ENGAGEMENT WITH TEXT:

COLLABORATIVE WRITING IN A HIGH TECHNOLOGY COMPANY

by

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Abstract

Over the past decade, an interest in collaboration has been coming to the fore in composition studies. Whereas once we were primarily interested in investigating the cognitive processes of the individual, we now seek to understand more about the social dynamics of writing in groups to improve our teaching of composition in the classroom. To that end, this dissertation looks at the real world collaborative activities of business proposal writers within a high technology company. Writing in the workplace is often undertaken in groups, and my work at Cerebellum, Inc. with computer professionals (who wrote as part of their jobs) reveals complexities hitherto unsuspected in the social writing process.

The importance of a detailed understanding of collaboration has been called for in the literature by, for example, Ede and Lunsford (1990). My dissertation surveys current literature in composition, including a review of investigations into collaboration during business writing as a salient behaviour of such a discourse community. In order to accomplish my research, I used a video camera to record the activities which embodied the writing process at Cerebellum Inc. I found that the use of the video camera in an ethnographic manner not only helped me to gather detailed data, both verbal and nonverbal, in the continuous and comprehensive detail so vital to communication research, but also assisted in initiating better understanding within the

business community of the aims and approaches of academic research. Video technology gave me a chance to participate in as well as observe situations, and also opened the door to conversation concerning my methods and my findings with both researchers and informants.

I propose a model of the varying levels of engagement undertaken by the writers of a business proposal. I then suggest the educational value of the representation with a discussion of implications for the teaching of writing in the workplace and in more traditional school settings.

Detailed research into collaboration offers us a window on the social processes which constitute writing for our students now and in their futures in the workplace. Such work is vitally important to ensuring superior levels of advanced literacy which will be in continuing demand now and in the next century.

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CHAPTER 1: INTRODUCTION AND OVERVIEW

In the business world, general communication abilities, both oral and written, have always been valued. They are acknowledged as useful and necessary foundations for the commonplace activities of professional life in corporate Canada: making presentations, participating in meetings, negotiating business deals, writing letters and reading promotional materials.

As businesses have become more specialized, so too have the demands on the literacy skills of employees. While the technical personnel (such as technicians and engineers) employed by computer companies, for example, are paid to solve problems, the scope of their job has changed. Where once talk and reading may have constituted the extent of the language demands on the technical staff, many of these employees now write as part of their job (Faigley and Miller, 1982), and are required to do so in more and more sophisticated ways.

With thousands of new products flooding the computer marketplace, demand is high for technicians with in-depth knowledge about a number of products, who can continue to add to their knowledge on the job by reading trade journals and texts. Concomitantly, the industry also needs technical writers, and technicians who are writers. These employees may be called upon to compose manuals for users of the plethora of new products being developed at many levels of expertise: beginners to sophisticates. Effective documentation has taken its place as a key differentiator in the competition among computer products.

The nature of the workplace in the nineties has also changed in other ways for those working in technological areas, as computer technicians do. Not only must they be effective technically, and be able readers and composers of technical documentation for a variety of products, but they must also understand marketing. McIsaac and Aschauer (1990) observe that engineers, for example, strongly prefer writing "where technical problems reign supreme, where conclusions are self-evident, where deliberate persuasion is suspect" (p. 550). Such attitudes, which show technical writing as divorced from presentation of the business or sales case, are fading in the bright light of new mandates for achieving a competitive edge. Technicians who write about their own work soon discover that the "crafting of language for promotional purposes in the technical environment is everyday fare now just as it has been throughout the history of consumer marketing" (Bryan, 1992, p. 76).

Indeed, the new cry in the business world is for "total quality" in all aspects of product and service offerings. Driven by the work of theorists such as W. Edwards Deming (1988), many business leaders are developing in-house standards which will allow them to be recognized as operating within total quality controls. The time is rapidly approaching when businesses must qualify for certificates granted by external agencies such as the International

Standards Organization (ISO 9000, 1991), guaranteeing their adherence to quality standards, including superior writing, in order to do business with many government agencies and large corporations.

Japanese approaches to quality control are hastening this drive to standardization. Despite more recent volatility in the Japanese economy, business practices long admired by western companies for their success in Japanese enterprises are now being adopted in North America. Total Quality Control (TQC), a blend of eastern and western visions of superior business practice, is now a goal for many businesses. Communication, according to the principles of TQC, must be "decentralized, vertical-upward, interdepartmental, interdependent, trusting, long-term, group-oriented, reciprocal, immediate, nurturing feedback, flexible, and characterized by close proxemics" (Goldman, 1993, p. 29). A TQC approach involves the breakdown of traditional barriers among the many and varied communicators who work in business. They must not only develop skills in reading each other's work, but also assist in the development of documents involving a variety of writers, the vast majority of whom write as a condition of their job (rather than as professionals dedicated to writing).

Communication in modern business involves not only employees but also, of course, clients. No longer is it sensible to make a sale with attention paid only to the bottom line profit. Now what is valuable are the employees who contribute to the presentation which sells the present job and also builds a foundation of good faith in hopes of future sales. Technicians, sales personnel, and managers have been forced to recognize that in a highly competitive economy, still suffering as Canada is from the effects of recession, "on-going success in sales requires building relationships with clients" (LaDuc, 1991, p. 157). One way such relationships are achieved is through ability in writing those key documents, such as business proposals, which connect one business with another. For such documents, where the demand for quality is high, research shows that companies often use collaborative writing approaches (Couture and Rymer, 1989).

In an attempt to further elucidate the compositional practices of those who are working together on a business proposal in a high technology business community, I have collected and analyzed data which suggest that writers working together experience different levels of engagement with the emerging proposal text. These levels (strategizing, information gathering and drafting) I have represented in a model. A schematized version of the social writing process will provide a concise and practical beginning point for a discussion of ways to better carry out (and help others to carry out) writing as a collaborative activity in a variety of settings.

Studying Writing as a Social Process

An important movement in writing research involves a re-focusing of attention away from the individual writer in isolation (for example, Flower and Hayes, 1981) and towards the social context as a factor influencing the composition act (Bizzell, 1982; Bruffee, 1986; LeFevre, 1987). Just how crucial the social role is differs from group to group of composition researchers; nevertheless, the trend in the professional literature is clear: "no man [or woman, either] is an island/entire of itself", and should not be studied as though they were.

This is not to say that the only important gains made in our understanding of writing have come in recent times, with current trends, and with a growing understanding of, or at least more attention to, social processes. Our interest in discovering how communication might be shaped dates from at least the time of Aristotle's *Rhetoric* (1932), itself a result of the influence of Plato and the Sophists on the communication habits of Greek society in the second century. Consideration of writing, however, has largely focused on the product and what it might contain in arguments (*logos*), in order to appeal to a specific audience (*pathos*), and be delivered by a rhetor skilled in writing or speech-making (*ethos*). Certainly, creating the document required skill in such matters as choosing ideas, and organizing them effectively, but the focus remained on the ultimate impact of the completed product.

In the late twentieth century, the concerns of writing researchers shifted. In 1971, Janet Emig published *The Composing Processes of Twelfth Graders*, an event since described (see for example, Purves, 1992) as heralding a change in the primary focus of composition theory and research from an interest in written products to an interest in the writer's composing processes. Emig borrowed much of her research methodology from the field of cognitive psychology, such as case study techniques, to discover what the individual writer did as composition proceeded. By 1981, Flower, a rhetorician, and Hayes, a psychologist, published a cognitive processing model of composition. The resultant outpouring of research activity based on this model established the cognitive psychologists as a central force in the study of writing.

Not all writing researchers were satisfied with the cognitive psychological approach to studying the writing process, however. One of the difficulties raised within months of the model's publication was its seeming lack of concern with the influence of the outer-world upon the communicative act: "What's missing here is the connection to social context afforded by recognition of the dialectical relationship between thought and language" (Bizzell, 1982, p. 223). If, indeed, language is modified by our interactions with others, which in turn influence our thoughts, which further modify our communicative acts, then social effects on writing are certainly important (Halliday, 1969; Vygotsky, 1978).

Both research and scholarship on the writing process now reflect a concern for social contexts from a broad variety of researchers. Bizzell and others, especially Bruffee (1983, 1984, 1986), have evolved a theory of *social construction* to explain the writing process. The origins of this school of thought, however, come far earlier. Kuhn's *The Structure of Scientific Revolutions* (1970) postulated that scientists, as a community, are the "producers and validators of scientific knowledge" (p. 178). When enough members of the group change their minds regarding an idea, a paradigm shift occurs. The insights of philosophers such as Rorty (1979) and cultural anthropologists such as Geertz (1983) heightened the interest of composition scholars in examining the influence of the group upon the writing act, and the writing act upon the group's beliefs.

Cognitive psychologists have more recently found great merit in adding a concern for context to their work with individual writers (Langer, 1985; Freedman, Dyson, Flower, Chafe, 1987; Flower, 1989), dubbing their research *sociocognitive*. The name, it seems to me, is significant: the influence of the social upon the cognitive. Social constructionists concentrate more upon the group influence resulting in a document written by one or more group members which reflects the group's beliefs. Rhetoricians of this social constructionist group (unlike Flower, a sociocognitivist) study issues of the functioning of the discourse community (Bizzell, 1987; Harris, 1989) and its construction of knowledge: the social epistemic (Lunsford, 1992). They, too, however, have acknowledged that the individual community member cannot and should not be forgotten. From such individuals comes the nonstandard, or abnormal discourse (Rorty, 1979) which keeps the group from merely reproducing itself. Through stimulus and conflict (Trimbur, 1989; Lyon, 1992) among members, groups reach their best performance.

Understanding Collaboration in the Workplace

The trend to inquiry in the social processes of the composition is especially evident in the work of researchers who investigate the professional writing community. As previously discussed, Kuhn's (1970) work aroused interest in the writing community and quite naturally lead to investigations of the writing processes of such professionals as scientists (Bazerman, 1988), bankers (Smart, 1993), and business professionals (Faigley and Miller, 1982; Odell and Goswami, 1985; Doheny-Farina, 1986; Couture and Rymer, 1989; Cross, 1990).

If writing is indeed a social process, then inevitably, perhaps, research attention would focus on writers working together. Ede and Lunsford's (1990) monumental project, which looks at writers collaborating in seven professional organizations, is but a recent addition to research in collaborative efforts in composition. Research by survey and interview has given us ample evidence that collaboration in the workplace is frequent and widespread (Faigley and Miller, 1982; Anderson, 1985; Ede and Lunsford, 1990). Ethnographic examination is beginning to take a more in-depth look at the nuances of the social processes of writing in specific situations (Doheny-Farina, 1986; Cross, 1990), with much work still needed.

Organizational Communication

Collaborative writing is a complex activity which requires an examination of ideas in several associated areas. Superior communication within companies leads to better documents. The effective business proposal must often be composed by a team of writers. Thus, business writers must be able to function well within a group (Doheny-Farina, 1986; Cross, 1990; Stohl and Schell, 1991), or even within several different groups working on various projects simultaneously. Each group, of course, presents its own set of challenges in achieving the desired characteristics of interdependence, trust and flexibility which will help lead to effective construction of a winning product. Writing together is one of the most complex tasks which individuals can face, involving many activities which must lead ultimately to clear, accurate and convincing documents.

Business proposals must present to their audience a unified voice. Consensus during the writing process, however, while laudable and certainly a goal for any group project, must be tempered by ideas arising from the conflict of varying viewpoints encompassed by the group. Members must, therefore, learn to maximize their individual contributions to the team, despite pressures to give in too quickly to "groupthink." Various factors, some researchers speculate, such as the presence of a highly vocal, talented and "titled" employee can lead to other group members minimizing their input (Veiga, 1991). Studying writing in the workplace must attend to such productive and nonproductive relations among group members.

What the field of collaborative writing research seems to require most, however, to help examine group writing approaches is progress toward the building of a model of collaborative writing. Nystrand (1989), in proposing a social-interactive model of writing, suggests that "Our interests in understanding writing and written communication require that we bring order to complexity by elucidating basic principles and regularities in a relatively parsimonious and simple form" (p. 81). Such interests are not to deny the complexities of the writing processes which surround collaborative writing, but rather to begin to look for patterns in the process. Nystrand is concerned mainly with the version of "truth" which arises through the interaction of writer and reader as mediated by the text. Obviously, models of social processes must also be constructed to focus our examination of document composition by several writers working together.

One place to begin looking for patterns from which to build a representation of the collaborative process is in the close analysis of events surrounding the production of a single document by several authors. Smudde (1991), in his work with General Motors, suggests that a writer moves from conception to final product through several stages. During each phase, the writer enlarges an understanding of the project. However, Smudde confines his attention to collaboration by limiting it to one possible cause of a writer's expanded view. The writer is still presented by Smudde as an isolated inventor. What is needed now is a model which includes all of the collaborators whose work defines the final document, and shows also their activities in concert with one another. Perhaps in this way, we might reach a justifiable balance between the complexities of an ethnographic "thick" description (Geertz, 1973) and the overly simple models proposed by Nystrand (1989) and Smudde (1991).

Research Questions

An examination of the current state of research in professional, nonacademic writing indicates that what would currently be helpful would be an investigation further testing our assumptions about the collaborative habits of business writers and then representing these habits in some pragmatic and pedagogically useful form. An ethnographic approach to data gathering would offer far greater detail to build such a model than would the survey approaches which currently dominate our understanding. Using a video camera to gather extensive data of a single writing process (such as the composition of a business proposal) would further heighten the chances for in-depth analysis, based on repeated viewing, to discover nuances of meaning expressed verbally and nonverbally in a communication situation. The social-construction-of-writing theory suggests that writers work together to build meaning. An examination of the interactions among people in different positions in a business should provide insights about just how those employees construct meaning while collaborating on a document.

During two years of research at a high technology company which I have called "Cerebellum," I hoped to achieve a greater understanding of the social writing process. My specific research questions, designed to focus my investigation, were the following:

1. *What are the collaborative manners and activities of writing involved in producing a business proposal document intended by one business to persuade another?*
2. *How might the proposal writing process, demonstrated by a collaborative writing group, be revealed, represented and improved by a model based on ethnographic data gathered in a typical high technology setting?*

The Research Context

The corporate setting for my investigation into collaborative writing was "Cerebellum Inc." Cerebellum is a large, Canadian-based computer systems integration firm. It has branches in most provinces and in several other countries. As a systems integrator, Cerebellum brings together computer software and hardware to create high-technology solutions to business problems for large private companies and government operations. It works extensively with sub-contractors as well in an effort to provide a total business solution for clients, coordinated by Cerebellum managers. These solutions are instituted by teams composed of employees from Cerebellum, from the sub-contractors, and from the client operation. Cerebellum may also train client employees who will use the system, and/or maintain it (e.g. fixing it if it fails to function properly) once it is up and running. Projects help to establish the long-term relationship so prized by many companies, often resulting in future work for the same client when they upgrade or add to their existing system.

