assertions are also acts. Assertions do not necessarily need to be taken as true to be taken as a social fact that they have been asserted. If an appropriately credentialed member of a profession presents a controversial research paper to a professional audience, delivered in an appropriate form and forum, then people do not have to accept the claims as true for them to recognize that the claim was made. The intellectual landscape of that profession will have been changed to the extent that the author has gotten people to attend to that claim. Indeed if the statement is extremely controversial, then there will be many consequences and further acts from the social recognition that the person has made this claim. It may become very difficult for the controversialist to erase the opprobrium that comes from the social fact of being associated with such claims. It even

146

may be the case that the author never hoped for agreement, but only wished to challenge current views and create a discussion. In that case, the author would have created exactly the desired social fact. Every text that is attended to or otherwise finds place on the discursive landscape can be said to create some kind(s) of social fact, even if it is only to leave an objection in the record. Of course, the textual act might not be recognized for everything the author would wish it to be, but then one can begin viewing the success of the text in terms of what conditions it would have to meet in order to carry out the desired act of the author. What new evidence or experiments would the author need to produce in order to stave off a particular objection? On the other hand, what maneuver can the opponents make to undermine the apparent accomplishment of having an experiment accepted as valid and definitive for the theory in question?6 These conditions that have to be met for an act to be successfully realized may be seen as forms of accountability. If a condition is not met-a legal document is not filed before a requisite deadline, confirming experimental evidence cannot be found for a chemical claim, a political claim does not resonate with the interests of the electorate-then the speech act will be called to account and fail. Of course, if the author can provide an additional account that puts the account back on the positive side of the ledger-a lawyer successfully argues that an extension be granted on the deadline, the chemist convincingly describes the limitations of the experimental apparatus, the politician appeals to nobler motives that bestir the electorate to rise above their interests - the speech act might still be retrieved (Bazerman 1997).

Practice as Situated, Distributed, and Mediated

Central is Hanks' (1996, 2000) notion of genres as situated (as in dialogic theories of utterance), indexical (see also Ochs', 1988, account of indexical socialization), and dispositional (through the multiple but mundane impacts of repeated engagements in some set of sociocultural scenes and practices). Sociocultural theories emphasize that learning/development is constant, that every interaction is part of a history of learning and development (not necessarily, of course, positive). Moreover, what is getting changed or reinforced through interaction is multiple, not only the persons participating in the activity, but also the practices, the texts, institutions, and other artifacts. Following these theories, we suggest that genre, as an activity practice, must be understood as distributed among participants (Bazerman & Russell, 2003; Cole & Engestrom, 1993; Hutchins, 1995), mediated (Scribner, 1997; Vygotsky, 1978, 1987; Wertsch, 1991, 1998), and constantly emergent within configurations of people, tools, and forms of activity (Beach & Kalnin, this volume; Berkenkotter, this volume; Engestrom, 1993; Lave & Wenger, 1991; Lee & Ball, this volume; Rogoff, 1990).

Because of the central focus on tools (material and psychological or semiotic) as carriers and shapers of human consciousness (what del Rio and Alvarez, 1995, refer to as cultural architectures for mind and agency), sociocultural approaches pay particular attention to how tools, such as genre practices, are appropriated in situated interaction, how they mediate social activity, how they may work to resolve or exacerbate contradictions within and between activity systems, and how such tools are themselves formed, coming to have embedded within them as affordances traces of the sociohistorical conditions of their production and past use. It is critical to recognize that learning does not involve full internalization, that practices are distributed (see Wertsch's, 1998, discussion of mastery, also Prior, 1998). Thus, learning genres involves learning to act-with other people, artifacts, and environments, all of which are themselves in ongoing processes of change and development. In short, this practice perspective draws our attention to how genre practices are learned through, and transformed in, situated interaction.

PARTICIPATING IN EMERGENT SOCIOLITERATE WORLDS

Structuration: The Social Structure as Interactionally Emergent

Because our utterances commit us to actions, relations, and identities in specific situations as they are recognized and typified by ourselves and other participants, genred utterances are what Giddens (1984) called structurational of society. Each act recognizably made by any participant evokes, maintains, and (re)produces a recognizable structure of social relations and social life. It is only by each action carrying forward and perhaps modifying particular understandings of society and relations that social life is maintained and carried forward. Of course, people may recognize different things in the same action, and may even attend to quite different aspects of the situation; there may be struggle and/or negotiation of the character of the action and situation, or there may be degrees of misunderstanding, mismatch, and failure of interaction. Goffman (1983) was particularly eloquent on the fragility of what he called the interactional order. He was also incisive on how people establish, negotiate, and manipulate the definition and alignment of the situation, or what he called footing (Goffman, 1981).

But such fragility of the social fabric and communicative alignment calls to attention those means by which some degree of alignment is achieved and even robustly stable social arrangements are maintained. The social is neither created and governed by abstract entities (culture, social norms) nor reduced to only contingent local interaction, but must be understood as the concrete historical spread of practices across integrated networks. Giddens (1984) emphasized the ways local practices draw on patterns of practice from previous situations and ways they spread through space and time producing broader social structures and patterns. Although such processes are

typically distributed across many social actors, some individuals or groups can attempt through mediating artifacts to gain control of the reproduced patterns of practice. Latour (1987, 1999), for example, discussed how modern global institutions gain power by becoming centers of calculation, through the control of inscriptional practices (the making and using of tables, diagrams, maps, lists, and other texts) that allow for institutional reach (see also Yates, 1989). The power of individuals in local situated action then can be radically enhanced by such structuration, by the presence of elements from, and by connection to, longer and wider chains of distributed activity. Genres are a nexus of such typifying understandings that are evoked within each act, allowing for reasonable congruent alignment among participants. The strength of that evocation will become clearer as we discuss below how genres fit within larger systems of genres and systems of activity.

FROM GENRE SETS TO ACTIVITY SYSTEMS

Genre Sets

Each new text draws on a history of utterances from which the genre has emerged and been maintained, such that texts can be identified and understood within a tradition of utterances of that type, or genre. Furthermore, specific situations, roles, activities, or social systems can be associated with a finite number of genres of texts or utterance that stand in relation to each that define the work and roles of the participants, and that are resources and points of reference within the interactional situation. Devitt (1991), in examining the writing of tax accountants, found that 13 named genres of letters and memoranda comprised the total regular work of these accountants. These she called a genre set. Devitt especially noted the intertextual links among these genres, the ways they formed sequences. She suggested that this set of genres, along with oral genres and the tax return forms themselves, formed the larger genre system or set of tax accountants. By extension we can see that any position or profession might be characterized by a distinctive genre set produced and received in the routine course of work.

Furthermore, Devitt found that each client or case the tax accountants worked with could be associated with and characterized by a file. These files defined the relevant information, unfolding events and contingencies, and outcomes bearing on all future actions in this case. Each new document in the file is intertextually linked to prior documents in the file. The concept of a file characterizing a case has been noted by a number of people

working with institutional ands corporate discourse (Berkenkotter & Ravatos, 1997; Garfinkel, 1967; Yates, 1989); and the production of the file has been seen as highly consequential for how a client, events, or projects are treated.

Finally, Devitt noted that all genres of the tax accountants are explicitly or implicitly intertextually related to the tax laws and regulations, but each genre or document has a different functional relationship to the tax laws, regulations and precedents, as well as has a different characteristic mode of explicitly or implicitly referring to the tax documents. These several findings indicate that work is organized and carried forward through a structure of related genres, which are held accountable to each other in genrespecific ways (Bazerman 1988, 1997).

Genre Systems

Expanding Devitt's notion of genre set, Bazerman (1994b) articulated the structural relations among genres within a setting by defining a genre system as:

the full set of genres that instantiate the participation of all parties.... This would be the full interaction, the full event, the set of social relations as it has been enacted. It embodies the full history of speech events as intertextual occurrences, but attending to the way that all the intertext is instantiated in generic form establishing the current act in relation to prior acts. (pp. 98-99)

A genre system is comprised of the several genre sets of people working together in an organized way plus the patterned relations in the production, flow, and use of these documents. So a genre system captures the regular sequences of how one genre follows on another in the typical communication flows of a group of people.

The genre set written by a teacher of a particular course, for example, might consist of a syllabus, assignment sheets, personal notes on readings, notes for giving lectures and lesson plans for other kinds of classes, exam questions, e-mail announcements to the class, replies to student individual e-mail queries and comments, comments and grades on student papers, and grade sheets at the end of the term. Students in the same course would have a somewhat different genre set: notes of what was said in lectures and class, notes on reading, clarifications on assignment sheets and syllabus, e-mail queries and comments to the professor and/or classmates, notes on library and data research for assignments, sketches and rough drafts and final copies of assignments, exam answers, letters requesting a grade change.

However, these two sets of genres are intimately related and flow in predictable sequence and writer-reader circulation patterns. The instructor is expected to distribute the syllabi on the first day and assignment sheets throughout the term. Students then ask questions about the expectation in class or via e-mail, and then write clarifications on the assignment sheets. In class and out, in talk and perhaps in e-mail, the teacher explains the assignment and answers students' questions. The assignment sheets in turn guide student work in collecting data, visiting the library, and developing their assignments. The pace of their work picks up as the assignment deadline approaches. Once assignments are handed in, the instructor comments on and grades them, then records the grades in a record book and returns the commented-on assignment to the student. Similarly the instructor prepares then delivers lectures and organizes class activities relevant to concepts the students are to write about; students are expected to take notes on readings beforehand; they then usually take notes on what the instructor says in class, then they study those notes on class and readings before the various quizzes and exams. Moreover, students often talk with other students, friends, and/or family members about the ideas and their texts. At some points in or before the semester, the instructor may also look at the lectures and assigned readings in order to write questions for quizzes and exams. The students take the exams and the teacher grades them. At the end of the term, the instructor calculates by some formula the sum of all the grades to produce the content of the grade sheet, which is submitted to the registrar to enter into an institutional system of genres.