The Vancouver branch office of Cerebellum has offices on two floors of a downtown office tower. It is a glamorous marble and glass building with a view of both mountains and ocean. At the conclusion of my study, the office had nearly ninety employees, having undergone significant growth in the two years during which I conducted this research. Cerebellum often moves workers between branches or out to client sites for extended periods of time. As I became more intimately acquainted with these Cerebellum writers, I developed an increasing awareness of the role of collaboration in the life of a professional who writes on the job. Not only were truths being explored in the e-mail messages which flowed back and forth through collaboration between writers and readers, as Nystrand might note, but the business employees' jobs in general were suffused with collaborative writing. They wrote together, even when they were alone.

Proposal Writing at Cerebellum, Inc.

Cerebellum competes regularly for work, and collaboration figures largely in their business strategizing. The "classic" (their term), though certainly not the only, approach to persuading a client to engage their services is by responding to a Request for Proposal (RFP) with a business proposal. These proposal documents range in length from several pages to several binders. The size often varies with the potential value of the business. Proposal writing teams, or "task-groups," are assembled to compose the document. These groups vary in size, but commonly feature similar members such as technical staff, sales personnel and managers. Each member brings expertise to the group, expertise without which the proposal could not be written.

Final drafts are ultimately the responsibility of the account executive, but individuals take responsibility for the content (if not for the style) which they have contributed. The technical architect, for example, is responsible for ensuring that the solution to the technical problem can be guaranteed to work as specified. Technicians contributing to documents must write carefully to promise only what can be delivered. Proposals thus become delicate balancing acts between suggesting solutions which will differentiate Cerebellum from its competitors, thereby taking on some risk, and making certain not to promise answers which cannot be implemented in order to protect Cerebellum from risk. Thus, the proposal, which focuses a group of writers on an important collaborative task representative of text production at Cerebellum, provides a focal point (or "test case") for my research into some of the larger issues of the social writing process.

Education, Research and Society

Although the proposal provides a focus for my research, I also wish to place such a collaborative writing project in a larger context. As Canadian society struggles to re-formulate itself to face the challenges of a global economy, hampered by a large and growing deficit and a populace discouraged by unemployment, education seems an obvious place to look for answers. Statistics Canada figures show that jobs in high-technology areas (perhaps as many as 300,000) are presently unfilled for lack of qualified workers. The people who might take up these positions will be required to fulfil not only the technical demands but also the new demand for advanced literacy. It thus becomes urgent to investigate questions surrounding workplace communications. These inquiries must acknowledge and address the often problematic relationships among education, educational research and the needs of society.

First, whether research looks at academic or nonacademic venues, investigators must develop a sensitivity to informants within a social context. Classroom or executive suite, playground or boardroom: people construct their own contexts and are in turn constructed by them. Research approaches suitable to the study of complex cultural behaviours become a part of that context and will have an impact on subjects and their milieu. Howe and Eisenhart (1990) caution all researchers that "[t]he research process itself must give attention to the nature of the contexts and individuals it investigates and to which its results might be applied, that is, to their social, political, and cultural features" (pp. 7-8).

Second, not only do these effects apply to the informant culture but also to the research community which will open itself to reciprocal gains as they interact with the workplace. Sensitive research will acknowledge its often hegemonic claims to authority and modify these: "As members of the research community, we need to understand the way our disciplinary discourse appropriates the experience of the research subject and represents it in our institutions" (Herndl, 1991, p. 320). Academic issues, such as literacy, find unique realization in the corporation. Appropriate research techniques will be those which will represent experience accurately and fairly, and benefit both research and business communities.

Third, educational research, which strives in this case to link the concerns of two often disparate and occasionally mutually suspicious groups, must also provide for educators at large to understand and consider the possible implications of the investigation for students: "the language of the results and implications must be in a form that is understandable to, and debatable by, various actors in a particular setting--teachers, administrators, parents, and also educational researchers with varying perspectives and expertise" (Howe and Eisenhart, 1990, p. 7). Models arising from the deep analysis of audio-visual data are one readily accessible way to present findings to a wider community. Although the nature of my study permits no broad generalizations, I do nevertheless present my findings for further confirmation in hopes that cases of a number of typical collaborations will eventually lead to generalizability. Classrooms, whether in schools or boardrooms, might thus be able to share a common background of knowledge with the workplace.

My project, then, uses an ethnographically based methodology to examine in some detail a collaboratively written business proposal. I then use my data to build a model of a representative case of the writing process in a social context.

Such a procedure is largely, I believe, without precedent. I have found, however, that a model based upon ethnographically gathered data proves useful for a number of reasons. First, it is based on rich and sensitively contextualized data. As I examined and re-examined my video-tapes, I began to see levels of engagement with text which I sketched into a diagram. More analysis showed characteristics which clustered around each category, characteristics which allowed me to examine further events and test the reliability of the model. As Cerebellum writers found with visual representations, diagrams which help to explain ideas to fellow collaborators are often useful with a wider audience of readers. One hopes they will feel welcomed as members of the research community. The model also shows data to these others in a form more condensed than ethnographic narrative or raw tape footage, to allow for ease of discussion by various audiences. Rhetorically, the model seems to belong more to a cognitively based theory of writing than a socially based one. However, it is my intent to draw together the best of approaches to writing in order to extend our ability to assist composition in many environments. Business is a field which values the efficient use of models to quickly and clearly express ideas, perhaps since the graphic representation is a dominant symbol system in the "technologized context of the twentieth and twenty-first centuries" (Hampton, 1990, p. 348).

The chronological description of the proposal writing process was useful as a way to show some of the social dynamics between and among writers engaged in text production. In particular, I now argue that their application of previously composed prose may be more widespread, and certainly more significant to the process than has been previously realized (see, for example Event Q The Recyclers for the use of already composed diagrams and letters). Although the use of "boilerplates" has long been recognized by business employees and noted in the professional literature (for example Selzer, 1983), I began to see that the use of previously composed ideas was far more complex than the simple use of a formula, and thus I called these at least partially pre-formed ideas "clip-text". Throughout the collaboration process, I also became aware of on-going activities which either help or hinder writers working together in a discourse community. I chose to identify collaborators by position rather than name in order to focus readers' attention on their roles (as account executives, or directors, for example).

My research will be useful in a number of ways. It will provide an ethnographically based approach to research by educators in the workplace. This investigation will use video-taping, involving informants in the process, and representing results in a model understandable and readily usable by employees, teachers, and students. My findings will give business writing researchers new directions for further investigation and confirm some previously established findings on collaborative writing behaviours. Finally, the model of levels of engagement with text should help to focus further research which will look at the collaborative writing process in other venues.

Upcoming chapters then, deal first with a review of the professional literature on collaborative writing in the workplace. Then, I look closely at my methodology. Data is presented next in a chronology detailing the development of a proposal at Cerebellum Inc. Finally, I look at conclusions and implications which are suggested by data analysis and representation in a model. The outcomes outlined above, tentative though they must be, nevertheless, I hope, will invite you to consider with me the events and ideas that follow.

CHAPTER TWO: REVIEW OF PROFESSIONAL LITERATURE

Before I built a wall I'd ask to know
What I was walling in or walling out,
And to whom I was like to give offence.
Something there is that doesn't love a wall,
That wants it down.
(Robert Frost, *Mending Wall*)

Although cognitive studies of composition have dominated educational writing research (Flower and Hayes, 1981; Scardamalia and Bereiter, 1987; Freedman et al., 1987) and contributed much to our understanding of how the individual proceeds in a composition situation, more socially sensitive research approaches are now enjoying pre-eminence (LeFevre, 1989; Flower, 1989; Thralls, 1992). This is true in investigations into academic writing, but is even more obvious in research which examines writing practices in the workplace. The new dominance of context-specific research, which takes as given the socially constructed nature of knowledge building practices, has lead to exciting gains in our understanding of the patterns of collaboration. Within such a sociocultural paradigm, yet still mindful of the gains of cognitive researchers, I place my own investigation. Building a model of the collaborative writing process, and describing the various activities it represents draws together scholarship in writing from different perspectives.

To begin then, it is necessary to look at the study of writing in general. In this chapter, I will develop themes which were introduced briefly in Chapter One. These will include cognitive and sociocultural writing research, organizational communication, collaboration and model building.

Overwhelming though the quantity and diversity of composition research may be, scholarship trends (Herrington, 1989; Durst, 1990; Fulkerson, 1990; Berkenkotter, 1991) show that, of several identifiable ways to engage in composition exploration, two major perspectives are cognitive and sociocultural approaches. Researchers within these two paradigms approach writing in different ways and, unfortunately, are all too frequently forced into adversarial postures. Though such behaviour may often be largely counterproductive to the progress of composition research as a whole, debate continues. It does, at least, challenge new contributors to defend their place, and brings a multi-vocal quality to composition research which serves to enrich the field.

Given such a struggle, I hesitate to align myself too strongly with one group or the other, reluctant to give up insights which are to be gained by a diversity of approaches. Mine is an interdisciplinary study. It seems ironic then, given that I have welcomed the richness found by looking at such fields as anthropology, philosophy, and sociology within my work, to find that I cannot so freely adopt techniques from the cognitivists and the socioculturalists without some explanation for my decision. Therefore, I will take this opportunity to develop an argument which seeks to marry some aspects of both the cognitive and the sociocultural approach.

Cognitive Research

As a educator, I am especially drawn to the exciting work of cognitive psychologists in writing research of the past two decades. As a composition teacher, I have always hoped that my interactions with students will help them to become better writers. Defining *better* is of course a challenge. Still, a change in emphasis from examining products to examining process fostered by cognitive research has helped writing teachers to focus on the specific behaviours which lead writers to more or less sophisticated products.

Emig (1971) is often credited with seminal work in using case study methodology, adapted from psychological approaches to research in order to study writing. She examined the activities engaged in by outstanding grade twelve students (as nominated by department heads). Though observation conditions were somewhat artificial (out of a classroom context, for example) and subjects were asked to perform "think-aloud" protocols, which have since come under some suspicion as a research technique (Bizzell, 1982), nevertheless, educators welcomed an approach which offered a chance to look at what writers were actually doing while they composed. Once studies were also done with less successful writers, comparisons could be made and then, most importantly, we could get on with the business of teaching better approaches to make poorer writers perform more like good writers with, we hoped, a significantly better written product.

Cognitive investigations often examine the differences between experts and novices (see, for example, Flower; Flower and Hayes; Scardamalia and Bereiter; Haas). While interested in building a theory of writing in general (Flower and Hayes, 1981), cognitivists also offered a way to intervene, to improve the writing of students and make it more sophisticated. Good writers, cognitivists suggested, were better at solving problems. These superior writers could build a model of their writing difficulty and find a solution for their writing impasse to reach a compositional goal. Better writers were able to take knowledge and not merely report it (copying, and not really composing), but rather "transform" knowledge (Scardamalia and Bereiter, 1987) in a model building fashion. These expert writers were "active builders of knowledge", engaged in "intentional cognition." They seemed to understand that "the composing process ... consists of setting goals, formulating problems, evaluating decisions, and planning in the light of prior goals and decisions" (p. 362). Such an awareness, coupled with an ability to participate in the best procedures for realizing their plans, seemed to lead to a superior writing performance.

Cognitive research in writing processes has informed educational approaches in the public school system since shortly after the appearance of Emig's 1971 research and its formalization by Flower and Hayes with their model of the cognitive writing process in 1981. It has helped teachers to make informed decisions about what to do in writing classrooms with Grade One students and Grade Twelve students, and with better and poorer performers. Cognitive research has also introduced the importance of the professional writer as a model. For example, Pulitzer prize winning author Donald Murray is often studied in hopes of discovering more about how the best writers proceed so that educators may assist the less able.

Cognitive approaches to writing in the nonacademic areas are congruent with those found in academic pedagogies. Those who write as a part of their career have a greater stake in the pragmatic outcomes of their ability to write well, so they perhaps are even better at the skills we would impart to our school aged writers:

> Business and professional writing calls for professional-level rhetorical problem solving. As with any important act of cognition, when writers know the real dimensions of the task and the knowledge it calls for, they are more likely to manage their own writing and thinking with the same awareness they bring to other aspects of their professional life (Flower, 1989b, p. 36).

Cognitivists speculated that such an approach, sensitive to the principles of rhetoric as interpreted from a cognitive psychological point of view, would lead to improved workplace writing. For example, Beck (1992) advises technical writers that

> [b]y considering proposals in a rhetorical context, writers can enhance their proposals by focusing on the *ethos* of the situation: highlighting the company's ability and desire to complete the requested task in light of the audience that will evaluate the proposal (p. 125).

Each individual writer, it seems, must consider using all rhetorical appeals—*ethos, pathos, logos*—as ways to solve the problem suggested by the writing project. As an educator, I value the research done by cognitivists, especially in looking at procedures followed by the individual writer, intervening in that writer's approach, and presenting a model of how the writer proceeds.

Recently, the cognitive group has admitted that their work would be strengthened by more "sociocognitive" views (Langer, 1985; Freedman, Dyson, Flower, and Chafe, 1987). Cognitive researchers began to discover that students were influenced by home and classroom contexts in their writing practices, a seeming move to a more socially sensitive outlook. However, Flower has forcefully asserted that her attention will remain focused on the thinking and writing abilities of each individual student, rather than becoming too involved in a socially based approach, since she finds that "as an educator, the action I can foster does not go on within a social abstraction or a collective, but in the minds of individual writers. The ultimate reason for my research is intervention" (Flower, 1989a, p. 295).

Thus it can be seen that cognitivist researchers proceed in a manner which mirrors their beliefs about writers. To reiterate, then, according to cognitivists, there is a problem: poor writing. Rhetorically speaking, this might be prose which fails, for whatever reason, to persuade an audience to accept an argument. The goal of such research is obvious: good writing, that is, writing which is effective in convincing a target group. Good writing, however, is but a product. In order to achieve a better product, the process must be examined and evaluated, and then steps taken to allow novice writers to proceed as expert writers would and thus achieve improved production. There is an underlying presumption that some rules must exist. For example, expert writers transform knowledge by doing thus and so, while novices simply re-tell knowledge in its original form. Good writers are problem solvers: they compose to work out difficulties by examining alternatives (e.g. this word instead of that, this argument first rather than last) to effect the best solution. Such research, however, while offering definite answers to the composition teachers, remains, I suggest, too entrenched in a remedial mode, and too focused on the isolated inventor of text to be entirely useful in my present work.

Sociocultural Research

A more sociocognitive view accepts that the rules of composition, as used by individual writers, are affected by the groups in which these writers work. Interest in the functioning of the individual within a group of writers, now often called a "discourse community," has lead gradually to a shift in focus by some composition researchers. These researchers suggest that our real interest ought to be focused on the dynamics of the social group as it struggles to build language and to build knowledge concomitantly. Many socially focused investigators seek to separate themselves from a contextually influenced view of the problem solving individual. They refuse to embrace both views: "The difference between saying that language has a social context and that language is a social construct defines a key difference between cognitive and social constructionist work in composition" (Bruffee, 1986, p. 784). Such an assertion, it seems, leads us to a consideration of truth, as built for example by a writer or group of writers, as a relative, non-positivistic concept. Those collaborators, building meaning and text together, seem indeed to be constructing ideas together rather than merely doing writing in isolation. To investigate the difference between a more cognitive and more sociocultural view of writing, however, it will first be helpful to consider the debate surrounding two key terms in this research controversy: audience and community.

Audiences and Communities

Aristotle's view of listeners/readers clearly places them in a role of commensurate importance with speakers and writers. Recently, however, attention to audience, certainly in the case of social constructionists, is being challenged by another concept: that of "discourse community." Some tension exists between applications of these terms (Bizzell, 1982). However, this controversy should not blind us to the similarities of classical views of audience and the more contemporary stand of social constructionists that discourse community is of greater importance. While concepts of audience and discourse community are not identical, they offer many of the same insights which describe the ideal relationship of the speaker and the one(s) spoken to. Some further explication of the perceived contrast between audience and community will show the need for attention to this topic in developing further understanding of the collaborative habits of writers.

Aristotle views rhetoric as not only a psychological pursuit, but a sociological one as well. Cooper (1932) says of Aristotle's *Rhetoric* that it is "a searching study of the audience ... the speaker or writer must know the nature of the soul he wishes to persuade ... it thus becomes a popular treatise on the interests of men in groups and as individuals" (p. xx). Aristotle believes, for example, that the rhetor's character "is the most potent of all the means to persuasion" (p. 9). The speaker adapts to the speech. Aristotle cautions the rhetor who does not study the audience carefully. Such a speaker's argument will be "unconvincing because the conclusions are drawn from premises that are not admitted or commonly believed" (p. 12). The rhetor discovers group beliefs, and thus is able to construct an appropriate argument. Though Aristotle does, for example, set the rhetor above the audience in intellectual ability, as the audience may be "uncultivated" (p. 154) or the "sort of hearers who cannot grasp many points in a single view, or follow a long chain of reasoning" (p. 11), the success of the speaker is still based on a sensitivity to the beliefs of the community which the rhetor joins when making a speech.

Modern attention to Aristotle's ideas (Perelman, 1982) finds that his premises are still valid: "to make his discourse effective, a speaker must adapt to his audience ... the speaker can choose as his points of departure only the theses accepted by those he addresses" (p. 21). Perelman finds that arguments become more effective as they are rendered more commensurate with an audience's convictions and traditions (p. 140); however, these arguments are not manipulative. Instead, the discourse offered "tries to gain a meeting of minds instead of imposing its will through constraint or conditioning ... a meeting which social and political institutions can facilitate or prevent" (p. 11). Similarly, Mao (1989) observes that in such meetings, there are no triumphant speakers and conquered listeners, but rather "everybody wins" and "persuasive discourse ... [becomes] part of a continuous cooperative effort to identify what can be best shared by writer and audience" (p. 139).

Thus we see that, while attention to classical conceptions of audience are valuable for an emphasis on the cognitive functioning of the individual composer, so too are they evocative within a more socially focused framework. Late twentieth century social constructionists, who understand "knowledge and the authority of knowledge as community-generated, community-maintaining symbolic artifacts" (Bruffee, 1986, p. 777), can still believe in an Aristotelean importance of the behaviour of each individual within a collective because: "[E]thos arises from the relationship between the individual and the community (LeFevre, 1987, p. 45)".

Some reluctance to accept such a view still remains in the social constructionist group. These scholars are not certain that the concept of audience is helpful in our efforts to understand the workings of the community. If "[t]he community of knowledgeable peers constituted by that symbol system [language] constructs knowledge by justifying it socially, that is, by arriving at a sort of consensus" (Bruffee, 1986, p. 779) then perhaps, they argue, it is time to dispense with audience and its unappealing baggage of separate realities between speaker and listener:

> A social perspective on writing creates the need for a new metaphor, one which can suggest the rich social dynamics that surround and support text, one which can account for the reciprocal relationships among writers and readers described by recent

> research of the writers and readers within them (Paré, 1991, p. 49).

Efforts have been made to recast audience as a more fluid and more flexible concept than the oft-perceived adversarial one (Ede and Lunsford, 1984; Kroll, 1984; Roth, 1987). However, the audience concept is still seen by many as at least unhelpful (Elbow, 1987) and at worst restrictive and inaccurate because, some social constructionists argue: "the text is not a message delivered to an 'audience'; rather, it is a moment in an ongoing discussion, an utterance shaped by the relationships, concerns, and procedures of the community" (Paré, 1991, p. 51).

For these reasons, social constructionists find the idea of the discourse community, that is "a group sharing language using practices" (Bizzell, 1987, p. 1), as a more useful concept to describe the relationships between readers and writers, speakers and listeners. Social constructionists find that their activities are based on a view that "[w]e use language primarily to join communities we do not yet belong to and to cement our membership in communities we already belong to" (Bruffee, 1986, p. 784). Rather than emphasizing the discovery of universal rules which the novice might use to become an expert, a sociocultural stance sees that the writer is persuaded to shape writing behaviour to match the style of the target community.

Discourse communities, although somewhat difficult to define (see Harris, 1989), seem to be bound together by a discursive project. Such interpretive activities, which must be undertaken in accomplishing the task, delimit the group and draw it together. Therefore, "some work in the world its members could not accomplish on their own" (Bizzell, 1987, p. 1) may be successfully done collectively. These discourse communities, in turn, influence the members who belong to them. Indeed, the group finds itself controlled by various rules of conduct which the group has helped to determine, whether individuals are aware of such codification or not. Thereafter, "the norms define the writer's discourse community, a context that conditions, governs, and constrains, not just the message, but the writer producing it" (Freed and Broadhead, 1987, p. 162).

The pedagogical implications of examining classrooms as places to learn about how to join other discourse communities were obvious to social constructionists. Rather than looking at universal rules for better writing as cognitivists might, "composition studies should focus upon practice within interpretive communities--exactly how conventions work in the world and how they are transmitted" (Bizzell, 1982, p. 239). In such a discourse community, students would be viewed not as deficient writers as the cognitivists seemed to imply, but rather as writers unknowledgeable about the habits of a particular discourse community which they sought to join (for example, the community of literary analysts).

Thus, the student gains not a set of universal rules but rather learns that even knowledge and skills attained in the classroom are subject to change. Nevertheless, educators might still teach discourse analysis, to discover the rules which seem to govern the organization and style of a text for a particular group, in order to allow students easier access to the many discourse groups they might wish to join. Students might also be able to achieve, as Harris (1989) suggests, a kind of polyphony "not to initiate our students into the values and practices of some new community, but to offer them the chance to reflect critically on those discourses...to which they already belong" (p. 19).

In similar fashion, business or professional groups of writers, which the students may want to emulate, are involved in creating their own culture through various sorts of languaging. Kuhn (1970) notes that "knowledge, like language, is intrinsically the common property of a group or else nothing at all. To understand it we shall need to know the special characteristics of the groups that create and use it" (p. 210). One sort of common property of a discourse group, especially in business, seems to be a store of previously written texts from which writers can draw ideas, formats, and even whole sections. Academic writers too find that they are expected to build upon each other's contributions to the community, and they too use words and sentences taken in chunks from the texts of others (or indeed from their own previous papers). Each discourse community, it seems, has a kind of data base from which it draws "clip-text," in much the same way as publishers and others use "clip-art." The differences seem to lie in the extent to which the clippings are referenced and transformed. Certainly, boilerplating, or what Bereiter and Scardamalia (1987) might call "knowledge telling" can be a problematic activity and is identified as such by some business writing scholars (see, for example, Wallace, 1994); however it is widespread enough in the workplace to warrant further consideration.

Early conceptions of discourse communities sought to break away from a focus on the individual writer addressing an audience, preferring to consider language's social functions (for example, Vygotsky, 1978; Halliday, 1969) and therefore the primacy of a social focus in research: "Conceived traditionally as an individualizing and adversarial relationship, writing viewed as a form of instrumental speech becomes a referential and interdependent one ... writing becomes essentially and inextricably social or collaborative in nature" (Bruffee, 1983, p. 165). While such a view seems at least to admit the possibility of divergent points of view, even if such points are of lesser importance, other socially motivated perspectives are less tolerant. Even if cognitivists, for example, were willing to admit a contextual influence, some social constructionists seem definitely less willing to find middle ground:

> [H]uman language (including writing) can be understood only from the perspective of a society

> rather than a single individual ... the focus of a social view of writing, therefore, is not on how the social situation influences the individual, but on how the individual is a constituent of a culture (Faigley, 1986, p. 535).

One of the main goals of the social constructionist community thus came to be the study of how the discourse community participates in epistemological ventures. While one may argue that they failed to grant that the cognitivists, though engaged in the same project as themselves (discovering how writing proceeds), might be working under different norms and therefore quite likely to come to different conclusions, the social constructionists nevertheless sought to both differentiate themselves and prove that they espoused the superior approach. They maintained that theirs was a real community, as they defined it:

> Social construction understands reality, knowledge, thought, facts, texts, selves, and so on as community-generated and community-maintained linguistic entities--or, more broadly speaking, symbolic entities--that define or "constitute" the communities that generate them (Bruffee, 1986, p. 776).

Communities were not primarily concerned with or engaged in the persuasion of some "other" audience, but rather in working together and persuading themselves. Unlike the cognitivists, social constructionists assume that "there is no such thing as a universal foundation, ground, framework, or structure of knowledge. There is only an agreement, a consensus arrived at for the time being by communities of knowledgeable peers"

(Bruffee, 1986, p. 774). Knowledge is built by communities composed of experts as a kind of "best guess," but must be perceived as ephemeral.

Despite the appeal of the notion of discourse community for me in my research into collaborative manners of writing, there can be no doubt that the concept of "audience," with long roots in rhetorical history, established and nurtured for almost two thousand years, remains a powerful idea. The concept of audience is undergoing renewal and recasting. However, I suggest, it is far from being, as Paré (1991) maintains, in danger or need of being "ushered out." The nineties have seen several attempts to rethink audience. It is interesting to note that not only do these new attempts to re-position audience help us to think more comprehensively about the readers of our work, but also about the nature of discourse communities which we may share, or come to share, as a result of our rhetorical act.

One such recasting is that which imagines audience members as a subgroup of a communicatively enabling community:

> A discourse community, however it is defined ... essentially denotes the setting or culture that enables communication within it ... [it is] the system of rules, conventions, constraints, and beliefs that readers and writers share and draw upon during the process of communication ... [P]articular audiences ... nearly always exist within a discourse community (Selzer, 1992, p. 172).

Thus, understanding the community's ways of knowing enables us to address some group of its members more effectively. If this group is known, for example, to accept writing as a communicative act, as an act which looks for interaction between speaker and bespoken, then speakers and writers might seek to address their audience according to their assumptions about their views of valuable discourse: "Good audience analysis thus involves directly the presumption of writing as a social act in a discourse community" (Fulkerson, 1990, p. 417).

A second recasting seeks to show how the community defines the activity of audience analysis. As Kirsch (1991) discovered, within one group, individual members differ in their approach to addressing other members of that same group. She maintains that her research

> contributes to the social-constructionist inquiry by focusing on writers' sensitivity to social contexts for written communication and by tracing individual differences--as well as similarities--in writers' sense of audience ... how writers represent audiences which occupy a different sociopolitical status within a given community (p. 34).

Such research also rejects any notion of homogeneity within a discourse community, and reminds us that the individual writer still makes individual decisions, despite the force of the group's influence. Kirsch does not however, look at the interactions of collaborators who seek to represent audiences who may be outside their community.

A definition of discourse community, expanded to encompass the often varying activities and opinions, must deal not only with the idea of audience but also with some troubling assumptions about the demeanour of the group. It is, for example, commonly assumed that communities are places of calm, where people join together for a common good and, therefore perhaps, are quick to arrive at a consensus. Though Burke (1957) assures us that his famous parlour is a forum of debate, one cannot somehow, especially given his premise of the identification desirable between conversants, conceive of a major conflict in his parlour. However, other scholars remind us that although every community has a "'core' of commonality" (Lyon, 1992, p. 286), just as important is the community's inherent "turbulence of action" (p. 286). Any rhetorical theory which fails to note the importance of dissent, the discourse which does not meet group standards which may lead to breakthroughs in the group's understanding of an issue under debate (Rorty's *abnormal discourse*), seems to me to be in danger of denying the inherent dynamism of language's social functions.

In practice, the discourse community of the schoolroom must deal with the results of the ubiquitous (and often badly implemented) group project which too often results not in the struggle of ideas, but rather to a sullen lowering of discussion to a superficial, yet consensual, common denominator: "Any teacher who uses group discussions or projects has seen that they can, on occasion, be fierce enforcers of conformity" (Myers, 1986, p. 159). Ewald and MacCallum (1990) offer a plan for a classroom community which welcomes dissenting opinions. Their pedagogy includes encouraging "deferral of agreement [which] becomes a creative and, therefore, desirable group strategy" (p. 23). This "rhetoric of dissensus" (Trimbur, 1989) should certainly revitalize our conceptions of the community to look at the group, and at the skills of the individuals who both constitute and are constituted by the community.