Activity Systems

150

Engestrom (1987, 1990, 1993), drawing on Leont'ev (1981), extended the Vygotskyan view of object-oriented activity as mediated by tools and artifacts, to elaborate the organized ways the community, rules, and division of labor also mediate and organize activities. It is only one further step then to locate texts as mediating artifacts within activity systems, conditioned by the community, rules, and division of labor as well as by the objects of activity (see also Lee & Ball, this volume). Russell (1997) used the notion of activity system to specify the underlying notions of setting and activity that link participants and texts together in a genre system. From this perspective, genres are seen as tools that mediate the regularized activities of the system. Considering the example of cell biology, he used the flow of genres (and intertextual references) to map out the structured production of activity and to identify the relations among multiple interlinked activity systems (in classrooms, research laboratories, drug companies, government agencies, and people's everyday use of medicines). All three levels of characteri-

zation, from genre set through genre system to activity system point out that genres have regular places with larger social activity webs and further each instantiation of a genre invokes and (re)constitutes the larger systems it is participating in. Furthermore, they point to the specific intertextual relations that form the immediate situational grounds and resources of the utterance. A letter from one's insurance company announcing a change in coverage is not just an isolated event. It invokes correspondence and conversations one has had with the company and its representatives, policy documents, records concerning the covered items, discussions with family and friends about insurance, and perhaps newspaper or television advice genres. It also carries with it a relation to internal company records as well as relations to state and national laws, regulations, and court cases. When reviewing the letter, depending on the specific context and issue, the individual might immediately feel the weight of any and all of these domains of documents and discussions. Additionally, the specific intertextual references in the letter might bring to mind a particular local intertextual field identified as relevant and structured by the presentation in the letter.7

However, in considering the role of genred utterances within activity systems, we should avoid imputing homogeneous stability to the activity systems. Engestrom (1993) specifically rejected as such a reified reading of activity systems:

An activity system is not a homogeneous entity. To the contrary, it is composed of a multitude of often disparate elements, voices, and viewpoints. This multiplicity can be understood in terms of historical layers. An activity system always contains sediments of earlier historical modes, as well as buds or shoots of its possible future. (p. 68)

Engestrom's (1987, 1993) model of activity systems emphasizes contradictions (internal and external) as well as heterogeneity. Applying this approach to a study of doctor-patient consultation in Finnish clinics, Engestrom (1993) identified contradictions and heterogeneity in the multiple voices or perspectives of the interactants, the layered presence of medical ideologies from different historical periods, and the ways consultations were structured by specific institutional legacies and linked to competing historical models of work. His analysis also highlighted the critical role of medical records. In this setting, they were a genre that served to mark and exacerbate the contradictions within and discoordinations between activity systems. For example, doctors routinely wrote telegraphic case notes (essentially to themselves) about patients whom they were unlikely to see again on subsequent visits. The result of this genre practice was a routine breakdown in continuity of care. (For an application of activity theory to composition research, see the online volume, Bazerman & Russell, 2003).

FROM DISCOURSE COMMUNITIES TO DISCIPLINARITY AND INTERDISCIPLINARITY

152

As we have been elaborating, genre is most usefully understood within a dynamic social theory of the nature of human activity. In a major and influential statement of genre theory, Swales (1990) argued that written genres depend on prototypical communicative purposes belonging to textual discourse communities (which he at the time distinguished from oral, face-toface speech communities, see also Swales, 1998). In another major statement of genre theory, Berkenkotter and Huckin (1995) defined discourse community "ownership" of genres as a key dimension (with discourse communities here stretching across oral and textual modes). Although we find much of value in Swales' close analyses of linguistic and rhetorical features and share many key premises with Berkenkotter and Huckin's theoretical account, we see a different way of describing the grounding of genre in social activity. Quite simply, we have found structuralist notions of discourse communities inadequate to characterize the complex emergent, multiform, conflictual, and heterogenous character of human interchange and groupings. We have looked instead to more complex and differentiated characterizations of the groupings and forums within which discourses circulate and to the constantly emergent forms of activity realized through genred utterances, oral and textual (Bazerman, 1988, 1994b, 1999a; Prior, 1991, 1995, 1998).

As much (although certainly not all) of the work on discourse communities has emphasized disciplinary and professional discourses, in this section we focus on disciplinarity as an illustration of how practice and activity-oriented accounts may reconceive social formations from a concrete historical perspective. The combined legacy of everyday tropes for, and structuralist theories of, discourse and society has encouraged us to imagine disciplinary discourse communities as autonomous objects existing in detemporalized spaces, unified territories to be mapped, systems to be diagrammed, abstract rules and knowledge that govern action and are passed on to novices. However, research on disciplines (e.g., Becher, 1989; Crane, 1972; Foucault, 1972; Harding, 1991; Klein, 1990, 1993; Pickering, 1995; Prior, 1998) has routinely pointed to complex configurations and relationships as practitioners are situated by such factors as objects of study, methodologies (including use of instruments), theories, institutional sites, audiences, social identities, interpersonal and institutional relationships, and broader sociocultural discourses and ways of life. Disciplines in these accounts seem more like heterogeneous networks (Latour, 1987), displaying Wittgenstein's (1958) family resemblance, than stable social objects. Thus, it seems important to move from a discourse community notion of disciplines as unified social and/or cognitive spaces to a notion of disciplinarity as the ongoing, mediated constitution of a kind of social network. Disciplinarity invokes the dynamic integration of the historical and the situated, the production of both knowledge and the social, the mature practice and the novice, the social representation of unity and the networked, dialogic hybridity of concrete activity.

From this perspective, we particularly want to emphasize that social life/structure, because it is fundamentally historical and concrete, is also deeply and routinely laminated (Prior, 1998). This notion of lamination was articulated by Goffman (1981) in his discussion of the ways participants manage multiple footings and is fundamental to Duranti and Goodwin's (1992) argument that multiple contexts or frames co-exist in social interactions, that they are best thought of as relatively foregrounded and backgrounded through dynamic and fluid contextualizations (rather than being thought of as a static stage where a common scene is enacted). Linking these notions to that of activity systems, we could say that multiple activity footings co-exist, are immanent, in any situation. When one activity system is foregrounded (e.g., school learning), other activity systems (e.g., of home, neighborhood, government, business) do not disappear. Lamination also points to perspective, the ways co-participants in an activity hold and coordinate differently configured activity footings (see e.g., Gutierrez, Rymes, & Larson, 1995; Holland & Reeves, 1994; Newman, Griffin, & Cole, 1989; Rommetveit, 1992). To take up again Russell's (1997) discussion of the genre system(s) and activity systems of a cell biology classroom, we argue that the institutional contextualizations of biology and the educational contextualizations of school as a site of social certification cannot be taken as given and shared, that the roles of teacher and student do not exhaust the footings on which participants operate in the classroom. One contextualization that matters would be sociocultural constructions of gender that are rooted in family, community, and public spheres of life. Feminist accounts of science (e.g., Haraway, 1989, 1991; Harding, 1991; Martin, 1994) offer examples of diverse ways that science has been gendered. More broadly, how participants are raced, gendered, and classed (how these social identities are performed and perceived) is always also present in the spaces of the discipline, the corporation, the government, and the classroom. And the histories of raced, gendered, and classed performances are sedimented into (embedded as affordances in) the texts, discourse practices, and activity systems associated with disciplinarity.

Lamination then suggests that disciplinarity is not a map of autonomous social spaces (here medicine, there physics, there art history), but a heterogeneous sphere of activity that partly constitutes other social domains of practice (those of family, government, community, entertainment, etc.), whereas those other domains simultaneously co-constitute disciplinarity. Of course, one of the challenges to seeing this heterogeneity is that bordering, idealizing, and spatializing what are in fact open, concrete, historical systems is a key representational practice of disciplinarity (see Fuller, 1993; Gieryn, 1999; Latour, 1993; Prior, 1998). It is this fundamental heterogeneity and lamination that most clearly distinguishes the notion of disciplinarity from that of disciplinary discourse community. This heterogeneity and lamination also makes expected and mundane the interdisciplinarity, those multilayered permeations that Klein (1993) noted, and more broadly a whole range of intercontextual, interdiscursive blendings and

blurrings.

If disciplinarity is understood as always under construction, though always with tools and in conditions that have been provided historically, then we need to account for practices of stabilization and change, for the production of foregrounded (and backgrounded) contextualizations and the management of laminated activity footings. At the core of this enterprise are developmental practices: how disciplines (re)produce themselves and participants over time, how novices are recruited and socialized into the evolving practice worlds of disciplines and how these newly socialized participants freshly perceive and novelly act to be part of the constant dynamic emergent reinvention of these fields. Thus, a practice view of disciplinary genres does not ask how novices acquire (or fail to acquire) the genres owned by some particular community of practice. Instead, it considers how generic activity is implicated in the ongoing (re)production of all the kinds of participants in the relevant spheres of activity, how disciplinarity/interdisciplinarity is produced as participants take up and use tools in situated activity, as they blend their multiple identities and manage multiple activity footings, and as they work to create some collective stabilized social formation and social representation of their practice through exclusions and inclusions, enculturation and enforcement, the foregrounding and suppression of contextualizations. In short, a study of genre activity in relation to disciplinarity dives into the dynamic, churning confluences of multiple streams of sociohistoric activity.

PROGRAMS OF RESEARCH

Up to this point in the chapter, the issues, outline, development and even phrasing of each sentence have been dialogically negotiated between the two co-authors as we have sent drafts and revisions back and forth. We hope a consistent, combined voice has developed. However, we have come to and used this perspective on genres and disciplinarity through separate lines of empirical inquiry and theorizing over the years. To give a flavor of what has drawn us to this view and the significance we find in it, the next two sections are devoted to separate narratives in the separate voices of the

two co-authors. In these separate narratives you may find not only differences in history and application, but even differences in what this perspective means for us now. This heterogeneity we take as endemic to all disciplinary activity and self-exemplifying of the arguments we have been making. We also take as self-exemplifying the constant remaking of aims and projects, re-creating disciplinarity through the agency of each of the authors as well as through interdisciplinary encounters and integrations driven by the nature of our separate projects. After these personal excursions, we will reform the corporate voice to make a few concluding comments.

Bazerman-Epistemic Ways of the Communicative Life

My mother used to complain I had no discipline. Now I have far too many.