John Dewey (1938) maintained that unproductive arguments may result from raising a wall between the individual and society: a false dichotomy. Educators, he believed, would do well to remember that "individuals are parts of a community, not outside of it" (p. 54). Similar ideas are expressed by more recent scholars. The discourse community must include a recognition of the group and of the individual members: "We will more fully comprehend the process of creating new ideas when we think of it as an act that is social even as it is individual, with the other always implicated in the inventions of the I" (LeFevre, 1987, p. 140). In my case study and presentation of the model, I have endeavoured to do just that.

Organizational Communication

Writing in business develops in an often treacherous sea of group dynamics: the unspoken assumptions, traditional roles and cultural norms which swirl like eddies in a stream, seen and unseen, helpful and unhelpful to the completion of the task. And indeed, the product is paramount and primary in the work setting. Employees writing together are deployed according to their ability to contribute to the final document. In the educational setting, by contrast, the main concern is that students learn together through contributing equally to a task and being co-authors (Dauite, 1986) in a compositional process. Any practising teacher, however, will testify that students often resist such egalitarian models. Nevertheless, the classroom attempts at least to provide similar opportunities whereas the business world proceeds in a more pragmatic (and some may say even Machaviellian) fashion.

Business, nevertheless, is still concerned with maximizing the effectiveness of the task group. To this end, group members must deal with centrifugal and centripetal forces of collaboration in a productive fashion. Problem-solving groups, such as those charged with writing a proposal "have in common their ephemeral nature and their dedication to one ... task, and the task will usually have an ending point, that is, a deadline" (Malone, 1991, p. 110). The group must therefore quickly identify the roles of group members: "a contributor must have a clear view of what all members of the team see as the project's elements and constraints" (Newman, 1988, p. 37), and accept them, at least to some extent, in order to proceed.

Indeed, such building of and adherence to group norms often comes in the first meeting, and patterns, both beneficial and detrimental, tend to continue throughout the group's brief life as a discourse community. However, as challenges to the speedy and effective completion of the task are faced and require some recursion in the process, individuals within the group must be prepared to function away from group norms to adapt to changes (Malone, 1991), recognizing, for example, that the problem as defined cannot be solved and must therefore be re-defined. Individuals as well as groups, however, are frequently inclined to persist with an established plan, even when there is strong evidence that they are pursuing a losing course of action (Staw and Ross, 1989).

A concern with collaboration among group members is a natural outcome of the small group dynamic process. Sub-groups must also work toward a satisfactory conclusion of the main project. Ideally, the best maintenance of creative tension between the centrifugal and centripetal forces would lead to situations where "all collaborators might be convinced that they could maintain self-identity and still bond with group members" (Lay, 1992, p. 91). Although it has been suggested that the most effective communicators are shaped even more by past experiences than by gender (Tebeaux, 1990), business writing in particular seems to be best served by a mix of styles and approaches.

Taking time to build social relationships before beginning work on a project requiring collaboration (Varner, 1988) helps to build teams capable of both entering and withstanding a communal frame of mind. Experience in previous collaborations with the same people, for example, seems to help group members engage more successfully in present collaborations (Allen et al., 1987). Not many businesses, however, have the time to build such relationships. Groups may be formed from a mix of employees who were hired to do a particular job and will be dismissed or moved to another branch office, when they are finished, to begin another project with yet another group. Modern businesses are, thus, especially challenged by the maintenance of effective organizational communication.

Collaborative Writing

Though research into the nature of collaboration continues apace, definitions of collaborative writing for both academic and nonacademic writing remain elusive. Those which do exist seem most often to be shaped context by context. For example, it is hard to deny that in the broadest theoretical sense, all text arises from others, other texts by other writers and other ideas by other speakers: "[W]riting is collaboration. It cannot be otherwise" (Reither and Vipond, 1989, p. 866). Such a concept, that all text production is collaborative, uncomfortable though it may be for those who continue to demand a place for individual agency (and even genius), is difficult to avoid in business composition. In the workplace, many documents are produced by teams, and even individuals consult constantly with previous documents and company "boilerplates", other employees, and the client audience in the building of text. It seems, in corporate Canada at least, that "collaboration [is] a partnership present in all discourse-production situations" (Thralls, 1992, p. 65). Creation of new text involves others as collaborators: frequently "people interact to invent and to create a resonating environment for inventors" (LeFevre, 1987, p. 50). These people may presumably be absent in time and place.

True as such pronouncements might be in a general sense, however, such collaborative partnerships ignore time and choice. In this document I draw upon Aristotle to help me build my text. He had no choice in what I create. However, I do my composition in his debt. He is also, of course, absent in time and place. Ede and Lunsford, while my contemporaries, have also no choice in my use of their ideas. However, my consciousness of the opinions of the composition community in which I claim membership constrains my words: I build my discourse carefully on my understanding of reasonable conclusions based on all of my absent "collaborators". Thus, I am aware of the social "collective" (LeFevre, 1987) as: "a supra-individual entity ... encouraged or constrained by ... institutions, societal prohibitions, and cultural expectations" (p. 50).

In some other, perhaps more practical, certainly more "here and now" sense, Aristotle, Lunsford and Ede are not my collaborators at all. They have no stake in my dissertation. Even more certainly, in the business writing community,

> when we talk of collaborative writing, we assume that more than one person is responsible for a

> document. ... [S]urveys tell us that the writing process in industry is collaborative if we take the word in its broadest sense to mean "working together" (Debs, 1991, p. 478)

Within this more restricted sense, that is, "writing in which more than one person contributes to the effort" (Couture and Rymer, 1989, p. 73), collaboration remains somewhat difficult to define but easier to recognize. Two or more people labouring together to some common purpose is indeed "the kind of beast we know when we see it" (Debs, 1991, p. 479).

More specific definitions, while valuable within a certain specific context, become open to attack if taken outside their immediate situation. Care must be taken to both broadly situate collaborative activity and recognize its present incarnation. One example may be seen in a description of collaboration as "a variety of interactive writing experiences" which in one specific case becomes "collaborators producing a shared document, engaging in substantive interaction about that document, and sharing decision-making power and responsibility for it" (Allen et al., 1987). Such definitions may, however, lead to further debate about non-specific terms such as "substantive" (such as, for example: are less substantive interactions less collaborative, or even collaborative at all?) I have, therefore, adopted a broader definition which will have less power to disallow one "working together" situation over another as suitable for research.

Collaboration researchers must be prepared to deal with situations of ambiguity. Some investigators lament that there remains "lack of agreement about the term, [which results in] diverse commentary on a destabilized concept and practices rather than an agreed upon, cumulative body of knowledge based upon a theoretically unified position" (Forman, 1991, p. 235). Such theory building, however, cannot proceed unless researchers strive to describe, whether by definition as some do, or by model, as I have, the manners of collaboration for any situation, while keeping in mind the broader meanings of the term.

Specific Research Findings

Knowledge building of a theory of collaborative writing in business rests largely on data accumulated from surveys, interviews and questionnaires. Early work centred on questions of whether writers did indeed collaborate, which seems now to be irrefutable (Faigley and Miller, 1982; Anderson, 1985; Ede and Lunsford, 1986; 1990). In questionnaires which surveyed hundreds of employees, writers studied by these researchers reported that large percentages of them "sometimes collaborate with at least one other person in writing" (Faigley and Miller, 1982). However, academics conducting such research began to realize that the definition of collaborative writing might vary between the academic and nonacademic communities. Such confusion, arising from an academic notion of collaboration among equal partners, might be at variance with a business view: "results indicating that collaboration is typical on the job may be misleading"

(Couture and Rymer, 1989, p. 75). Some jobs in the workplace seem to call more regularly for collaboration. For example, those requiring quality as a factor more important than, or at least equal to, speed of production. A large percentage of these writing tasks were completed by writers working together (76%). More routine jobs, in contrast, were often completed alone (Couture and Rymer, 1989).

Collaborative writing projects were also viewed by writers with decidedly mixed feelings. Research techniques such as interviews revealed that workers might prefer to work alone but saw the practical results of group approaches. Although individuals saw sacrifices of time and ego, and even ethical stance (Bryan, 1992), they also appreciated that, effectively managed, groups could offer a better product. Collaborators also understood that conflicts could lead to more creative solutions; large projects could be divided amongst several writers; specialists could contribute high quality input; and teams could synthesize large quantities of information more effectively than individuals could (Allen et al., 1987).

More recently, research into collaborative processes has moved beyond the tabulation of the numbers of writers involved in writing to a consideration of the patterns revealed in manners of collaboration. Ede and Lunsford (1990) have published a large study which reveals widespread collaboration of different types. They identify and discuss two modes of collaborating, the more widespread "hierarchical" (one member of the collaborative group having more power, others less) and the less frequent "dialogic" mode (all members having equal power). However, they resist setting up modes as binary opposites (or as negative and positive modes) given the nature of their survey, questionnaire, and interview data: "Perhaps only full-fledged ethnographic studies could provide the depth of detail and critical perspective necessary... Discourse situations are ... inherently mixed and paradoxical; they defy easy analysis and categorization" (p. 134). And indeed, ethnographic studies of business writing do exist. Cross (1990), using the work of Bakhtin, analyzes her data and identifies sixteen factors which affect the success of collaboration based on notions of small group cohesion. These factors are centripetal ones such as time, centrifugal ones such as differing perceptions of audience. Still other factors, such as a group hierarchy, are convertible; that is, they could contribute to the building of ties between group members or tend to drive them apart.

Both Doheny-Farina (1986) and Brown and Herndl (1986) discovered through their ethnographies the importance of the environment where the collaborative writing process takes place. Doheny-Farina suggests a model which describes a reciprocal relationship between writing and organizational context. He postulates that context influences the way writers formulate their situation, and the way they behave within that situation. In turn, the activities of these writers influence the organizational context. Brown and

Herndl add that the context which surrounds the social writing process creates a lack of privacy or solitude; rather, "professional writing is often display behaviour in a very public place" (p. 24). Writers in corporations "describ[e] a 'layered' speech event in which the writer addresses an audience ... and the entire transaction is observed *as a transaction* by a known or imagined overlooking 'other'" (pp. 24-25). Furthermore, the writing behaviours engaged in by business writers indicate that they want to align themselves to a group, and hope that their writing style will mark them as group members and entitle them to group support.

The influence of the culture surrounding the writer was also investigated by McIsaac and Aschauer (1990). They conducted interviews, circulated questionnaires and did discourse analyses of engineers' writing. They sought to characterize the proposal writing process and discovered a highly collaborative, highly structured approach to the writing task. Further, they discovered that collaborative assistance helped improve the quality of the proposal and influenced writers' attitude towards writing. They concluded that "[l]anguage practices are rooted in an organization's culture" (p. 551) and recommended the importance of personal interaction to improve writing. Their research is echoed by advice from various business communications experts teaching seminars in the workplace (Asner, 1991; Harcourt, 1990).

Questions Remaining

My own investigation seeks to address some gaps which presently exist in knowledge about the collaborative writing process in the workplace. In addition to calls for more detailed observation of business writers (Ede and Lunsford, 1990), gaps exist also in our understanding of

> the extent to which workplace writing is immersed in 'talk' and the nature of these exchanges. ... [M]ore case studies could help define the interactions that occur while planning and drafting are in process, demonstrating, for example, how closely some pairs of writers collaborate and whether their sense of authorship becomes merged (Couture and Rymer, 1989).

Such studies should, of course, look also at more problematic interactions, such as the problems faced by groups which include reluctant collaborators (Stohl and Schell, 1991), and the difficulties of developing a collaborative representation of audience.

In addition, work must be done in focusing on the various activities which surround the creation of discourse, by examining "the relationship of a text to other texts and to conversations that precede and follow it ...[and] the writer's relationships to other people ... who affect invention" (LeFevre, 1987, p. 125). Such investigations need to find ways to represent the complex contexts which influence the social writing process. One of the questions arising in the workplace is the nature and prevalence of previously shaped ideas. Selzer (1983) notes that his subject, Nelson, "often borrows sentences, paragraphs, sections--even graphs--from past documents and incorporates them into new proposals, reports, and correspondence" (p. 181). In similar fashion, Winsor (1990) observes that her writer, Phillips, spent much of his time "writing from previous texts" (p. 61). However, Winsor finds also that Phillips interprets existing material as he writes new text. Both Nelson and Phillips are observed writing in isolation; that is, not as a part of a collaborative effort. They are also both acknowledged by their respective researchers as talented writers who even sought out writing tasks. We need to look at the "clipping" of previously composed ideas and texts by collaborators who were often more reluctant writers.

Next, we need to continue to address the difficulty of defining collaboration, both in our own community and in other cultures such as those in the workplace. LeFevre comments: "Writers in all discourse communities should attempt to clarify and possibly expand the prevailing sense of what constitutes collaboration and how it should be acknowledged" (p.123). As well, work needs to be done on ways to share our findings with an academic research community and with the business community. Such approaches should include more involvement of informants as participants in research.

We need to develop representations which allow us to reveal our growing understanding of the rules which seem to govern collaborative activities, whether these representations are models (Smudde, 1991; Nystrand, 1989) or modes (Ede and

Lunsford, 1990). All such attempts are bound to be controversial, revealing as they do an attempt to make concrete what is obviously abstract, and simple what is remarkably complex. The advantages of a representation are many as well, however. A model is a visual representation which offers a distilled and, it is to be hoped, potent version of a researcher's findings. "Maybe the social writing process looks like this," the researcher says, inviting further conversation with the model as focal point. Such a representation must therefore be sufficiently but not overwhelmingly complex, must be convincingly supported by data, and finally must be useful in engendering further research and scholarly debate.

Despite the risks of modelling which is too specific or too general, researchers are already inclined to develop conceptual frameworks because "[t]hey assist us in making sense of the flood of sensory data we receive every waking moment from the world around us, and they help us to systematize that world by revealing its underlying patterns and regularities" (Pemberton, 1993). Attempts to develop models such as that by Flower and Hayes (1981) to describe the individual's cognitive writing process were followed by a flurry of research activity suggested by the model. Even though the Flower and Hayes model has been sharply criticized (for example, Bizzell, 1982) and more recently found too limited even by one of its creators (Flower, 1989), it still succeeded in giving definition to a complex process. Models do exist as ways to present social writing processes, but clearly more research is needed to propose a representation which will be helpful in extending our work on the activities and interactions of collaborative writers. It is to such work in examining and representing collaboration, then, that my research is directed.

CHAPTER 3: METHODOLOGY

> Alice could not help her lips curling up into a smile as she began: "Do you know, I always thought Unicorns were fabulous monsters, too! I never saw one alive before!"
>
> "Well, now that we have seen each other," said the Unicorn, "if you'll believe in me, I'll believe in you. Is that a bargain?" (Lewis Carroll, *Through the Looking Glass, and what Alice found there*)

In studying the writing habits of another culture, we often discover that our problems are much like those Alice faces. When she steps behind the looking glass, Alice finds things not just reversed, but unusual in many ways. Here, for example, Alice meets a unicorn whom she finds to be as sceptical of her existence as she is of his. Eventually, however, Alice and the Unicorn agree to trust to their senses, ignore old ideas and believe in each other. The Unicorn is but one of many fantastic characters with whom Alice learns to interact as she journeys down the rabbit hole, and behind the mirror: the Red Queen, the Mad Hatter, Humpty Dumpty, the Cheshire Cat, the White Rabbit, Tweedledum and Tweedledee. Their only similarity seems to be their altogether "curious" outlook on life, or rather on life as Alice understands it. They are involved in a number of strange activities, such as unbirthday parties and fencing with umbrellas, and several more familiar ones taken to unfamiliar extremes, such as interpreting "nonsense words" and battling for crowns. What is Alice to make of Wonderland and the world beyond the looking glass?

Alice has several approaches which seem sensible to anyone who seeks to make the strange familiar—as ethnographic researchers do. She becomes a watcher, a listener, and a participant. She talks to the residents and tries to impose some order on her findings, checking her understanding by engaging in conversation with those she meets. Alice perseveres, even though her attempts at unraveling the behaviour of Wonderland's denizens sometimes make her cry, "Nonsense!" in frustration. Mostly, however, Alice sees her problems in understanding as a wonderful adventure, especially in retrospect as she shares her experiences with her sister and her cat.

If we want to investigate writing activities in an unfamiliar context, we will encounter what may seem to be curious people engaged in curious games, with some similarities to the games of our own academic world and also some remarkable differences. How can we gain access to and study such a world—and how represent it to those members of our own culture "back home," many of whom will be rather more like the sceptical Unicorn than the accepting cat?

In this chapter, I will outline my research approach. My adventure began in accessing a research location. Next, I will describe my activities in gathering data at the research site in interaction with those who worked within the culture I discovered. Third, I will clarify the techniques used to sort the data collected, and then, fourth, I will explain the method used to analyze the sorted data. Finally, I will discuss my representation of the data for further debate and use by interested parties within the academy and the investigated community.

Although I began this investigation as an interpretive ethnographer, attempting primarily to "generate insights, explain events, and to seek understanding" (Anderson, 1989, p. 253) of another culture, such understanding did not entirely meet my evolving research purposes. These purposes were relationship-building, pragmatic information sharing and effective writing intervention. Each researcher is influenced by certain research traditions, such as, in my case, those of ethnography, which seems perfectly suited to studying complex social phenomena. Though we must be "appropriately but not excessively suspicious" (Tchudi and Mitchell, 1989, p. 396) of our conclusions concerning what meaning our subjects may place on events, we should also question our own cultural assumptions as researchers.

Like Alice and the Unicorn, as researcher and researched, my informants and I could have remained locked in two solitudes. In my quest to build a relationship between us, I found it necessary to push the boundaries of generally accepted practices in the gathering, and representing of ethnographic data. I had already moved beyond the confines of interpretive ethnography, seeking to understand and influence my own community as well as the target culture, in order "to describe and understand the worlds in which researchers as well as the writers they study reside" (Brodkey, 1987, p.

413). To gather information, I did at first use field notes, but largely abandoned them in favour of video-recording for reasons I will shortly explain. Finally, I realized that, although I had used video to record and gather data in an ethnographic fashion, I wanted to represent my findings in a manner other than by ethnographic narrative. Instead, due primarily to my business audience, I wanted to attempt to persuade and instruct my readers in both cultures by constructing a model which would represent the collaborative activities of business writers.

Gaining Access to Data

Of the many groups that researchers might study, the high powered world of corporate Canada, in my case "Cerebellum" a computer systems integration company, is a world which certainly leads to a questioning of the university researcher's right to assign meaning to events or assume other hegemonic control. The corporation is, first of all, a culture sometimes at odds with the academy. The oppositions are easy, perhaps too easy, to enumerate: business is right wing; the university leans left. Business is pragmatic; the university, idealistic. Business makes money; the university spends it.

Gwendolyn Etter-Lewis, however, reminds us that "[w]e must cease to view the world around us in terms of duality and/or opposing pairs" (1991, p. 56) but should rather look for the possibilities for relationships. The business of integrating computer systems exudes power, and should lead us away from techniques which suggest the university's place is somehow above the life of the corporation. Here we are dealing with a different world, a different culture, but this world is quite secure in its wealth and influence. Studying business writers requires research approaches adapted to their own special needs--for pragmatism, efficiency, and immediacy. Business people relate to others on the basis of mutual advantage, and therefore, research methods used in their environment must similarly seek to provide that advantage.

Accessing The Research Site

In order to pursue a general interest in the working habits of business writers, in August of 1991 I became a research associate on the *Learning Connections Project*. Supported and funded by the Social Sciences and Humanities Research Council of Canada (SSHRC), the *Learning Connections Project* was conceived and pursued by Dr. John Willinsky, University of British Columbia, and Dr. Lori Neilsen, Mount St. Vincent University, Nova Scotia. Their investigation sought to increase an understanding of writing in the workplace and the schoolroom. They proposed "a university and corporate partnership that seeks to improve literacy in workplaces and school by using technologies that help people communicate" (Neilsen and Willinsky, 1990). Business employees at Cerebellum, Inc. and a group of high school students were introduced to each other and exchanged ideas via Internet. The students also communicated electronically with other students across Canada (e.g. between Vancouver, BC and Bridgewater, NS). The interests of the principal investigators centred on the influences of technology on communication, and the influence of correspondents on each other. It was hoped that such an exchange might lead to gains by all participants, those in school settings and those in business ones.

Nearly thirty (out of a total of sixty-five) of the employees at Cerebellum, Inc. took part in the *Learning Connections Project*, both by corresponding electronically with students (later meeting them face to face) and by submitting copies of their other, more specifically job related, written work. Over the two years of the project, though student subjects remained relatively constant, employee participants came and went: some hired and electing to join the project; some fired or resigned from the company, some just stepping off the project. Fortunately, a strong core of participants remained with *Learning Connections* through its entire life. Others worked with us very willingly for short periods of time, for example to fill a spot vacated by an employee relocated to another branch office. *Learning Connections* continued despite these often unstable conditions. The project team from the university learned to work with a modern corporation which sees such change as a mostly desirable fact of life.

Even the highest levels of this branch office of Cerebellum Inc. saw considerable change during the project. Cerebellum has no official hierarchy but a definite sense of seniority and authority which belies a flat corporate structure. Shortly after we began, the general manager who first allowed us permission to do research was moved from his position by corporate head office decision. The new general manager, also a company vice president, allowed research access to the employees, but was not willing to be a more active member of the project.

Accessing the Lives of Informants

Access, however, is more than just gaining permission to enter a research site. It is also gaining the trust and understanding of the participants who may elect to share openly or more begrudgingly. Due to the long term nature of the project, in my position of business liaison within the project team, I was able to visit Cerebellum twice weekly and gradually establish long and continuing relationships with many of the project's business participants. In addition to my duties as trouble-shooter during the e-mail correspondence (for example, dealing with problematic messages—incomplete, inchoate, or inappropriate), I drank coffee with employees, went with them for lunch and out shopping, celebrated new babies (and new photocopiers), welcomed new employees, and commiserated over job frustrations. I bought flowers during Secretaries' Week and was treated more and more as "one of the company family," if a rather itinerant member. My name appeared on the company employee list and I was invited to play softball and go bowling. I was assigned a desk, sometimes in the executive wing (more often in the programming cubicles), and always had access to a private telephone. Curiously, as Alice might have said, in a branch office of Canada's largest computer systems integrator, I almost never had an assigned desk with a computer (though many employees invited me into their work spaces when I needed a few minutes on a terminal)!

Gathering Data

It was part of my duty, while working on the *Learning Connections Project*, to collect writing samples from the business correspondents. Although I began by placing appropriately labelled boxes in the work space of all participants, I soon discovered that very few people were saving their materials. On my twice weekly visits, I began by making the rounds, but began to stop and chat if the employee seemed to be willing and available, whether or not there was anything to be collected. Often my visits resulted in discourse artifacts being produced on the spot (by printing off a copy of something which may have only existed electronically, for example), but just as often I also began to gain insight into the jobs of the project's participants. Sometimes I would stay and watch them write, marvelling at the constant interruptions of phone callers and visitors. Many of these putative intruders were actually contributing in some fashion to the evolution of the document under construction by the writer, or asking for input for documents under construction elsewhere. The collaborative way of working was omnipresent.

I soon discovered that, as time passed, I was learning about their ways of *doing writing* by connecting informally with each of them. Not only that, but I was discovering their relationships with each other as they were involved in the creation of knowledge in text. I gathered these insights partially through logs which I kept as a research assistant. However, a large part of my understanding grew as I participated at Cerebellum. I gradually developed general impressions of Cerebellum employees, their work and their inter-relationships. We built on a common interest: we were all writers and more or less interested in how writing worked (and why it sometimes did not work).

Ethnography seemed the perfect way to begin my investigation. After all, it proceeds from the belief that "the most important behaviour of individuals in groups is a dynamic process of complex interactions ... [and this] behaviour is influenced by the setting in which it occurs" (Best, 1981, p. 113). Behaviour in general is a dynamic process, and ethnography a long term study. It seemed to me important to begin to understand a process such as collaborative writing which changes, subtly or dramatically, as time passes. Given different contextual frameworks--of places, people, objects--people shift their behaviour. Relationships too are built on time and careful watching, remembering always that people are rarely, if ever, completely predictable.

Another advantage of ethnographic methodology for my research purpose was that the researcher/subject relationship is an intimate one, as Best (1981, p. 113) observes, "based upon trust and confidence." The ethnographer, he maintains, "gets inside the minds of the subjects, while at the same time interpreting the behaviour from his or her own perspective" (Best, 1981, p. 113). Eventually, I wanted to do much more than that, but it was a valuable place to start. Trust and confidence, in my experience, are difficult to earn and easy to lose. They build up slowly over time and can be damaged quickly. My challenge quickly became how to find an effective and ethical stance in research in order to achieve both "an intimate view and a cool assessment" (Geertz, 1988, p. 10), necessary to the research process.

I did not begin by trying to effect a *detente* between two dissimilar cultures, the academy and the corporation, but merely to try to interpret the behaviour of this "other" culture. I had signed confidentiality agreements as a condition of gaining research access at Cerebellum, but my concerns became deeper than allowing a vital document into the hands of a business competitor: I wanted to deal fairly with people that I knew and liked. More often than not, senior directors rose to my defence when I asked to sit in on meetings and objections were raised on confidentiality issues. I owed them at least as much consideration as I decided how and what to gather. One research issue became how to represent the Cerebellum collaborators in depth, but also in a way which they would find accessible. Clearly, I also owed a debt to the research community to gather and present data in order to provide new insights in writing research.

To focus my studies further, I began to study Cerebellum's employees in more detail as they engaged in the writing activities. Project participants wrote frequently in a number of genres: memos, letters, technical trouble reports, seminar notes, user documentation, and company newsletter articles, to name but a few. They consulted with each other over the phone, in the hallway, over coffee, in meetings and over e-mail systems. And so I began to gather data: notes, rough drafts and final copies. I was, however, dissatisfied, convinced that the answers to my questions were not in these products of writing. I began to sit in offices and take notes: what did the writer do?

One early informant talked aloud as she wrote in the manner of a spontaneous think-aloud protocol. Gathering data from her, on her writing process, was relatively straightforward. However, the problem of observing and recording increased as other Cerebellum writers broke their intense (and *quiet*) periods of drafting to seek advice from others. The conversations were rapid and fascinating. I could not capture all of the words, nor the tone of voice in my notes, but even less could I capture the nonverbals (body language and facial movements) nor the context of desk decorations, or presence or absence of windows, all of which began to seem more important to the writing process. Also I realized that I had only a sense of the meaning of the conversation, but was hampered by my lack of background in the language of computer professionals. In addition, I was fairly well acquainted with the writers and advisors in more casual settings, and it seemed to me that these personal relationships were important in the operation of the working process. I had the sense that what I could record with my pen was but an incomplete or even misleading facade of the whole reality which was writing at Cerebellum, Inc.

Video-taping offered me great opportunities for the kind of detailed study needed to examine collaboration. Jacob (1987) points out that ethnographers of communication often use videotaping because it "preserves data in close to their original form ... continuous ... comprehensive ... [so that the] naturally occurring sequence and duration of actions is recorded" (p.20). Researchers such as Kirsch (1991) had to count on individual writers to produce *think-aloud protocols* (not at all spontaneous), a technique sometimes criticized for its artificiality and tendency to cause self-fulfilling prophecy (Bizzell, 1982). I realized in doing my own research, that collaboration by its very nature involves talk (and nonverbal behaviour) which can be captured on film and then systematically analyzed and represented in ways valuable to the collaborators.

There were other ways in which video-recording contributed to my study. Collier and Collier (1986, pp. 169-170) suggest that we need both verbal and visual sources of intelligence to gain more complete research insights. I wanted to let both sources support each other. Obviously, the written account has a long and honourable place in the reporting of ethnography. However, the potential of the visual, perhaps underrated in a Western culture which "wants it in writing," I believe, has not yet been fully explored, but some research examples show the rich possibility of visual data.

I was initially inspired by, for example, Seymour Papert (1980), in *Project Headlight*, who sought to examine the influence of computer technology on elementary school children. Goldman-Segall (1989, 1991), a member of the original project team, used video techniques to show the growth of children's thinking as they interacted with the computer programs. Her video camera recorded the nuances of voice and behaviour so valuable to the ethnographer while her informants' response to the video-camera revealed and recorded something about the culture of the classroom. As Hammersley and Atkinson (1983) say in response to possible protests that any observer may be intrusive: "How people respond to the presence of the researcher may be as informative as how they react to other situations" (p. 15). It seemed to me to me that video-taping in an ethnographic fashion (that is, by immersing myself in the environment) would offer insights into the collaborative manners of the writers at Cerebellum.