As an undergraduate I tasted many majors in sciences, social sciences, and humanities before settling on English literature in my senior year-my experience of that major was largely new critical, emphasizing close reading, but I caught some of the earliest waves of new historicism brought from the left coast by a new assistant professor. My graduate training in literature was strongly historical, but very rapid, so I did not feel the disciplining weight of graduate school for many years. Furthermore, I took 2 years out in the middle for inner-city elementary school teaching, redirecting my attention from literature to literacy. During this period I also became introduced to interpersonal psychology which helped me see the role of communication, interaction, and social surroundings in individual development (Bazerman 2001a, 2001d). I returned to graduate school to finish my dissertation on Renaissance occasional poetry-in that dissertation I had already focused on genre as it located texts both within ritual moments of a royal succession and within the class positions and decorums of the authors.

After completing my degree, I obtained a position to teach writing with special focus on open admissions at Baruch College in City University of New York. To this task and professional redefinition I brought the tools of close reading, historical and social consciousness, a 1960s-left-activist view of social change, an understanding of development and learning as interpersonal, and an elementary school teacher's view of the classroom as a place of learning activities. The very real and compelling task of teaching writing to underprepared students seemed to me to require I draw on all that I knew—including unpacking the skills I had gained in my own well-prepared and well-supported academic career (Bazerman, 1998). Those of my colleagues who took this teaching task serious also drew on the full range of skills, practices, and knowledges they each had uniquely available to themselves.

From my perspective, I soon defined the aim of my teaching as to make available the literacy skills that allowed academic success, and I quickly

focused in on the skills that enabled one to search out, understand, evaluate, and use the writings and knowledge presented by others. What we now call intertextuality (Bazerman, 1993, 2004) seemed to me to be central to learning to take advantage of and participating within the knowledge environments of the university and the professional worlds that follow on university experience. But as I studied and taught the skills and practices of intertextuality, it became clear to me that the skills were differentially practiced and developed within specific genres assigned in university courses, with the research paper only being the most complex (and often vague and underdefined) example (Bazerman, 1995). Furthermore, I came to see that the textual practices and genres were differently distributed and organized in he different disciplines as taught. In order to understand the disciplinary practices as reflected in the classroom, I undertook to study the disciplinary practices as carried out on the professional level, assuming that there should be some (although not necessarily direct) relationship between the two. Thus, I was drawn ever more deeply from surface appearances of literate accomplishment into the socially organized intellectual and institutional worlds within which the texts were produced, evaluated, and used. I found that the worlds of publications in different disciplines were radically different on a number of variables-in the way they projected authorial and audience roles, the ways they understood and treated their objects of study, and the ways the positioned themselves to the literature. Each of these textual differences implied the difference of the material, social, and intertextual contexts within which the text resided. In the study "What Written Knowledge Does," I clearly was drawing on literary training in close reading and in situating texts within their sociohistoric context (Bazerman, 1981). I also started to draw on the sociology and history of science, which I began studying and participating in professionally, in order to understand that sociohistoric context (Bazerman, 1982).

156

Through investigating the history and development of the scientific experimental report, I found out not only that the genre was historically emergent and mutable, changed by local argumentative needs and circumstances, but that it was deeply embedded within the lives of the disciplines that used it. Experimental reports could not be understood apart from the material and social circumstances within which they appeared. In major ways they help constitute the social arrangements and material experiences of the disciplines which were constantly remaking the genre for their own purposes. The textual practices were of a co-emergent piece with the social, empirical, and theoretical practices and structures of the disciplines. Within this co-emergence and interdependence I found the answer to the puzzle of how humanly constructed texts arising in particular social and historical circumstances could be said to represent a material world that exists independently of our attention (Bazerman, 1988).

To further understand the emergent forms of life the textual and literate practice was part of and helped shape, I studied the work of two 18th-century thinkers who early in their careers wrote major works on rhetoric but later became known in other areas and who have been highly influential in giving shape to the modern world of knowledge and information: Joseph Priestley (Bazerman, 1991) and Adam Smith (Bazerman, 1993b). In both cases, I found their thinking as well as their recommendations for rhetoric part of an integrated view of human life and society, which integrated views also encompassed their later accomplishments in science and economics. I also found out that their own rhetorical practices throughout their careers were developments from their rhetorical theories and their more general views of how one might most fruitfully participate in society. I originally turned to Joseph Priestley to understand the origins of modern citation practices in science-for which his History and Present State of Electricityseemed a crucial turning point. I found, however, a large millenarian democratic vision of how wise and successful living (including our practical knowledge of the material world) grows out of communal discussion that is respectful to the cumulative experience of humankind understood within changing historical conditions. In the case of Smith, I found his economics an outgrowth of his fundamental problem of social communication-again the democratic problem of how to create social order without the hierarchical domination of church or royalist state. The problem of social coordination and communication was made difficult by the differences of human perception, interests, and experience that led us to desire different ends and to vary in our basic terms of understanding. His solution was the creation of a system based on a least common denominator of exchange, through which all other values could be translated and negotiated—the economic marketplace. The role of the marketplace and finances in modern life is greatly illuminated once you can see it as a historically emergent activity system aimed at creating social order through homogeneous symbolic exchange among heterogeneous peoples. Its strengths and weaknesses as a communicative system and way of life stand out in much greater relief.

With some sense now of the historical emergence, genres, communicative practices, and symbolic forms of some of the more powerful systems in the modern world (science, academic disciplines, and capitalist marketplaces), I started to develop a sense of how literate practices have been coevolutionary with the complex systems of the modern world (Bazerman, 2000a). I also began to see more clearly how written genres started to take on certain robust mediating social roles, transforming face-to-face interactions into recognizable actions at a distance. I found evidence within the consistent pattern of genres emerging out of correspondence (which strongly identifies its social and temporal situation) that through genres we came to recognize new textualized spaces of social interaction that form the virtual worlds of institutions, information, and modernity (Bazerman, 1999b). The local moments we live are now complexly influenced and refigured by systems of law, government, knowledge and science, scriptural religions, literature and textual culture, finances, and other sociotextual systems.

158

But it is not sufficient to see these moments simply from the external systemic view. These moments only happen insofar as we participate in them, understand and interpret, make them come into being. Thus these emergent and changing systems must also be seen as the sites of individual action, individual cognition, social interaction, emergent social thinking and evolution, and self-formation. Our orientation to such moments, our ability to participate in them, the way in which we choose to participate, and the growth and learning that occurs as we act within the systematically organized moments, are all shaped by our understanding, experience and vision of this sociohistoric-communicative situation. My studies of Priestley and Smith revealed their rhetorical practices developed in tandem with their understandings of their worlds and their places within them. These moments then became sites of learning as these powerful authors learned to articulate their emergent vision to audiences they were emergently forming relationships with. My more recent study (Bazerman, 1999a), The Languages of Edison's Light, shows how Edison developed a system of incandescent light and power by strategically participating in the communicative systems of his time. The concrete work of invention is embedded within a complex of social communications and cooperations involving law, finances, marketplaces, corporations, journalism, consumers, and scientific and technical professions. Only by gaining presence, meaning and value for his inventive work in all these spheres could he bring light and power to material reality so that we can now plug into it in every wall.

This historical interactional view of how the social world works through communication embeds much of the social theory discussed in this article: the phenomenology of Schutz, ethnomethodology, and conversation analysis; the structurational sociology of Giddens and Bourdieu; the sociocultural psychology of Vygotsky and activity theory of Leont'ev; and the interpersonal psychiatry of Sullivan. If life does emerge complexly and multidimensionally, we need a very full set of interdisciplinary theoretical and analytical tools to get a sense of the whole without ignoring significant parts.

The complexity of communication within recognizable forms that act powerfully in the world presents very large educational challenges of great consequence. In learning to write, students are learning ways of being within specific ways of life, with all the knowledge and orientation that is part of competent participation in that world. Furthermore, in order to have motive to write and have felt communicative needs to generate new utterances, students need to gain a sense of their stakes and interests in being part of that particular communicative way of life. The success of writing

across the curriculum depends on students engagement in the curriculum, though the positive commitment-forming act of writing can be an important part of building that engagement. My studies of classroom writing and my pedagogic (Bazerman, 1992, 1994a) and textbook writings have centered on student engagement with knowledge. The Informed Writer (Bazerman, 1995), the Informed Reader (Bazerman, 1989), and Involved: Writing for College, Writing for our Self (Bazerman, 1997) all are aimed at helping students identify their own interests and perspectives as they engage ever more deeply with the texts university life has to offer. How to get students to engage actively and intelligently with textually mediated knowledge is one of the central challenges of the information age. We need to make visible how information is not just an abstract commodity but a concrete rhetorical product of particular socially located communicative practices (Bazerman 2001b, 2001c) so students can learn to become agents within the informationalized world.

Prior-Making Genres, People, and Practices through Situated Activity

In the mid-1980s, I was teaching academic reading, writing, and conversation in an ESL program at the University of Wisconsin-Madison. Working with a very multicultural, multilingual, and multidisciplinary group of undergraduate and graduate students, I became increasingly interested in the question of what their academic needs were, what kinds of communicative competence, particularly in relation to writing they truly needed to be successful in their academic work. At that time, the literature in applied linguistics and writing studies typically analyzed published professional writing or surveyed the types of writing (e.g., long research papers or lab reports) that students did for classes. An interesting set of ideologically freighted assumptions seemed to exist about the nature of academic work that translated into pedagogical goals. For example, it was not unusual to hear English for academic purposes practitioners suggest that students needed to know how to listen, read, and write, but not necessarily to speak, that they could control a narrow field of academic discourse (say, biochemistry) with little need for broader cultural knowledge. These assumptions construed students at largely passive recipients of knowledge, academic work as rational and asocial, and disciplines as autonomous discourse communities. From my own experience and what I could see of my students' successes and problems, I had serious doubts about these representations of academic life.Returning to school to pursue a doctorate, I began in 1989 what turned out to be a series of three situated studies of writing in graduate seminars.