In January of 1993, I sought and received permission to video-record at Cerebellum in addition to taking notes and removing written artifacts. Most of the reaction from employees was positive, perhaps because this is a high-technology company, and perhaps because the general manager was an enthusiastic camcorder user, and had just been the subject of a television program on his business approaches. Finally, the employees were used to my presence. I used a full sized recording unit with which I "shot from my hip", as used and recommended by Goldman-Segall (personal correspondence, January 1992), rather than on my shoulder ("thank goodness", one informant said, "otherwise you'd look like the Borg!"--a reference to a race of half machine, half human entities appearing in *Star Trek: The Next Generation*). The placement of the camera meant that I could focus on the whole scene, rather than the smaller frame visible through the viewfinder. This wider perspective allowed me to observe off camera behaviour, and seek out other events to record. Since I was not barricaded behind my camera, I was also more available for interaction with my informants. In addition, by this time I had been at Cerebellum for eighteen months and they were accustomed to talking to me as we worked.

Sample Selection

In looking for a representative case of collaborative writing, I wanted a project which

a) offered a relatively short term project (since many went on for months)

b) would be completed in-house (to avoid ethical and privacy problems with vendors)

c) did not involve expensive travel arrangements (as Cerebellum deals with clients at sites all over the world)

and d) would involve a limited number of writers (to allow for the broadest possible coverage and to look at writers working in different subgroups).

Both Borden and Sundial seemed to meet these criteria. The Borden proposal did have some vital information gathering events which occurred off-site, and were thus unavailable to me. Otherwise, everything took place in-house over eleven days and involved eight collaborators. The Sundial proposal turned out to be more problematic, since it was originally planned as a project for one branch office, but was substantially moved to another office. Thus, it proved to be difficult to follow in detail. However, the meetings I was able to record did offer tantalizing glances (and corroborative data) during the early, middle and late phases of the text production process, and did involve a largely different group of collaborators.

Therefore, I captured the Borden proposal writing process as a case study supported by further examples from the Sundial bid. The study examines the full range of writing activities which surrounded the production of a single document. In January 1993, I joined the Borden proposal writing team as a participant-recorder. During the following two weeks, I was at Cerebellum from early in the morning until late at night, immersed in the process, recording every event possible which was undertaken in the completion of the proposal. The Sundial proposal was taped during August and September, 1993.

I also talked at length with the writers, none of whom were specialized technical writers, about their interpretation of the various activities of the collaborative writing process. They commented as well about other events which I had missed (often due to concurrent happenings). We spoke informally as well about their reactions to being filmed almost constantly. As might be expected, reactions varied widely. Extroverted sales personnel loved the attention, often playing to the camera. Quieter, more introspective employees, some technicians for example, agreed that they mostly tried to ignore me (or rather my camera). As the days went by, however, much of the office, including employees not involved in the proposal effort, began inquiring about my progress as a "film maker": they even offered advice about the whereabouts of key players, asked about the camera, and wondered aloud who would be interested in the final result. This interest, even excitement, gave me further openings to discuss what I was doing (for example, not making a film) and to build a relationship with more employees in the office. I even ate pizza late in the evening with clients and employees (as the company fed employees and guests working overtime), which afforded me a chance to interact with representatives of other businesses important to Cerebellum's success.

Sorting Data

As I began to follow the writing activities of Cerebellum employees more closely (for example, moving with them from their desks to a meeting in the boardroom), I began to discover that there were, however, limits to my behaviour as a researcher who was not really an employee at all. Unlike Alice, I found that my informants were often pleased to include me as participant-recorder, but leery of who else might share my findings: "researchers must weigh the quality of the data they can gather (and whether they can gather any data at all) against principles such as confidentiality, privacy, and truth-telling" (Howe and Eisenhart, 1990, p. 8).

Given the competitive nature of business in the present market conditions, I was often amazed that Cerebellum executives let me record as often as they did. Some informants developed signals for use during filming sessions (one senior director would wave his hand if he wanted something kept private—a client name perhaps) and I would wave or nod in return. I learned that, in general, data had to be sorted less rigorously as time elapsed between collection and sharing with an outside audience. Because of confidentiality agreements with clients and sub-contractors, information which was sensitive now would be far less so in six months. As well, a leading edge idea developed by Cerebellum (for example, a business strategy which would differentiate them from their competitors) was more problematic for sharing with a general audience than technicians deciding on a heading for a diagram.

All film, notes, and written artifacts generated by me or by employees were available for my study. Except for a very few sensitive documents, I took data with me when I left the office. Sorting data for use in searching for work patterns became a simple matter of using everything which was clear enough (in picture and speech) to be informative. Further sorting for focus on collaborative events was done after I had completed frequent viewing of tapes and transcribed conversations which surrounded the actual drafting of text.

All participants' names can be kept anonymous in written transcripts, but sharing video clips is more difficult as names are exchanged, including names of the company, on and off camera employees, clients and subcontractors. Sorting then becomes a matter of choosing examples which are informative without divulging sensitive information. As with the complete transcripts, clips must also be cleared by senior staff for further sharing.

My challenge in sorting was to guess what Cerebellum would find too sensitive for general discussion and to accept such limitations as a condition of my continued research. The reality was that every employee was expected to make the same non-disclosure agreement. Information is a valuable commodity at Cerebellum, as it is in most businesses (see also Debs, 1991): it translates almost directly to money and jobs. Information in my culture is a step on the way to epistemological pursuits; that is, a step towards making knowledge. I could use everything, but had to be careful how I represented my conclusions to a wide audience.

Analyzing Data

Howe and Eisenhart (1990) maintain that "justifying qualitative research largely consists of developing and articulating methodological design and analysis standards" (p. 2). Clearly, although the researcher can learn much from studying the classical rules of, for example, ethnography, "a methodology must be judged by how well it informs research purposes, at least as much as by how well it matches a set of conventions" (pp. 4-5). The conventions continue to be challenged as the research community re-invents itself in response to new insights and changing research purposes and available tools and techniques. Thus, I began to seek ways of studying business writers that would meet my research purpose of offering back to them a readily understandable picture of their collaborative activities.

Ethnography offers us one way to examine a complex process set in an environment of social relationships and rules, which in this case speaks to a real need:

> [The]relative lack of growth in contextual research on writing can be attributed in large part to the composition community's relative unfamiliarity with ethnographic methodologies, which differ radically from more established experimental and cognitively-oriented case-study approaches. (Durst, 1990, p. 401)

Certainly, recent calls for more ethnography (see for example Ede and Lunsford, 1990) indicate a desire for a more detailed look at composition activities. For researchers of language issues who acknowledge a language's base in culture (for example, Vygotsky, 1978), ethnographic research seems an ideal way to reveal language/culture relationships. For writing educators, Brown and Herndl warn: "If we do not recognize and accommodate [culture], our teaching fights the culture--and always loses" (1986, p. 12).

It is difficult for us not to perpetuate a hegemonic separation between cultures, whether the "other" culture is students or business. However, as we have seen, ethnographic approaches help to make us more aware and perhaps more able to confront these difficulties and overcome them. An analysis of events must address issues in power and power-sharing. As Doheny-Farina (1993) reminds us, "[b]ecause there is work to be done in the world, we need to walk that tightrope between ethical self-consciousness and our attempts to observe and analyze systematically and perceptively what is going on around us" (p. 267).

Video-recording fixes the transitory nature of events in such a way that analysis becomes more rigorous as the researcher views the data repeatedly, trying to find meaning amongst the "piled-up structures of inference and implication" (Geertz, 1973, p. 7). Goldman-Segall (1989) comments that videotaped events lend themselves to "systematic evaluation" (p. 1) which often proves difficult in other observational research. I sought to gather details on a very complex event, collaborative writing, and then use the data to build a model which I hoped would organize and schematize the collaborative writing process.

I viewed the video of the proposal writing again and again, logging events, transcribing conversations, and looking for patterns of interaction. I looked for ways to code data, postulating three levels of engagement with text, and divided a long, interwoven series of happenings recorded on video into chunks for transcription and further analysis. I drew diagrams of the chain of events leading from the first strategy meeting to the proposal leaving the office. I coded the activities of personnel from one event to another. During this time, I continued to search the professional literature for further insight. In so doing, I began to "construct meaning with the data, identifying patterns and looking for answers to ... questions" (Grant-Davie, 1992, p. 273).

In order to ensure validity, I checked my understanding of conversations with informants. I worked at length in creating divisions and subdivisions for data. The data and categories were discussed with my research supervisor. As Grant-Davie reminds us, validity "should be judged in the context of a particular data base and research purpose; and it should be demonstrated by elaborated definitions of categories and ample examples to illustrate them" (p. 281). My data analysis resulted in a model identifying three levels of engagement with text, accompanied by detailed lists of characteristics and illustrated by many sample events.

Margaret Mead (1975), herself an early champion of video use, called for "the articulate, imaginative inclusion in the whole process of the people who are being filmed" (p. 8). Such inclusion seems to me to be particularly important in a business context. My Cerebellum informants were often university trained and fully aware of "the particular types of games that researchers play" (Jones, 1973, p. 36), perhaps because they had played them! One answer to this possibly divisive issue is to include informants as commentators. Collier and Collier (1986) speculate that "only in theory are 'we' willing to let the 'native' have authoritative judgement" (p. 157). My analysis was aided by insights gained from informants, which I recorded in note form between events during the proposal writing process, and also by comments on film clips made by technicians. Underlying this understanding, of course, lay insights gained from eighteen months of visits and more informal observations.

Representing Data

Telling the world, at least that portion of it that reads research papers, is, for me, clearly different from Alice telling her cat. Obviously, the story of what I found at Cerebellum was crucial to an understanding of another culture by my culture. And still I wanted more: "research in professional writing needs to respond more strongly to needs in pedagogy, while continuing, as well, to respond strongly to needs in theory" (Spilka, 1993, p. 215). I wanted a way to represent my findings to the business writers themselves and to those educators who would help them to build their own meanings.

To reiterate then, I sought to discover how collaborative writing proceeded at Cerebellum, and to represent my discoveries fairly (accurately and sensitively), as "warranted conclusions" (Howe and Eisenhart, 1990, p. 8) to interested parties. My research led me first to involvement in ethnographic approaches, then to a consideration of the rhetoric of narrative and graphic representations, and finally to the construction of a model.

One powerful way to share findings is by representing them in ways which will be familiar to all interested audiences. Narrative is one way to communicate discoveries. It has several advantages, for example ensuring that "the language of the results and implications [is] in a form that is understandable to and debatable by, various actors in a particular setting" (Howe and Eisenhart, 1990, pp. 7-8). Language, however, is not merely a conduit for information. It is the culturally sensitive product of a community. The product of research is a discourse, shaped by the rules of the community which writes such documents: researchers. It is the responsibility of researchers to alert readers to rhetorical approaches. Ethnographic accounts have their own rhetorical devices, for example, the "thick description" (Geertz, 1973), which, according to some scholars, "functions as a textual strategy authorizing attempts at ethnographic realism" (Herndl, 1991, p. 321). This, I believe, is not so much to be avoided as to be examined and admitted, and further methods found for representing data in ways no less rhetorical but perhaps more useful in some contexts, and for some purposes, as I hope my model will be. As Kleine (1990) said of the best ethnographic text, our concern should be that our representations are "not *true* but ... *effective*" (p.122), effective in building relationships with others in the informant culture, and helping to improve writing practices.

The model was developed by me as a way to show the patterns of working together which developed among members of the collaborative proposal team as the writing project proceeded. Both the chronological description of the proposal process and the diagrammatic representation of the levels detected in the analysis of that process are based on video data, which is much closer to the original experience than fieldnotes could ever be. In addition, I discovered that fieldnotes are too limited by the speed of the writer, and by the immediate understanding of the researcher, especially when recording technical conversations.

The ethnographically gathered data led to a visual representation of collaborative writing patterns. The model presents three levels of engagement with the evolving business proposal text. Each level has different collaborative activities and players associated with it. *Levels of Engagement with Text* offers a concise overview of my findings and moves beyond the representations of the isolated writer which have, so far, dominated the writing process discussion in educational circles. As Pemberton (1993) notes: "in order to teach writing effectively, we must know as much as possible about how people write; in order to know how people write, we must observe them writing under a variety of conditions and *describe what we observe them doing*" (p. 41, emphasis mine). My descriptions construct the world of Cerebellum writers as I saw it: in time-order at first, and then, later, in diagrammatic representation. My goal was to present an effective interpretation of another culture for use by many interested parties.

The model postulated is undoubtedly and intentionally a reduction and abstraction that, nevertheless, renders the extremely intricate into the manageable and useful. It will require further corroboration before any generalizability may be claimed. Nevertheless, these two instances (Borden and Sundial) provide a beginning point. The model operates as something of a hypothesis and, perhaps, a pedagogical convenience and focus for future discussion.

CHAPTER FOUR: A MODEL OF LEVELS OF ENGAGEMENT WITH TEXT

> "Let's pretend there's a way of getting through into it, somehow, Kitty. Let's pretend the glass has got all soft like gauze, so that we can get through. Why, it's turning into a sort of mist now, I declare! It'll be easy enough to get through—"
> (Lewis Carroll, *Through the Looking Glass, and what Alice found there*)

Tempting though it may be to think of any writing project in terms of simple and straightforward stages involving pre-writing, drafting, and revising, the Cerebellum proposal process shows vividly just how much more complex the writing process is, especially when it involves writers working in collaboration. As discussed in previous chapters, proposal writers must be always cognizant of the influence of their writing on others, not just the client but also fellow workers, project partners and subcontractors. In similar fashion, I seek to develop a series of insights that will ultimately be useful for two audiences: academic researchers and business writers.

The Business Proposal

A brief explanation of the document under production may be helpful. The particular group of collaborative writers which I studied at Cerebellum, Inc. had, as their ultimate text production goal, a completed **business proposal**. In response to a Request for Proposal (RFP), a document sent out by a company inviting response from several interested bidders, a proposal team develops a plan to answer a business need. Proposals, which may vary in size according to the complexity of the RFP, are written by a team of employees and delivered by a deadline time on a particular date.

Although the contents of a proposal vary somewhat, a number of topics are commonly found in such a business document. These topics are discussed in numbered sections, whose order of appearance may change but, again, are fairly consistent. In fact, the question of topics and their ordering becomes an issue for this particular proposal team during the writing process. Standard sections are the covering letter, the executive summary, the objective of the proposed project, the solution in detail, the plan for implementing the solution, the price of the solution, and the appendices, which often include a description of the bidding company and its other successfully implemented projects. The proposal tries to respond to a very basic question: *Why should we deal with you?* Formulating the answer, however, is a complex rhetorical feat.

Levels of Engagement with Text

Further to my goal of communication with both the academic and business communities, as a way of "getting through" from one world to the other, I have developed a model that divides the proposal writing process into a series of levels, for the sake of rendering an immensely complex process into more readily comprehensible steps. The outline in Table

1. summarizes the objective, collaborative tasks, quality and authority associated with each of three different levels of engagement with text.

No chronology is intended by the level numbers (I, II, III); that is, the levels are not phases. Level I does not come first, Level II second and Level III third. Neither should any hierarchy of importance be attached to the order of presentation; that is, although level III is discussed first, it should not be thought of as more or less important than Level I. A helpful metaphor might be to consider the levels as markers of depth, as one would measure water. A higher level (III) then is closer to the surface; a lower level (I) is deeper. Each activity within a level has its own importance to the task at hand, with collaborators moving up and down through the levels many times, as will be seen in the relevant descriptions below.

The collaborative writing process makes obvious several ongoing themes which are common to all levels, but manifest themselves in different ways at each level. Building and maintaining team relationships (including being sensitive to various audiences), maintaining a schedule, keeping a comprehensive view of the whole project, and finally, focusing on the tasks of the level at hand all emphasize the communicative nature of composition for the Cerebellum writers.

Table 1. Outline of Levels of Engagement

Level I Drafting

Objective: drafting text
Collaborative Tasks
- Building Text
  - drawing (charts, diagrams)
  - selecting (using "clip-text")
  - rehearsing (words, phrases)
  - composing
- Checking Text
  - reading (RFP, other documents, current text)
  - reviewing and justifying
  - style combining

Quality: intense, focused

Authority: skill based (How well do you present ideas in written form?)

Level II Information Gathering

Objective: assembling all details necessary to complete proposal
Collaborative Tasks
- Building Content
  - discovering sources of information
  - gathering information (e.g. availability, costs)
- Checking Content
  - collating and sorting information
  - considering impact (e.g. estimating time)

Quality: pragmatic, diffuse

Authority: knowledge based (How much do you know?)

Level III Strategizing

Objective: establishing general strategy of the proposal
Collaborative Tasks
- Building Strategy
  - generating ideas
  - differentiating approach
  - pricing solution
- Checking Strategy
  - evaluating alternatives and options
  - modifying and elaborating

Quality: extroverted, free-ranging

Authority: status based (What is your title?)

First, team work requires that time be spent on building connections between collaborators (including proposal writers, subcontractors and clients) and maintaining those positive bonds once achieved. Such social networks are established in various ways and for various reasons during the different levels of engagement with text. Second, Cerebellum writers must maintain their awareness of the time pressures under which they are composing the proposal. The final deadline marks only one, though the major one, of the mileposts which must be attended to during the writing process. Third, members of the proposal team at every level often allude to other levels, and to other events on the proposal writing timeline, in an attempt perhaps to maintain a comprehensive view of the entire process. Finally, collaborators must learn to focus on writing tasks at hand, whether those tasks be strategizing, information gathering or drafting. I will illustrate these on-going themes of collaborative writing in detail with examples from data during the discussion of the particular proposal writing events observed.

Each level is defined and described in general terms below. I have decided to begin with Level III, strategizing, because the collaborative writing processes I have observed began with discussions of the general business approach. Level II will follow, as information gathering begins immediately after a strategy is established. Level I, drafting, starts last, and will be discussed in the ultimate position.

Level III--Strategizing

Level III is concerned with establishing and maintaining a general strategy which will be realized in the business proposal. Such strategizing involves senior employees in deciding on a winning approach, both in content and in presentation. The primary goal, then, is to establish what business people themselves call "high-level" ideas; that is the general, non-detailed tenets of business strategy for the winning of job contracts. The customer should be impressed with the company's understanding of the business problem, their potential competence in the effecting of a solution, and their competitive business stance, that is, price. Because pricing by various competitors on any single bid is now very similar, today's customers want to see extra quality in offers, highlighted by the business strategy. The notion of strategy embraces not only business approaches, which partner to choose, for example, but also rhetorical ones such as questions of diction. How to present ideas is an important part of the strategy of winning contracts.

Several activities are undertaken at Level III which serve to build the business and rhetorical strategy. Members of the team bring to Level III meetings stories of prior dealings with clients and potential customers. They discuss perspectives of how Cerebellum's overall goals might affect the current proposal. In close concert, the team struggles to generate ideas, differentiate their approach from that of potential competitors, and reach an appealing approach to pricing. In discussions aimed at discovering the best strategy, Level III collaborators aim for consensus but are prepared to deal with conflict to achieve the best answer. And as they do, the approach, which must gradually become the text of the proposal, is reviewed or checked. It is evaluated, modified and elaborated. The proposal grows and changes in collaboration with others, both present as are Cerebellum team members, and imagined, as clients must often be.

A further checking goal of Level III is to ensure that the proposal once drafted adheres to the plans agreed upon, and, further, that the text presents the strategy persuasively to the client. Senior management may also review the effectiveness of the proposal writing process. Several activities dominate the attaining of these checking goals: re-reading the Request for Proposal (RFP) and comparing its requirements with drafts of the text, talking to other team members and confronting problems of approach or role maintenance with them, and changing the text for persuasive impact.

The quality or tone of Level III is closely linked to the basis of authority for Level III activities. Meetings which deal with business and rhetorical strategy are usually extroverted and free-ranging. Members encourage each other to express their ideas without fear of excessive evaluation. The goal, obviously, is to generate many ideas in hopes that one or more will be worthy of further consideration as a general strategy. Senior employees are generally well experienced and have much to offer a brainstorming session. Authority at Level III, however, is based on company status. At Cerebellum, titles such as "Director" are invested with a good deal of authority. The persons holding these roles are more powerful in group situations. Differences of opinion and final closure are still regulated by the most senior executives, usually those with the most experience. It should be noted, however, that officially, Cerebellum claims not to have a hierarchical structure.

Ongoing Themes

While each level has unique objectives and activities, some themes percolate throughout all the levels yet are manifested in different ways at each level. The ongoing themes are establishing and maintaining relationships (including being sensitive to the various audiences), maintaining a schedule, keeping a comprehensive view of the whole project, and focusing on the tasks of the level at hand.

Establishing and maintaining relationships. Level III meetings attempt to build common purpose between and among team members of more senior status (for example, directors and managers). The team further tries to identify itself as a subgroup of the company by searching for "differentiators" (ways of separating themselves from competitors). Common ground is established in various ways, by relating shared past events, for example. Camaraderie is also built by such behaviours as responding empathetically during the meeting to the emotions of other team members (such as outrage and humour) and responding positively to their ideas. These activities are especially important when the meeting includes new employees, who are as anxious to blend in to company culture and establish themselves as valuable team members as the company is for them to identify with its goals. Care is usually taken in subtle ways to forge bonds among team members, and between the team and the company culture as a whole. However, team roles can also be attacked in more damaging ways. Finally, however, each member of the Level III meeting wants to establish, or even re-establish, their expertise and power within the group. Individual members offer caution and advice to each other in a more or less friendly manner. They tell anecdotes, and even roleplay dialogue, to illustrate their points. At times they openly challenge other opinions aggressively, or show disagreement in more subtle ways, for example by engaging in private one-to-one conversations while the main meeting proceeds.

Audience sensitivity. At times, Cerebellum writers considered and treated the client audience as important members of the team in the proposal effort; at other times they placed them in more antagonistic roles. Participants in Level III strategy meetings also struggled constantly to establish relationships with business partners. Partners are vendors who sell, perhaps, computer hardware or some other product or service which Cerebellum, as a systems integrator, will need in order to provide a complete solution to a client.

Partners are yet another audience whose relationship with Cerebellum often proved difficult to establish.

Schedule maintenance. All collaborators working on proposal documents must balance their need to plan and investigate solutions thoroughly with their need to press forward to meet the proposal deadline. Sometimes sacrifices are made, and the need for care and attention loses out to the need for alacrity. Such scenarios may later be costly, however, and there are constant attempts to avoid panic and poor decisions--rushing to closure, for example, may beat the deadline but lose the profit margin. To this end, team members must also bear in mind the interlocking nature of their contributions to the proposal. At Level III, however, schedule maintenance is less important, perhaps because most strategy meetings occur relatively early in the process before time pressures become a serious problem. Keeping to a schedule, it seems, only becomes important late in the proposal production during Level III events.

Keeping a comprehensive proposal view. Level III meetings must often consider borderline sales which may be accomplished by the careful presentation of ideas by proposal writers. Such drafting would be accomplished during Level I. In addition, although senior management brings experience to the table, they also bear in mind the necessity of careful information gathering (Level II) to achieve the detail needed to implement the general strategy and reflect the necessary competence to win confidence. Level III meetings consider also personnel available to accomplish all tasks associated with the proposal writing task. Pointing forward to remind each other of upcoming tasks remains an important task of directors at Level III events.

Maintaining level of engagement with text. The generally senior status of employees who take part at Level III and the egalitarian quality of their meetings mitigates against strong enforcement of attention to task. Lapses must be delicately handled to avoid the appearance of threat to power, or to the wide-ranging scope of Level III meetings.

Level II—Information Gathering

Although members of the strategic team bring broad knowledge to Level III, once a general strategy has been agreed upon, details must be sought which are specific to the current situation. Such work involves primarily technical staff, but managers and more senior staff are sometimes involved as well. The primary goal of Level II is the assembling of information needed to complete the proposal. The proposal team reaches out into the company, even beyond the local branch, and finally outside company walls, working with people increasingly less familiar to them. What is available? What will it cost? Expertise, software and hardware can be bought and sold, but first, someone has to discover and access relevant sources of information. The less overt goal of Level II is the control of knowledge flow. Asking questions reveals interest, even business or technical approach, to a skilled interlocutor. Answers may come with "strings attached," and favours owed.

Several activities build content at Level II. Whereas Level III writing focused primarily on recording general concepts which arise as the result of brainstorming sessions, Level II writing concentrates on discovering sources of information, accessing those sources and then gathering details, filling in ("populating") charts and taking notes, for example. These details must then be considered, what I have called "checked," at meetings where collaborators discuss the impact of the information on the proposal. Level II information gathering and consideration may influence the general strategy shaped at Level III, and will certainly affect drafting activities at Level I.

Though information gathering has, certainly, some exciting elements of the "chase," knowledge seekers are usually involved in considering the pragmatic ramifications of information. Level II collaborations are often conducted in a market of buying and selling, dealing with a continuum of more or less known, and more or less friendly parties. Collaborators building a store of facts and ideas rely often on relationships developed over a long period of time, remembering also debts owed and caches of good faith available for use. Checking sessions are conducted with collaborators closer to the centre of the proposal effort to look at the ramifications of such information as availability and cost of goods and services. Level II is then more diffuse than Level

III, with collaborators ranging far afield to gather information. Such is the case in particular when dealing with advanced technology where products come and go with often stunning rapidity. Authority at Level II is knowledge based. How much someone knows will decide who controls the collaboration. The status imbued by the company hierarchy is thus largely dissolved, since new ideas come often from junior employees with recent education.

Ongoing Themes

Building and maintaining relationships. Level II activities which centre on information gathering also highlight relationship building and maintenance. Whereas senior management in Level III meetings often have the luxury of long-term knowledge of each other, information gathering operations must frequently be conducted with others relatively unknown. The seekers are required, if they are to be successful, to make the source feel sympathetic to team goals. If the source is a company member of another branch, support may be gained easily by, for example, appeals to expertise. If, however, the source is a possible competitor, or a possible, but rejected partner, inducing co-operation is more difficult. Requests must be more tenuous, careful not to promise more than the seeker can deliver. Suggestions of past favours, or future relationships tend to mark these discussions. And if there is any doubt that knowledge in the collaborative setting is power, consider the possible fallout of a single phone call seeking pricing information—what has been revealed by the information seeker? And how will the informant respond to the request? Something valuable may be inadvertently revealed: sources may be insulted. Information seekers must know when to be diplomatic, even circumspect. Conversations with collaborators more distant from the core team of company employees (such as clients and partners) may provide a further means of cementing the relationships of the immediate team, providing as they do information not just on facts but on emotional reactions which may later be important to the team's success.

Audience sensitivity. As discussed above, there are many audiences, more and less distant, at Level II. Telephone calls and face to face meetings prove to be more like playing chess than simply acquiring facts. As team members at Level II, writers face considerable challenges, including vendors and other audiences, as they attempt to gather information without giving away proprietary facts.

Schedule maintenance. A constant struggle between the need to be accurate and thorough, and the need to make haste permeates Level II activities. Although senior executives would prefer to do data collection first and then proceed to drafting, technicians must often do tasks at the same time. They remind one another of how time is passing, especially during checking meetings where one criterion becomes the amount of time a procedure will take. Because proposals are written under considerable time pressure, better ideas which take longer will often be rejected in favour of adequate but quicker solutions.

Keeping a comprehensive proposal view. Being "in the middle," writers seeking information at Level II are acutely aware of the duties given them by Level III strategizing, and also by the concern for written presentation of ideas in Level I. They may, for example, begin to sense that the general plans of Level III are unrealistic as they discover new information. Or they may find questions of presentation answered in pieces of text available in other documents, ready for re-use in the present proposal. The gathering of facts and opinions, textual formats and even whole sections of text seems to be pursued in much the same fashion.

Maintaining level of engagement with text. Remaining engaged with Level II tasks is fairly easy during the building phase where collaborations are quickly established, questions and answers are exchanged, and collaborations are broken off. Checking meetings are more problematic, given that participants must face the implications of information and are therefore often tempted to discuss the strategy (which should happen at a Level III meeting). Collaborators may be tempted to jump to levels which are associated with more powerful employees.

Level I—Drafting

Level I has as its primary goal the production of written text. Existing files become like data bases which can be accessed for cut and paste activities to help to save time and target audiences. Writers must assemble information gathered at Level II, keep in mind general directions established at Level III, and work to draft a detailed solution to the business problem even as they look for the best method of rhetorical presentation. It is during Level I that the secondary goal, evaluating the solution, also becomes important. General ideas may turn out to be unworkable once drafted in detail. Vital steps may be missing, requiring more time and money to accomplish. Writers must remain aware of the need for more information, or for the alteration of high-level strategy. Collaboration builds not only the text but the solution itself concomitantly.