My research began with basic questions about academic writing tasks. I expected to find something like a very local and temporary discourse community, centered in a particular course and strongly influenced by the professor who set and responded to the tasks. However, I soon found my image of a unified writing task fracturing and multiplying as I traced ways the event structure of academic work (how writing tasks were cued, produced, and evaluated) interacted with participants' perspectives (their diverse evolving interpretations and goals) and with the lamination of activity (the multiple trajectories of personal, interpersonal, institutional, and sociocultural histories being relatively foregrounded or backgrounded by participants). I began to turn especially to the notion of speech genres to understand the intensely situated and dialogic character of talk and text in the seminars as well as to Vygotskyan accounts of learning and mediated activity to understand how such genres were involved in disciplinary enculturation (the formation of participants and the field). In retrospect, I would say that, through investigating the writing task, I came to seen the need to study the complex genre system(s) in and around the seminar in relation to the laminated activity systems that flowed together in participants' work.9

Theoretically, I concluded that writing was a problematic unit of analysis (see also Witte, 1992), suggesting in its place a notion of literate

activity as situated, mediated, and dispersed:

Usual representations of writing collapse time, isolate persons, and filter activity (e.g., "I wrote the paper over the weekend"). Actually, writing happens in moments that are richly equipped with tools (material and semiotic) and populated with others (past, present, and future). When seen as situated activity, writing does not stand alone as the discrete act of a writer, but emerges as a confluence of many streams of activity: reading, talking, observing, acting, making, thinking, and feeling as well as transcribing words on paper. (Prior, 1998, p xi)

The practical complexity of genre and activity systems came home to me most clearly in a case study of a student, Lilah, a first-year graduate student in an American Studies seminar. Lilah was the only one of about 90 graduate students participating in my studies who agreed to do a process log—and then actually did it. She produced a paper for the American Studies seminar that loosely resembled other students' texts, which were themselves quite diverse in length, topic, style, and organization. I had asked Lilah to keep her drafts and notes as well as to describe in her log entries her writing for the seminar and any reading, conversation, or other writing related to it. Although I had anticipated that other academic and nonacademic settings would be involved in her writing for American Studies and was interested in such connections, I was still asking essentially how these other things related to the focal writing task of the seminar. I had, in fact, tacitly accepted the privileged perspective of institutional pro-

duction (a tendency de Certeau, 1984, described quite cogently), granting the seminar a fairly autonomous and dominant space on that official map. Lilah, on the other hand, did not respect the borders of the institutional territories she sometimes inhabited. In her log entries, she moved seamlessly not only from the research project for American Studies to papers she had written and was writing on Chicano ethnicity for immigration history seminars, but also to talk at home with her husband, TV programs and films, and various experiences—in the community, during her childhood, and from her days teaching high school (see Prior, 1997, 1998).

By beginning with the institutional space of the classroom, with the institutional identities of student and professor, and with the task as assigned by the professor, I was looking at literate activity through a screen that privileged the institution's perspective, that respected everyday categorizations of social worlds and the boundary work of discipline and school. To track the kind of complex historical trajectories that I saw most distinctly, but by no means exclusively, in Lilah's case, I needed a different methodological approach. I came to a strategy for tracing voices in networks that involves the following: (a) identifying the elements of a functional system of activity; (b) tracing the histories of some key elements, especially to recover the particular motives, goals, values, and practices interiorized in material and semiotic artifacts and practices as affordances; and (c) reanimating artifacts, treating them as participants with a voice in

constituting contexts of activity.10

The intersection of following people where they go across activities with following the historical trajectories of artifacts, practices, and institutions that people are using has led me to a renewed concern for writing processes. Emig's (1971) seminal study of composing processes introduced the use of think-aloud protocols and the clinical writing tasks, research strategies that were taken up and developed at Carnegie Mellon by Flower, Hayes, and their students. However, there is a real distance between Emig's foundational work and the line of inquiry that emerged from Carnegie Mellon. Emig was much influenced by naturalistic accounts of literary authors. For example, in Writers at Work (Cowley, 1958), we are told of Hemingway waking early in the morning, standing at a reading board, writing in pencil on onionskin paper, and tracking his progress (words produced per day) on a chart on the wall, a chart that displayed some more productive days followed by blanks, as Hemingway pushed ahead one day so he could go fishing the next. While offering a systematic rendering of the microstructure of some composing processes, Flower and Hayes' models (e.g., 1981, 1984) represented a series of black box diagrams that reflected rational processes alone. The material, the social, the emotional and motivational, the historical, all of these disappeared from composing in those diagrams. By the middle of the 1980s, studies of writers writing began to be

replaced by studies on the social contexts of writing. Phelps (1990) observed that writing researchers had been caught up in "textual and the psychologized rhetorics where abstractions like the fictive audience (textual representation) and the cognitive audience (mental representation) are more salient than the actual exchanges of talk and text by which people more or less publicly draft and negotiate textual meanings" (p. 158). Those more-orless public exchanges became the writing process for me and other researchers (cf. Syverson, 1999). As I began to think through following writers wherever they went, I realized that part of this task meant reviving writing process research, finding ways to capture, theorize, analyze, and represent composing processes (inventional as well as transcriptional and textual trajectories) that were situated and dispersed. Currently, I am pursuing two studies along these lines.

In one research project, Jody Shipka, Gail Hawisher, and I have been asking people to share draft and final texts and to talk about the processes and contexts behind them, but also to draw images of their writing. These drawings have elicited accounts of the expected—of books, computers and desks, data from laboratories, but also of other elements often missing from process accounts, images of music, food, coffee, colleagues, walks, trips, showers, cats, kids, and many emotional upheavals. They point to specific historical events but also to the production of composing spaces, from ones as temporary as those achieved by cleaning a room and turning on a particular kind of music to ones so hardened that they involve the construction and furnishing of rooms and the cultivation of gardens.

In a second research project, I am in the early stages of tracing the voices in the networks for IO and its revision. IO is a web art object produced by Joseph Squier, a professor of art and design at the University of Illinois. Throughout his career, he has focused on the juxtaposition of words and images. Joseph is a photographer who has largely stopped taking photographs and become a recylcer of cultural images. His work is collecting and repurposing (or remediating in Bolter and Grusin's, 1999, terms). His office/workshop is full of images and old books he has collected, journals he has kept (mostly poetic fragments and thoughts), and the sophisticated computers, cameras, and programs he uses. Talking about the history of IO in an interview, Joseph explained:

Um oh, 97 98 . . . I was reading a book called *Hamlet on the Holodeck* and Eliza was mentioned, so I went ah looking for it on the web and I found Eliza and I found a small repository of similar AI programs and I actually found one called Bob, and um, Bob was pretty stupid in that Bob didn't have an interesting vocabulary . . . but Bob was fascinating to me because Bob was written in Java and . . . the person who posted it had actually posted the raw code, so I could open that up and I could actually understand how it worked,

and once I made that recognition I realized that all I would have to do was switch out the vocabulary so Bob became IO. . . . IO is actually . . . a series of seven separate programs that interact with one another and they all do separate things. One just parses the words, one just checks the vocabulary list, another one actually decides how to construct the response, and one of these programs does nothing but um feed the output to the screen, and it um I always think of it as a typewriter program because basically what it does is it breaks the output into individual letters and then pauses a random amount of time before it delivers the next letter.

IO presents words written by Joseph in one space (in response to inputs from its vocabulary) and complexly overlaid images next to it. The words and images change, but those changes are not linked, in part because of conceptual hurdles but largely because he lacked the technology to make the links. After Joseph completed IO, a new tool (Flash 5.0) became available, and he realized that it put the linkage in his reach. For the first time, he chose to revise an art object rather than move on to the next project. Actually, to redo IO, he needed not only Flash 5.0 but also a team of collaborators, including Nan Goggin, another professor in art and design, Christian Cherry, a professor in dance, and two student resident assistants, Tony and Uma. Together, they want to expand IO, so that the words and images are linked, so sound as well as images can be presented, and so that the program can become more interactive, as one observer remarked, to make an art project that learns.

What unites these research projects is a sense that genre systems must be understood as embodied, mediated, semiotically multimodal, and historically dispersed, that learning to write in genre and activity systems is truly about developing ways of being in the world—about embodied work and its material conditions, about attunement to and transformation of complex lifeworlds, and about sociohistoric trajectories of hybrid practices, artifacts, institutions, and persons. This research suggests that disciplinarity is richly laminated, full of the interdisciplinary and interdiscursive permeations Klein (1993) noted. I believe that following texts, practices, institutions, and people, the voices in the networks, will continue to push our theories of how people produce genres, how genres produce people, and how both are implicated in the constant unfolding of history.

AN APPROACH FOR LITERACY EDUCATION

We now return to the corporate voice for some final comments on the approach to literacy presented in this chapter and its implications for education. The view of genre as a mediator of complex sociocultural interac-

164

tions embedded in experienced material worlds reflects the centrality of discourse socialization and participation as key to learning in schools and out of them. It points to the indexicality of utterance within participatory situations and the necessity to see writing not as an abstracted skill but as an embedded part of real epistemic and social activity. It prompts study of the social through studying discourse as historical practice—laminated, emergent, multimedia, and multimodal.

We do not intend to argue that studying genre alone is always best or even sufficient. Indeed, our theoretical accounts and our repeated use of the metaphor of holography render any such notion incoherent. Studying genre from this perspective requires that it be studied in relation to all salient aspects of the forms of life with which it may be associated. This approach calls for methods that will support rich contextualizations of discourse. Analysis of isolated texts (typically at the level of formal organization, style, or linguistic function) offers limited purchase on what students and other writers need to know and understand about genre in order to become competent communicators at any level. Because the view we offer here does not offer the opportunity for isolated studies of straightforwardly identifiable technical matters, it requires a more complex and contingent pedagogy. In viewing discourses and utterances as historical human action, this view not only shares the limits and strengths of other historical sciences (cf. Gould, 1989), but all the complexities endemic to sociology, anthropology, linguistics, and cognitive science as well as the unpredictable fecundity of the creative arts. Although those who would prefer research to tell only crisp, simplified stories and would desire simple monotonic pedagogies might find our approach unsatisfying, we find the richness exciting for it suggests how writing and other discursive practices are closely tied to human development, cognition, interaction, social formation, and culture.

In order to develop students' abilities to produce, understand, and use genres, a pedagogy must (a) (re)produce key elements of the systems of activity within which the genre has historically evolved and is now used (as advocated by Dewey and others who have espoused experiential and project based learning) and (b) acknowledge the dynamism of genre, not merely the transformability, and its role in creating both change and stabilization. Students or other novices need to see their work as not just conforming to the genre, but as carrying it forward, perhaps as challenging both its stabilized textual realizations and the stabilized forms of life they index. Students must understand themselves as participating purposefully within a rich, multi-dimensional communicative environment. For pedagogical purposes that environment may be made more immediate and visible than it is sometimes experienced in the worlds-at-a-distance mediated by literacy, but the pedagogical environments should never be stripped of the meaning-

ful complexity of the communicative environments outside the classroom worlds.

Literacy education must attend not only the formal skills of encoding and decoding texts but also to the individualized processes of meaning making. One must also help students engage with the tools needed to understand, evaluate, and participate in the larger systems of social activity wherein the texts take on meaning and life. Students must become embedded within activities and develop the practices to make the holograph become fully dimensional, dynamic, and motivated. Some of the textually mediated systems within which literacy skills are important and need to be developed, are generally accessible to large parts of the population-say, the production and circulation of news, or consumer communication, or entertainment delivery or bureaucratic application and reporting. Some people, however, might not find these texts and activities widely practiced in their daily worlds, and even those familiar with such practices may have only partial knowledge of these systems, from the consumer side. Some of the textually mediated systems are less familiar and accessible-but these become particularly important in secondary and higher education when students are being introduced to wider worlds of possibility as well as the more focused worlds of professional, disciplinary, and other highly specialized activity with their characteristic genres, vocabularies, discourses, and patterns of document circulation and use.

Specialized discourses are highly consequential for life in the contemporary world. They are the symbolic environments within which information lives. For all of us to live in the information age we will need to learn how to make that information come alive. Those for whom the information remains dead will be the victims of the information age rather than its agents. Can we live on the holodeck without a robust holography?

ENDNOTES

1. The wall between applied linguistics and composition is often much higher than it needs to be. Internationally, much of the work of advanced literacy instruction that is done in the United States by compositionists is done by applied linguists. And within U.S. universities the work of applied linguistics in providing English as a second language (ESL) instruction and developing theory and research for that task is very close to the work of composition. Both are concerned with literacy instruction for young adults entering the university—and sometimes they are the exact same students (see Harklau, Losey, & Siegal, 1999). Yet the theories, traditions and practices of instruction on which they draw are often quite different. The conjunction of practical

concerns becomes even greater when looking at the education in specialized literacy skills for disciplines, professions, and workplaces—work that is considered Writing across the Curriculum/Writing in the Disciplines in composition and Language for Specific Purposes in the applied linguistic world. It is gratifying that in these areas there is a much greater conjunction of resources and mutual interest and that in fact a coordinated set of perspectives is developing. Starting from positions in these two separate fields, we have come to understandings of literate practices that are similar and that have been mutually informing and have come to teaching and research practices that are closely related. As such, they are indicative of others who have similar views, practices, and research at this conjunction.

Process approaches to literacy instruction also were developing in earlier grades; however, literacy instruction there did not grapple in the same way with disciplinary differences except perhaps in the case of Australian genre theory.

3. Voloshinov (1929/1973), most clearly in Marxism and the Philosophy of Language but also in his earlier work on Freud (1927/1976), set out the project of establishing an utterance-based linguistics—in contrast to the structural linguistics that has dominated since Saussure. In the 1929 volume, Voloshinov argued that speech genres and embedding in prior utterances (what Kristeva, 1980, later called intertextuality) were cornerstones of language use. Bakhtin and Medvedev (1929/1978) also described this utterance-centered view of genre as key to sociological poetics. Bakhtin, in the 1930s and after pursued genre and responsivity to other utterances in relation to the novel and other literary texts as forms of ideology and consciousness. Only in the 1950s did Bakhtin articulate a social theory of speech genres as situated utterances. His essay "The Problem of Speech Genres" was not published in Russian until 1979 and English until 1986, but it stands as the most detailed statement of the Russian circle's theories. Voloshinov's critique of structural linguistics has been echoed by many since, including Kristeva (1980), Todorov (1990), Harris (1981, 1987), and Hanks (1996).

4. The multiplicity of semiotic modes of inscription has led to suggestions for broader terms for genre. Taking up Witte's view in relation to their study of a student's drawings, Smagorinsky and Coppock (1994) proposed the term communication genre. Lemke (1998) suggested that many texts are best described as multimedia genres, using the example of typical science texts. Looking beyond the text to the contexts of production and reception, Prior (1998) suggested the term semiotic genres and more broadly yet, Lemke (1990) argued for a notion of activity genres. This last term echoes some of the earliest formulations

of dialogic theory, Voloshinov's (1929/1979) varied references to behavioral genres, behavioral speech genres, speech genres, and behavioral ideologies—perhaps summed up in his call for a study of "the very forms of semiotic communication in human behavior" (p. 20).

5. In practice, speech acts must be understood as complex. The social facts created may be unintended, multiple, even contradictory. What was intended as a claim in a professional setting may be taken up as a sign of mental illness or as a crime against the orthodox political or religious regime. Criteria for success are likewise complex. Austin (1962) discussed the many institutional felicity conditions that need to be aligned for a legal marriage to be achieved, but also conditions of sincerity on the part of bride and groom (another type of success). He called failures of the first sort misfires and of the second abuses. Consider, for example, if one party wishes to stage a deceptive wedding ceremony for some nefarious purpose; what is a success for that person is a misfire and an abuse from the perspective of the other party. See Bazerman (1994b) for a more extensive discussion of the need to rework speech act theory to take account of situatedness, particularity, and multiplicity of perspectives, as well as the complexity of longer utterances.

6. For further elaboration of this view of texts as creating social facts, see the concluding chapter of Bazerman (1999a). See also Latour's (1987; Latour & Woolgar, 1986) discussions of facticity in science.

7. Further empirical studies elaborating these perspectives are found in Bazerman and Paradis (1991), Russell and Bazerman (1997), Bazerman

and Russell (2003), Dias et al. (1999), and Prior (1998).

8. Recently, other formulations like the community of practice (Lave & Wenger, 1991; Wenger, 1998), have partially eclipsed the notion of discourse communities, although Beaufort (1999) and Swales (1998) both argued explicitly for the continuing value of discourse community formulations. Like discourse community, the idea of a community of practice seems to function metaphorically more than technically, to have achieved a kind of instant allegiance. If it offers a salutary focus on learning as participation and on the dynamics of practice over time, it also continues to emphasize boundaries and shared knowledge. Wenger's (1998) definition also makes it clear that dense interpersonal interaction is criterial. The notion of disciplinarity shifts attention to processes rather than places: It is not concerned with distinguishing who and what is in from who and what are out (although it is interested in how such representations may be constructed by people). It asks, without a priori rules, in an empirical sense, how disciplinary activity is being achieved, with what resources, with what mix of participants, to what ends. See also Scollon's (2001) discussion of why he has now

rejected the notion of a community of practice as a fundamental construct in his approach to mediated discourse analysis. Finally, simply shifting terminology and calling a social formation a community of practice does not necessarily change structuralist assumptions. If the community of practice is approached as homogeneous with respect to practice (with variations limited to centrality of participation) and tightly bounded (with little or no attention to lamination and heterogeneous networks), then key structuralist assumptions may have migrated to another terminological formulation. See Prior's (1998) discussion of a similar migration in the development of notions of speech and discourse communities.

- 9. The details of my research and theory have been presented in a series of reports (Prior, 1991, 1994, 1995, 1997) culminating in: Writing/Disciplinarity: A Sociohistoric Account of Literate Activity in the Academy (Prior, 1998). In approach and findings, my analyses in many ways paralleled and echoed Michaels' (1987) study of the "writing system" in an elementary classroom.
- 10. Several sources particularly informed this approach. Hutchins' (1995) notion of functional systems offered a key methodological and theoretical framework, especially when linked to Latour's (1987; 1999) strategy of following the actors and artifacts outward to widening heterogeneous networks of other times, places, and activities. The notion of tracing voices was partly prompted by Griffin and her colleagues (1993) analysis of the role of computer programs in educational settings, especially their suggestion that programs represented the frozen voices of the programmers, voices that indexed those programmers' own ideologies of education and technology. Finally, I drew on Bazerman's (1988) Vygotskyan analysis of the co-evolution of scientific report genres and science, especially for his exploration of ways key actors and events reshaped the genre and activity systems, highlighting the personalization of the social through the sociogenesis of tools (see also Prior, 2001).

REFERENCES

- Austin, J. L. (1962). How to do things with words. Oxford, UK: Oxford University Press.
- Bakhtin, M. (1981). The dialogic imagination: Four essays by M. M. Bakhtin (C. Emerson & M. Holquist, Trans.; M. Holquist, Ed.). Austin: University of Texas Press.
- Bakhtin, M. (1986). Speech genres and other late essays (Vern W. McGee, Trans.). Austin: University of Texas Press.

- Bakhtin, M.M., & Medvedev, P. (1978). The formal method in literary scholarship (A. Wehrle, Trans.). Baltimore, MD: The John Hopkins University Press. (Original work published 1929)
- Bartholomae, D. (1985). Inventing the university. In M. Rose (Ed.), When a writer can't write (pp. 134-165). New York: Guilford.
- Barton, D., & Ivanic, R. (Eds.). (1991). Writing in the community. Newbury Park, CA: Sage.
- Bauman, R. (1992). Contextualization, tradition, and the dialogue of genres: Icelandic legends of the *kraftaskald*. In A. Duranti & C. Goodwin (Eds.), *Rethinking context: Language as an interactive phenomenon* (pp. 125-146). Cambridge, UK: Cambridge University Press.
- Bazerman, C. (1981). What written knowledge does: Three examples of academic discourse. *Philosophy of the Social Sciences*, 11(3), 361-88.
- Bazerman, C. (1982). Scientific writing as a social act: A review of the literature of the sociology of science. In P. V. Anderson, J. Brockman, & C. R. Miller (Eds.), New essays in technical and scientific communication: Research, theory, and practice (pp. 156-184). Farmingdale, NY: Baywood
- Bazerman, C. (1988). Shaping written knowledge: The genre and activity of the experimental article in science. Madison: University of Wisconsin Press.
- Bazerman, C. (1989). The informed reader: Contemporary issues in the disciplines. Boston, MA: Houghton Mifflin.
- Bazerman, C. (1991). How natural philosophers can cooperate: The literary technology of coordinated investigation in Joseph Priestley's History and Present State of Electricity (1767). In C. Bazerman & J. Paradis (Eds.), Textual dynamics of the professions: Historical and contemporary studies of writing in professional communities. (pp. 13-44). Madison: The University of Wisconsin Press.
- Bazerman, C. (1992). From cultural criticism to disciplinary participation: Living with powerful words. In C. Moran & A. Herrington (Eds.), Writing, teaching, and learning in the disciplines (pp. 61-68). New York: Modern Language Association.
- Bazerman, C. (1993a). Intertextual self-fashioning: Gould and Lewontin's representations of the literature. In J. Selzer (Ed.), *Understanding scientific prose* (pp. 20-41). Madison: University of Wisconsin Press.
- Bazerman, C. (1993b). Money talks: Adam Smith's rhetorical project. In W. Henderson, T. Dudley-Evans, & R. Backhouse (Eds.), Economics and language (pp. 173-199). London, UK: Routledge.
- Bazerman, C. (1994a). Constructing experience. Carbondale: Southern Illinois University Press.
- Bazerman, C. (1994b). Systems of genres and the enactment of social intentions. In A. Freedman & P. Medway (Eds.), *Genre and the new rhetoric* (pp. 79-101). London, UK: Taylor & Francis.
- Bazerman, C. (1995). The informed writer (5th ed.). Boston, MA: Houghton Mifflin.
- Bazerman, C. (1997). Involved: Writing for college, writing for your self. Boston, MA: Houghton Mifflin.
- Bazerman, C. (1998) Looking at writing; writing what I see. In T. Enos & D. Roen (Eds.), *Living rhetoric and composition* (pp. 15-24). Mahwah, NJ: Erlbaum.

Bazerman, C. (1999a). The languages of Edison's light. Cambridge, MA: MIT Press. Bazerman, C. (1999b). Letters and the social grounding of differentiated genres. In D. Barton & N. Hall (Eds.), Letter writing as a social practice (pp. 15-30). Amsterdam: Benjamins.

Bazerman, C. (2000a). A rhetoric for literate society: The tension between expanding practices and restricted theories. In M. Goggin (Ed.), Inventing a discipline

(pp. 5-28). Urbana, IL: National Council of Teachers of English.

Bazerman, C. (2000b). Singular utterances: Realizing local activities through typified forms in typified circumstances. In A. Trosberg (Ed.), Analysing the discourses of professional genres (pp. 25-40). Amsterdam: Benjamins.

Bazerman, C. (2001a). Anxiety in action. Mind, Culture, and Activity, 8, 174-186.

Bazerman, C. (2001b). Nuclear information: One rhetorical moment in the construction of the information age. Written Communication, 18, 259-295.

Bazerman, C. (2001c). Politically wired: The changing places of political participation in the age of the internet. In J. Yates & J. Van Maanen (Eds.), IT and organizational transformation (pp. 137-154). Thousand Oaks, CA: Sage.

Bazerman, C. (2001d). Writing as a development in interpersonal relations. Journal

for the Psychoanalysis of Culture & Society, 6, 298-302.

Bazerman, C. (2004). Intertextuality: How texts rely on other texts. In C. Bazerman & P. Prior (Eds.), What writing does and how it does it (pp. 83-96). Mahwah NJ: Erlbaum.

Bazerman, C., & Paradis, J. (Eds.). (1991). Textual dynamics of the professions: Historical and contemporary studies of writing in professional communities. Madison: The University of Wisconsin Press.

Bazerman, C., & Russell, D. (Eds.). (2003). Writing selves and societies: Research from activity perspectives. Fort Collins, CO: The WAC Clearinghouse.

Beaufort, A. (1999). Writing in the real world: Making the transition from school to work. New York: Teachers College Press.

Becher, T. (1989). Academic tribes and territories: Intellectual enquiry and the cultures of disciplines. Stony Stratford, UK: Society for Research into Higher Education and Open University Press.

Becker, A.L. (1988). Language in particular: A lecture. In D. Tannen (Ed.), Linguistics in context: Connecting observation and understanding (pp. 17-35).

Norwood, NJ: Ablex.

Beebe, T. (1994). The ideology of genre: A comparative study of generic instability. University Park: Pennsylvania State University Press.

Bergmann, J., & Luckmann, T. (1995). Reconstructive genres of everyday communication. In U. Quasthoff (Ed.), Aspects of oral communication (pp. 289-304). Berlin: Walter de Gruyter.

Berkenkotter, C. (2001). Genre systems at work: DSM-IV and rhetorical recontextualization in psychotherapeutic paperwork. Written Communication, 18, 326-349.

Berkenkotter, C., & Huckin, T. (1995). Genre knowledge in disciplinary communication: Cognition/culture/power. Hillsdale, NJ: Erlbaum.

Berkenkotter, C., & Ravatos, D. (1997). Genre as tool in the transmission of practice over time and across professional boundaries. Mind, Culture, and Activity, 4, 256-274.

Berlin, J. (1987). Rhetoric and reality: Writing instruction in American colleges 1900-1985. Carbondale: Southern Illinois University Press.

Besnier, N. (1995). Literacy, emotion, and authority: Reading and writing on a

Polynesian atoll. London, UK: Cambridge University Press.

Bhatia, V. K. (1993). Analyzing genre: Language use in professional settings. Essex, UK: Longman.

Bitzer, L. (1968). The rhetorical situation. Philosophy and Rhetoric, 1, 1-14.

Bizell, P. (1992). Academic discourse and critical consciousness. Pittsburgh, PA: University of Pittsburgh Press.

Bolter, J.D., & Grusin, R. (1999). Remediation: Understanding new media. Cambridge, MA: MIT Press.

Booth, W. (1963). The rhetorical stance. College Composition and Communication, 14, 139-145.

Brandt, D. (1990). Literacy as involvement: The acts of writers, readers and texts. Carbondale: Southern Illinois University Press.

Brodkey, L. (1987). Academic writing as social practice. Philadelphia, PA: Temple University Press.

Brown, R., & Herndl, C. (1996). Beyond the realm of reason: Understanding the extreme environmental rhetoric of the John Birch Society. In C. Herndl & S. Brown (Eds.), Green culture: Environmental rhetoric in contemporary America (pp. 213-235). Madison: University of Wisconsin Press.

Burke, K. (1945). A grammar of motives. Berkeley: University of California Press. Burke, K. (1950). A rhetoric of motives. Berkeley: University of California Press.

Carruthers, P., & Chamberlain, A. (2000). Evolution and the human mind: Modularity, language, and meta-cognition. Cambridge, UK: Cambridge University Press.

de Certeau, M. (1984). The practice of everyday life (S. Rendall, Trans.). Berkeley: University of California Press.

Chapman M. (1994). The emergence of genres: Some findings from an examination of first grade writing. Written Communication, 11, 348-380.

Chapman M. (1995). The sociocognitive construction of written genres in first grade. Research in the Teaching of English, 29, 164-192.

Charney, D. (1993). A study of rhetorical reading: How evolutionists read "The Spandrels of San Marco." In J. Selzer (Ed.), Understanding scientific prose (pp. 203-231). Madison: University of Wisconsin Press.

Chomsky, N. (1965). Aspects of the theory of syntax. Cambridge, MA: MIT Press. Christensen, F. (1967). Notes toward a new rhetoric. New York: Harper & Row.

Cintron, R. (1997). Angel's town: Chero ways, gang life, and the rhetorics of the everyday. Boston, MA: Beacon Press.

Cole, M. (1996). Cultural psychology: A once and future discipline. Cambridge, MA: Harvard University Press.

Cole, M., & Engestrom, Y. (1993). A cultural-historical approach to distributed cognition. In G. Salomon (Ed.), Distributed cognitions: Psychological and educational considerations (pp. 1-46). Cambridge, UK: Cambridge University

Corbett, E. P. J. (1965). Classical rhetoric for the modern student. New York: Cambridge University Press.

- Cowley, M. (Ed.), (1958). Writers at work, the Paris review interviews. New York: Viking Press.
- Crane, D. (1972). Invisible colleges: Diffusion of knowledge in scientific communities. Chicago: The University of Chicago Press.
- Cross, G.A. (1994). Collaboration and conflict: A contextual exploration of group writing and positive emphasis. Cresskill, NJ: Hampton Press.
- del Rio, P., & Alvarez, A. (1995). Tossing, praying, and reasoning: The changing architectures of mind and agency. In J. Wertsch, P. del Rio, & A. Alvarez (Eds.), Sociocultural studies of mind (pp. 215-247). Cambridge, UK: Cambridge University Press.
- Deacon, T. (1997). The symbolic species: The co-evolution of language and the brain. New York: Norton.
- De Vault, M. L., & McCoy, L. (2001). Institutional ethnography: Using interviews to investigate ruling relations. In J. F. Gubrium & J. A. Holstein (Eds.), Handbook of interviewing. Newbury Park, CA: Sage.
- Devitt, A. (1991). Intertextuality in tax accounting: Generic, referential, and functional. In C. Bazerman & J. Paradis (Eds.), Textual dynamics of the professions (pp. 336-380). Madison: University of Wisconsin Press.
- Dias, P., Freedman, A., Medway, P., & Pare, A. (1999). Worlds apart: Acting and writing in academic and workplace contexts. Mahwah, NJ: Erlbaum.
- Dore, J. (1989). Monologue as reenvoicement of dialogue. In K. Nelson (Ed.), Narratives from the crib (pp. 231-260). Cambridge, MA: Harvard University Press.
- Duranti, A. (1994). From grammar to politics: Linguistic anthropology in a Western Samoan village. Berkeley: University of California Press.
- Duranti, A., & Goodwin, C. (Eds.). (1992). Rethinking context: Language as an interactive phenomenon. Cambridge, UK: Cambridge University Press.
- Dyson, A. (1997). Writing superheroes: Contemporary childhood, popular culture, and classroom literacy. New York: Teachers College Press.
- Emig, J. (1971). The composing processes of twelfth graders. Urbana, IL: National Council of Teachers of English.
- Engestrom, Y. (1987). Learning by expanding: An activity-theoretical approach to developmental research. Helsinki: Orienta-Konsultit.
- Engeststrom, Y. (1990). Learning, working and imagining: Twelve studies in activity theory. Helsinki: Orienta-Konsultit.
- Engestrom, Y. (1993). Developmental studies of work as a testbench of activity theory: The case of primary care medical practice. In S. Chaiklin & J. Lave (Eds.), Understanding practice: Perspectives on activity and context (pp. 64-103). Cambridge, UK: Cambridge University Press.
- Flower, L., & Hayes, J. (1981). A cognitive process theory of writing. College Composition and Communication, 32, 365-387.
- Flower, L., & Hayes, J. (1984). Images, plans, and prose: The representation of meaning in writing. Written Communication, 1, 120-160.
- Foucault, M. (1970). The order of things; an archaeology of the human sciences. New York: Vintage Books.
- Foucault, M. (1972). The archaeology of knowledge and the discourse on language (A. Sheridan Smith, Trans.). New York: Pantheon.

- Freedman, A., Adams, C., & Smart, G. (1994). Wearing suits to class: Simulating genres and simulations as genre. Written Communication, 11, 193-226.
- Freedman, A., & Medway, P. (Eds.). (1994). Genre and the new rhetoric. London, UK: Taylor & Francis.
- Fuller, S. (1993). Disciplinary boundaries and the rhetoric of the social sciences. In E. Messer-Davidow, D. Shumway, & D. Sylvan (Eds.), Knowledges: Historical and critical studies in disciplinarity (pp. 125-149). Charlottesville: University of Virginia Press.
- Garfinkel, H. (1967). Studies in ethnomethodology. Englewood Cliffs, NJ: Prentice-Hall.
- Geertz, C. (1983). Local knowledge: Further essays in interpretive anthropology. New York: Basic Books.
- Geisler, C. (1994). Academic literacy and the nature of expertise: Reading, writing, and knowing in academic philosophy. Hillsdale, NJ: Erlbaum.
- Gieryn, T. F. (1999). Cultural boundaries of science: Credibility on the line. Chicago: University of Chicago Press.
- Giddens, A. (1984). The constitution of society: Outline of a theory of structuration. Berkeley: University of California Press.
- Goffman, E. (1981). Forms of talk. Philadelphia: University of Pennsylvania Press. Goffman, E. (1983). The interaction order. American Sociological Review, 48, 1-17.
- Goody, E. (1995). Social intelligence and interaction: Expressions and implications of
- the social bias in human intelligence. Cambridge, UK: Cambridge University Press.
- Gould, S. (1989). Wonderful life: The Burgess Shale and the nature of history. New York: Norton.
- Gragson, G., & Selzer, J. (1993). The reader in the text of "The Spandrels of San Marco." In J. Selzer (Ed.), Understanding scientific prose (pp. 180-202). Madison: University of Wisconsin Press.
- Griffin, P., Belyaeva, A., Soldatova, G., & the Velikov-Hamburg Collective. (1993). Creating and reconstituting contexts for educational interactions, including a computer program. In E. Forman, N. Minick, & C. Stone (Eds.), Contexts for learning: Sociocultural dynamics in children's development (pp. 120-152). New York: Oxford University Press.
- Guenthner, S., & Knoblauch H. (1995). Culturally patterned speaking practices: The analysis of communicative genres. Pragmatics, 5, 1-32.
- Gusfield, J. (1996). Contested meanings: The construction of alcohol problems. Madison: University of Wisconsin Press.
- Gutierrez, K., Rymes, B., & Larson, J. (1995). Script, counterscript, and underlife in the classroom: James Brown vs. Brown v. Board of Education. Harvard Educational Review, 65, 445-471.
- Halliday, M. A. K. (1985). An introduction to functional grammar. Baltimore, MD: E. Arnold.
- Halliday, M. A. K., & Martin, J. (1993). Writing science: Literacy and discursive power. London, UK: Falmer Press.
- Hanks, W. (1987). Discourse genres in a theory of practice. American Ethnologist, 14,668-692.
- Hanks, W. (1990). Referential practice. Chicago: University of Chicago Press.

- Hanks, W. (1996). Language and communicative practices. Boulder, CO: Westview.
 Hanks, W. (2000). Intertexts: Writings on language, utterance, and context. Lanham,
 MD: Rowman & Littlefield.
- Haraway, D. (1989). Primate visions: Gender, race, and nature in the world of modern science. New York: Routledge.
 Haraway, D. (1991). Simians, cyborgs, and women: The reinvention of nature. New

York: Routledge.

Harding, S. (1991). Whose science? Whose knowledge? Thinking from women's lives. Ithaca, NY: Cornell University Press.

Harklau, L., Losey, K., & Siegal, M. (Eds.). (1999). Generation 1.5 meets college composition: Issues in teaching writing to U.S.-educated learners of ESL. Mahwah, NJ: Erlbaum.

Harris, R. (1981). The language myth. New York: St. Martin's Press.

Harris, R. (1987). Reading Saussure: A critical commentary on the cours de linguistique générale. London: Duckworth.

Heath, S. B. (1983). Ways with words: Language, life, and work in communities and classrooms. Cambridge, UK: Cambridge University Press.

Hengst, J., & Miller, P. (1999). The heterogeneity of discourse genres: Implications for development. World Englishes, 18, 325-341.

Herndl, C., & Brown, S. (1996). Green culture: Environmental rhetoric in contemporary America. Madison: University of Wisconsin Press.

Herrington, A. (1985). Writing in academic settings: A study of the contexts for writing in two chemical engineering courses. Research in the Teaching of English, 19, 331-359.

Herrington, A. (1988). Teaching, writing and learning: A naturalistic study of writing in an undergraduate literature course. In D. A. Jolliffe (Ed.), Advances in writing research, vol. 2: Writing in academic disciplines (pp. 133-166). Norwood, NJ: Ablex.

Holland, D., & Reeves, J. (1994). Activity theory and the view from somewhere: Team perspectives on the intellectual work of programming. Mind, Culture, and Activity, 1/2, 8-24.

Hoskin, K. (1993). Education and the genesis of disciplinarity: The unexpected reversal. In E. Messer-Davidow, D. Shumway, & D. Sylvan (Eds.), Knowledges: Historical and critical studies in disciplinarity (pp. 271-304). Charlottesville: University of Virginia Press.

Hoskin, K., & Macve, R. (1993). Accounting as discipline: The overlooked supplement. In E. Messer-Davidow, D. Shumway, & D. Sylvan (Eds.), Knowledges: Historical and critical studies in disciplinarity (pp. 25-53). Charlottesville: University of Virginia Press.

Hutchins, E. (1995). Cognition in the wild. Cambridge, MA: MIT Press.

Kamberelis, G. (1999). Genre development and learning: Children writing stories, science reports, and poems. Research in the Teaching of English, 33, 403-460.

Kamberelis, G. (2001). Producing heteroglossic classroom (micro)cultures through hybrid discourse practice. *Linguistics and Education*, 12, 85-125.

Kamberelis, G., & Scott, K.D. (1992). Other people's voices: The coarticulation of texts and subjectivities. *Linguistics and Education*, 4, 359-403.

Katz, S., & Miller, C. (1996). The low level radioactive waste siting controversy in North Carolina: Toward a rhetorical model of risk communication. In C. Herndl & S. Brown (Eds.), Green culture: Environmental rhetoric in contemporary America (pp. 111-140). Madison: University of Wisconsin Press.

Kinneavy, J. (1971). A theory of discourse: The aims of discourse. Englewood Cliffs,

NJ: Prentice-Hall.

Klein, J. (1990). Interdisciplinarity: History, theory, and practice. Detroit, MI: Wayne State University Press.

Klein, J. (1993). Blurring, cracking, and crossing: Permeation and the fracturing of discipline. In E. Messer-Davidow, D. Shumway, & D. Sylvan (Eds.), Knowledges: Historical and critical studies in disciplinarity (pp. 185-211). Charlottesville: University of Virginia Press.

Klein, J. (1996). Crossing boundaries: Knowledge, disciplinarities, and interdisciplinarities.

narities. Charlottesville: University Press of Virginia.

Kristeva, J. (1980). Desire in language: A semiotic approach to literature and art. New York: Columbia University Press.

Latour, B. (1987). Science in action: How to follow scientists and engineers through society. Cambridge, MA: Harvard University Press.

Latour, B. (1993). We have never been modern. Cambridge, MA: Harvard University Press.

Latour, B. (1999). Pandora's hope: Essays on the reality of science studies. Cambridge, MA: Harvard University Press.

Latour, B., & Woolgar, S. (1986). Laboratory life: The social construction of scientific facts. Princeton, NJ: Princeton University Press.

Lave, J., & Wenger, E. (1991). Situated learning: Legitimate peripheral participation. Cambridge, UK: Cambridge University Press.

Lemke, J. (1998). Multiplying meaning: Visual and verbal semiotics in scientific text. In J. R. Martin & R. Veel (Eds.), Reading science: Critical and functional perspectives on discourses of science (pp. 87-113). London, UK: Routledge.

Lemke, J. (1990). Talking science: Language, learning, and values. Norwood, NJ:

Ablex.

Leont'ev, A.N. (1981). Problems of the development of the mind. Moscow: Progress.

Luckmann, T. (1986). Grundformen der gesellschaftlichen Vermittlung des Wissens: Kommunikative Gattungen [Basic forms of social mediation of knowledge: Communicative genres]. In Koelner Zeitschrift fuer soziologie und Sozialpsychologie, Sonderheft 27, 191-211.

Luckmann, T. (1992). On the communicative adjustment of perspectives, dialogue and communicative genres. In A. Wold (Ed.), The dialogical alternative: Towards a theory of language and mind (pp. 219-234). Oslo: Scandinavian University Press.

Luhmann, N. (1983). The differentiation of society. New York: Columbia University Press.

Lunsford, A., & Ede, L. (1990). Singular texts/plural authors: Perspectives on collaborative writing. Carbondale: Southern Illinois University Press.

Lunsford, A., Moglen, H., & Slevin, J. (Eds.). (1990). The right to literacy. New York: Modern Language Association. MacDonald, S. P. (1994). Professional academic writing in the humanities and social sciences. Carbondale: Southern Illinois University Press.

Martin, E. (1994). Flexible bodies: Tracking immunity in American culture from the days of polio to the age of AIDS. Boston, MA: Beacon Press.

McCloskey, D. (1985). The rhetoric of economics. Madison: University of Wisconsin Press.

Merton, R. K. (1968). Social theory and social structure. New York: The Free Press. Michaels, S. (1987). Text and context: A new approach to the study of classroom writing. Discourse Processes, 10, 321-346.

Miller, C.R. (1984). Genre as social action. Quarterly Journal of Speech, 70, 151-167.
Miller, C.R., & Selzer, J. (1985). Special topics of argument in engineering reports.
In L. Odell & D. Goswami (Eds.), Writing in nonacademic settings (pp. 309-341). New York: Guilford.

Miller, P. J., Hengst, J. A., Alexander, K., & Sperry, L. L. (2000). Versions of personal storytelling/versions of experience: Genres as tools for creating alternate realities. In K. Rosengren, C. Johnson, & P. Harris (Eds.), Imagining the impossible: The development of magical, scientific, and religious thinking in contemporary society (pp. 212-246). Cambridge, UK: Cambridge University Press.

Myers, G. (1990). Writing biology: Texts in the social construction of scientific knowledge. Madison: University of Wisconsin Press.

Newman, D., Griffin, P., & Cole, M. (1989). The construction zone. Cambridge, MA: Cambridge University Press.

Nystrand, M., Greene, S., & Wiemelt, J. (1993). Where did composition studies come from? An intellectual history. Written Communication, 10, 267-333.

Ochs, E. (1988). Culture and language development: Language acquisition and language socialization in a Samoan village. Cambridge, MA: Cambridge University Press.

Orlikowski, W. J., & Yates, J. (1994). Genre repertoire: The structuring of communicative practices in organizations. Administrative Science Quarterly, 39, 541-574.

Paradis, J., Dobrin, D., & Miller, R. (1985). Writing at Exxon ITD: Notes on the writing environment of an R&D organization. In L. Odell & D. Goswami (Eds.), Writing in nonacademic settings. New York: Guilford.

Perelman, C., & Olbrechts-Tyteca, L. (1969). The new rhetoric (J. Wilkinson & P. Weaver, Trans.). Notre Dame, IN: University of Notre Dame Press.

Phelps, L. (1990). Audience and authorship: The disappearing boundary. In G. Kirsch & D. Roen (Eds.), A sense of audience in written communication (pp. 153-174). Newbury Park, CA: Sage.

Pickering, A. (1993). Anti-discipline or narratives of illusion. In E. Messer-Davidow, D. Shumway, & D. Sylvan (Eds.), Knowledges: Historical and critical studies in disciplinarity (pp. 103-122). Charlottesville: University of Virginia Press.

Pickering, A. (1995). The mangle of practice: Time, agency, and science. Chicago: University of Chicago Press.

Prior, P. (1991). Contextualizing writing and response in a graduate seminar. Written Communication, 8, 267-310.

Prior, P. (1994). Response, revision, disciplinarity: A microhistory of a dissertation prospectus in sociology. Written Communication, 11, 483-533.

Prior, P. (1995). Tracing authoritative and internally persuasive discourses: A case study of response, revision, and disciplinary enculturation. Research in the Teaching of English, 29, 288-325.

Prior, P. (1997). Literate activity and disciplinarity: The heterogeneous (re)production of American Studies around a graduate seminar. *Mind*, *Culture*, *Activity*, 4, 275-295.

2/5-295.

Prior, P. (1998). Writing/disciplinarity: A sociobistoric account of literate activity in the academy. Mahwah, NJ: Erlbaum.

Prior, P. (2001). Voices in text, mind, and society: Sociohistoric accounts of discourse acquisition and use. *Journal of Second Language Writing*, 10, 55-81.

Rogoff, B. (1990). Apprenticeship in thinking: Cognitive development in social context. New York: Oxford University Press.

Rommetveit, R. (1992). Outlines of a dialogically based social-cognitive approach to human cognition and communication. In A. Wold (Ed.), *The dialogical alternative: Towards a theory of language and mind* (pp. 19-44). Oslo: Scandinavian University Press.

Russell, D. (1997). Rethinking genre in school and society: An activity theory analysis. Written Communication, 14, 504-554.

Russell, D., & Bazerman, C. (Eds.). (1997) The activity of writing, the writing of activity [Special issue]. Mind Culture and Activity, 4, 4.

Rymer, J. (1988). Scientific composing processes: How eminent scientists write journal articles. In D. A. Jolliffe (Ed.), Advances in writing research, vol. 2: Writing in academic disciplines (pp. 211-250). Norwood, NJ: Ablex.

Schutz, A., & Luckmann, T. (1973). The structures of the life-world (R. Zaner & H. Engelhardt, Trans.). Evanston, IL: Northwestern University Press.

Schryer, C. (1993). Records as genre. Written Communication, 10, 200-234.

Scollon, R. (2001). Mediated discourse: The nexus of practice. London, UK: Routledge.

Scribner, S. (1997). Mind and social practice: Selected writings of Sylvia Scribner (E. Tobach, R. Falmagne, M. Parlee, L. Martin, & A. Kapelman, Eds.). Cambridge, UK: Cambridge University Press.

Searle, J. R. (1969). Speech acts: An essay in the philosophy of language. London, UK: Cambridge University Press

Selzer, J. (Ed.). (1993). Understanding scientific prose. Madison: University of Wisconsin Press.

Shaughnessy, M. (1977). Errors and expectations: A guide for the teacher of basic writing. New York: Columbia University Press.

Smagorinsky, P., & Coppock, J. (1994). Cultural tools and the classroom context: An exploration of an artistic response to literature. Written Communication, 11, 283-310.

Smith, A. (1976). An inquiry into the nature and causes of the wealth of nations (R. H. Campbell & A. S. Skinner, Eds.). Oxford, UK: Clarendon Press.

Smith, D. (1990). Texts, facts, and femininity: Exploring the relations of ruling. London, UK: Routledge.

Smith, D. (1998). Writing the social: Critique, theory, and investigations. Toronto: University of Toronto Press.

- Street, B. (1984). Literacy in theory and practice. Cambridge, UK: Cambridge University Press.
- Swales, J. (1990). Genre analysis: English in academic and research settings. Cambridge, UK: Cambridge University Press.
- Swales, J. (1998). Other floors, other voices: A textography of a small university building. Mahwah, NJ: Erlbaum.
- Syverson, M. (1999). The wealth of reality: An ecology of composition. Carbondale: Southern Illinois University Press.
- Taylor, D., & Dorsey-Gaines, C. (1988). Growing up literate: Learning from innercity families. Portsmouth, NH: Heinemann.
- Todorov, T. (1990). Genres in discourse. Cambridge, UK: Cambridge University Press.
- Ulman, H. (1996). "Thinking like a mountain": Persona, ethos, and judgment in American nature writing. In C. Herndl & S. Brown (Eds.), Green culture: Environmental rhetoric in contemporary America (pp. 46-81). Madison: University of Wisconsin Press.
- Voloshinov, V. N. (1976). Freudianism: A Marxist critique (I.R. Titunik, Trans.; I. R. Titunik & N. Bruss, Eds.). New York: Academic Press. (Original work published 1927)
- Voloshinov, V.N. (1973). Marxisim and the philosophy of language (L. Matejka & I.R. Titunik, Trans.). Cambridge, MA: Harvard University Press. (Original work published 1929)
- Vygtosky, L. (1978). Mind in society: The development of higher psychological processes (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.). Cambridge, MA: Harvard University Press.
- Vygotksy, L. (1987). Thinking and speech (N. Minick, Ed. & Trans.). New York: Plenum.
- Wenger, E. (1998). Communities of practice: Learning, meaning, and identity. Cambridge, UK: Cambridge University Press.
- Wertsch, J. V. (1991). Voices of the mind: A sociocultural approach to mediated action. Cambridge, MA: Harvard University Press.
- Wertsch, J.V. (1998). Mind as action. New York: Oxford University Press.
- Winsor, D. (1999). Genre and activity systems: The role of documentation in maintaining and changing engineering activity systems. Written Communication, 16, 200-224.
- Wittgenstein, L. (1958). Philosophical investigations (G.E.M. Anscombe, Trans.). Oxford, UK: Basil Blackwell.
- Witte, S. (1992). Context, text, intertext: Toward a constructivist semiotic of writing. Written Communication, 9, 237-308.
- Yates, J. (1989). Control through communication: The rise of system in American management. Baltimore, MD: Johns Hopkins University Press.
- Yates, J., & Orlikowski, W. J. (1992). Genres of organizational communication: a structurational approach to studying communication and media. Academy of Management Review, 17, 299-326.

Settings, Speech Genres, and the Institutional Organization of Practices

Carol Berkenkotter, with Amanda Haertling Thein University of Minnesota

Over the past 18 years, I have combined ethnographic techniques such as participant-observation with discourse analyses of spoken and written institutional and professional genres. More recently, I have incorporated the perspective of critical ethnography into the field research courses I teach to graduate students in the Rhetoric Department at the University of Minnesota. Field researchers using a critical ethnographic approach are concerned with the ways in which social structures and power relationships growing out of inequities in class, ethnicity, gender, or other sources of asymmetry are instantiated in every day practices. The focus here is on practices (a term with a long history in critical social science; see Turner, 1994) with the researcher's questions and data-gathering techniques foregrounding students or other participants' discourse practices, and in particular, their use of speech genres.

Discourse practices are not only linguistic; they also are semiotic. Thus, the ways in which people position their bodies, the arrangement of furniture to support their social interactions, as well as their context-sensitive language behaviors all play a role in how people, through their daily interactions, establish social roles, power relationships, or, conversely, how they resist and subvert the status quo, which of course is a power issue as well.