Drafting proposal text still proceeds through building and checking activities. Building text, which technicians do while developing the solution, typically involves several activities such as the drawing of charts and diagrams, either for inclusion in the final text or for the purpose of sharing ideas; selecting and modifying previously written text for use in the document currently under production; and composing original text which involves the oral rehearsal of words and phrases. Checking activities include reading documents (such as the RFP and the text under production), reviewing and justifying the presentation of ideas, and merging the various writing styles into a unified corporate voice.

Level I, drafting, especially during building of text is very intense and focused, what business writers at Cerebellum call "heads down" work. There is an urgency to complete the writing task. Authority at Level I is based on skill with words. How well a writer presents ideas often determines who will control a Level I collaboration. However, shared leadership sometimes occurs as well and high company status often intrudes in the logical granting of power to the most skilled, as we see also at Level II.

Ongoing Themes

Establishing and maintaining relationships. Level I collaborations of writers actually drafting text are marked by fairly intimate relationships. Writers learn to lead and follow, clarify and detail, order and re-order in a kind of choreography which grows easier as the dancers become more familiar with, and accepting of, each other's ways of writing. Ideally, they must find ways to produce documents, agreeing on outlines, drafting workplans in diagrams, dividing data entry duties, maintaining give and take on final decisions regarding wording. Writers must also discuss how to defend their decisions, especially as the writing of the document does not follow the discussion of the business solution, but rather shapes general premises into operational plans. Drafters constantly evaluate their document based on discussions with each other. Since all text might be built and checked by different writers or groups of writers, relationships also tend to make drafters more equal. A junior engineer, for example, may be asked to review the work of a more senior technician and will be expected to be critical.

Audience sensitivity. Level I involves collaborators struggling constantly with questions of audience. Collaborators must be aware of all the audiences for their document--clients, partners, subcontractors--whose desires must also be kept in balance by the company directors and managers (yet another audience!) as they review the document. Indeed, varying interpretations of the desires of the most important ultimate readers, the clients, can consume a great deal of time. While technicians often prefer to write to an audience of fellow engineers, they too must deal with the need to write, at least in some parts of the proposal, for an audience of senior executives in another company. The style appropriate for different audiences varies, and this can become problematic.

Schedule maintenance. As one director at Cerebellum was heard to comment: "We are eleventh hour people." Despite the efforts of collaborators to hurry along (and enjoin other team members to hasten as well), drafting tends to fill time available. The ultimate deadline, the time at which the proposal must arrive on the client's desk, serves as the final maintainer of the schedule during Level I. Other comments intended to enforce team discipline and to help the group stay on time are made directly by senior employees.

Keeping a comprehensive proposal view. Level I drafting is evaluated by its adherence to ideas advanced as general rhetorical strategies during Level III meetings. Level I drafters must also be aware of the need to cycle back to Level II activities if they need more information to make further drafting possible, or to Level III if more general problems arise. Level I also looks forward to the possibility of an oral presentation stage if the written proposal is shortlisted. At such a presentation, managers and senior technicians will be asked questions of clarification, which can be anticipated by writers who discuss their ideas fully with each other, and especially with those likely to be questioned.

Maintaining level of engagement with text. The intense, focused quality of Level I activities, motivated largely by time pressures, tends to ensure that writers will stay on task. If they are tempted to jump to another level, it will be because what they are writing puts them in a quandary of some sort: perhaps it reveals a difficulty in the overall approach, or some missing information.

Conclusion

The preceding overview of the Levels of Engagement with Text will, I trust, assist readers to understand the general outline of my model. Three levels are posited. Level III is concerned with strategy, Level II with information, and Level I with drafting. The three chapters which follow describe and discuss twenty-three events, featuring business writers collaborating on the production of a proposal document. These events are presented chronologically. Readers are directed to Figure 1, which shows the **Path of Document Movement Between Levels**, and Table 2. which offers a **Classification of Events by Level, Day and Participant**. Participants are listed in order of rank in the unofficial company hierarchy.

These additional perspectives provide overviews of findings which should prove useful in following the narrative of chapters five to seven. The final two chapters, then, will summarize findings at each level and look at various implications of the model for business, education and future research.

Figure 1. Path of Document Movement Between Levels

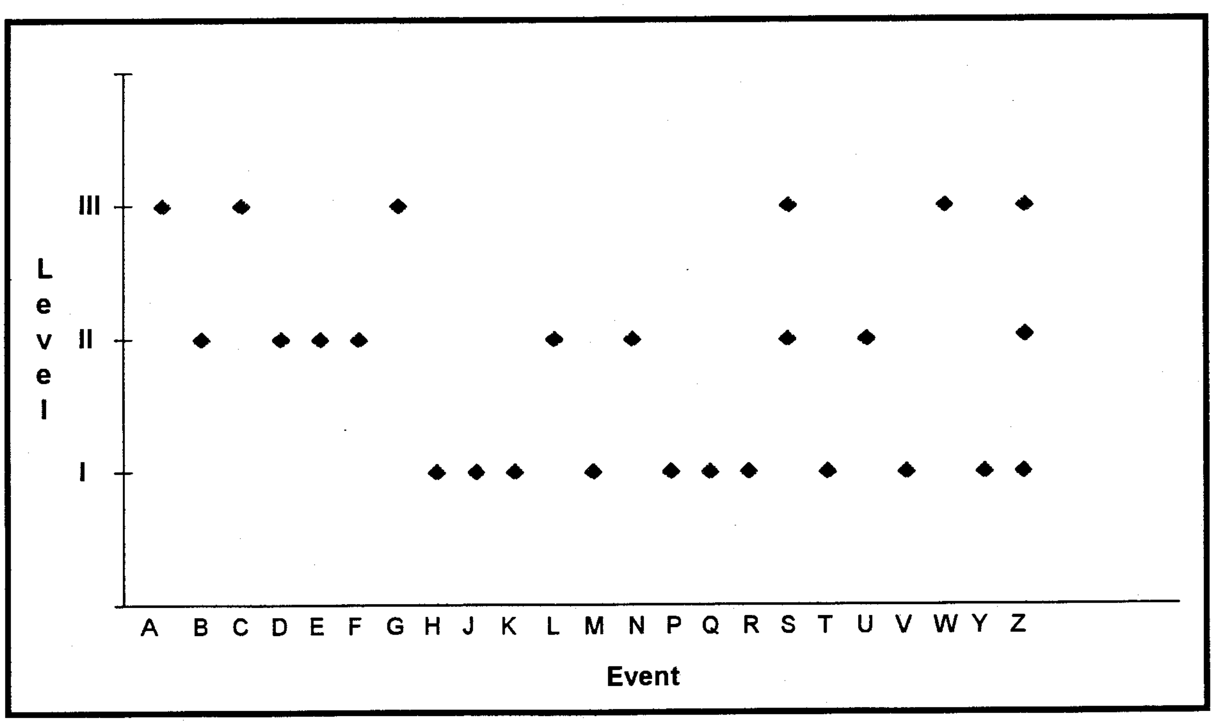

Table 2. Classification of Events by Level, Day, and Participant (in order of rank).

	Event	Subtitle	Level	Day	Participants
Early	A	The Starting Gun	III	1	D1 D2 D3 A1 M1
	B	Opening Moves	II	1	A1 M1 T1
	C	Changing Horses	III	4	D2 A1 M1 A2
	D	Who's On First?	II	4	M1 T1
	E	Decisive Action	II	4	A2 M1
	F	Under Consideration	II	5	D2 A1 M1 T1 T2
	G	Quick Change Artist	III	5	GM D1 D2 D3 A1 A2 M1
Middle	H	Problems, Problems	I	6	A1 M1 T1 T2
	J	Down to Work	I	6	T1 T2
	K	Covering Off	I	7	A1 T1
	L	The Audience Awaits	II	7	A1 M1 T1
	M	A Decisive Dyad	I	7	A1 M1
	N	Collabo-tech	II	8	T1 T3
	P	Enter the Dragons	I	8	D2 M1 T1 T2
Late	Q	The Recyclers	I	9	T1 T2
	R	A Woman's Place	I	9	D2 T1 T2
	S	Pulling Rabbbits Out of Hats	II	9	D2 M1 T1 T2
	T	Asking the Tough Questions	III I	10	D1 D2 A2 M1
	U	Rounding Up The Stragglers	II	10	D2 A2 T1
	V	Words, Words, Words	I	10	D2 T2
	W	If Only . . .	III	10	D2 A2
	Y	Coming Together	I	10	D1 D2 M1
	Z	Deadline Day	I, II, & III	11	D1 D2 A1 A2 M1 T1 T2

CHAPTER FIVE: PRESENTATION AND DISCUSSION OF EARLY EVENTS

> The White Rabbit put on his spectacles. "Where shall I begin, please your Majesty?" he asked.
>
> "Begin at the beginning," the King said, very gravely, "and go on till you come to the end: then stop." (Lewis Carroll, *Alice's Adventures in Wonderland*)

With the general characteristics of the Levels in mind then, let us begin at the beginning and examine illustrations of the model. These are revealed in data collected during the collaborative writing of two proposals which I have called "Borden" and "Sundial". The following chapters, divided according to early, middle and late events, report my observations and analysis of the collaborative proposal writing process at Cerebellum Inc. primarily during the development of a proposal to Borden Bodyworks. My discussion is augmented by several events from the writing of a proposal for Sundial Industries.

In each chapter, I propose to take the reader through a series of events detailing a particular process of collaboration leading to text production. Each "event" is a meeting of a group of collaborators. For example, Event A in the Borden proposal is a group of senior executives discussing strategy. At the end of this gathering, two members convene a new meeting, thus demarcating a new event. Event B, then, shows the proposal manager and an account executive gathering information about the proposal process. A technician is eventually involved and becomes part of the original conversation; therefore, Event B is sustained. Events can usually be placed at one of the three posited levels of engagement. Readers should note that I have not labelled any events as letters I, O or X in order to avoid confusion with numbers, especially since the levels are called I, II and III.

The Borden Proposal

Dramatis Personae

The Borden proposal was undertaken primarily by a group of eight Cerebellum employees (and a significant group of supporting people who had very minor roles and are briefly mentioned as they appear). The major players and their chief roles, as defined by the company, follow. The order, as given, is hierarchical; that is, directors have more power than account executives. Within groups, seniority (years with the company) dictates authority. Director 1 is thus the most influential director. Readers should note, however, that their actual roles shift as the proposal takes shape, so a junior member (in experience and title) such as Technician 2 may control a situation while collaborating with a more senior member. The main players, then, are as follows:

Director 1 (**D 1**) supervises the development of all strategy to build and maintain the business of Cerebellum as a computer systems integrator.

Director 2 (**D 2**) oversees Cerebellum's technical approach to solving client business problems.

Director 3 (**D 3**) co-ordinates the selling of Cerebellum's expertise and maintains its strategic partnerships.

Accountexec 1 and 2 (**AE 1 and 2**) are ultimately responsible for the proposal in every detail: pricing, viability, final success. They bring in the business initially and maintain customer relations during a proposal and the following project to promote further business opportunities.

Manager 1 (**M 1**) supervises the proposal development process to ensure on time completion, and serves as lead writer and co-ordinator of the proposal writing team.

Technician 1 (**T 1**) creates the technical solution and is often called the technical architect.

Technician 2 (**T 2**) serves as assistant to the technical architect.

General Background

After Cerebellum had already been working on a project at Borden Bodyworks for several months, Borden decided to proceed with a completely computerized approach to record-keeping which would connect their many branch offices both with each other and with a constant stream of clients. They hired a project manager ("Jake") to represent them, and issued an RFP to find the computer hardware which would solve their problem. Amazingly, large portions of the RFP had actually been copied (errors and all) from documents outlining technical needs which had previously been written for Borden by Cerebellum employees. Now, however, Borden wanted a computer system which would provide a complete business solution, and which would, of course, be guaranteed against "downtime"—periods during which the system would not be operational. To accomplish such a project, Cerebellum, as a computer systems integrator, would need to partner with a company which would provide the hardware.

The Sundial Proposal

Dramatis Personae

Director 2 (**D 2**) directs all technical operations (see above, Borden proposal).

Director 3 (**D 3**) directs sales operations (see above).

Director 4 (**D 4**) directs systems integration (see above, Director 1).

Director 5 (**D 5**) manages another branch office which has initiated the Sundial proposal effort.

Accountexec 3 (**AE 3**) takes ultimate responsibility for proposal effort (see above, Accountexecs 1 and 2).

Manager 2 (**M 2**) manages the proposal writing process (see above, Manager 1).

Technician 4 (**T 4**) creates the technical solution, the technical architect (see above, Technician 1).

Technician 5 (**T 5**) assists with the creation of the technical solution as a technical specialist.

General Background

Although I have concentrated on analyzing the Borden proposal, I offer here a supplement and support for my comments with data from another project, Sundial, a proposal which was written by Cerebellum employees some seven months after Borden was completed. Sundial wanted to convert client records from one format to another for better storage. The company once again had a single contact person who was, however, a long-time employee of Sundial. With the exception of Directors 2 and 3, the proposal team for Sundial was composed of different members than the Borden group. Their roles are very similar, though each individual, of course, plays their part differently.

The Sundial proposal group involves two of the same players as the Borden team, Directors 2 and 3. Their initial meeting shows evidence of many characteristics of Level III meetings during the Borden proposal development, realized, of course, in ways particular to two different groups of senior executives. As with all Level III meetings, the Sundial encounters were characterized by emotional volatility: confident predictions and warnings of disaster, a touch of ironic humour, and the tension of challenges to each other's power.

The formal writing of each of the Borden and Sundial proposals began at meetings which included three directors and an account executive. The Borden meeting also included a proposal manager, but the manager for the Sundial proposal was not yet working at Cerebellum although she had been hired. I collected data at this particular Borden meeting with field notes, as the Accountexec had indicated that he was too concerned about client confidentiality to allow video-taping. The Sundial meetings were all video-taped. As mentioned above, Level III collaborations are undertaken by the most senior personnel in relatively large groups (usually five or more), and these meetings follow this pattern. Senior personnel are experienced, and used to wielding a considerable amount of power. However, in both of these proposals, the manager who was specifically charged with overseeing and writing large portions of the proposal was a new employee. These proposal managers were unfamiliar both with the company and its ways of working and with the other members of the team at every level. Collaboration is often hampered by such lack of knowledge. Senior management otherwise tends to avoid initial drafting, preferring to critique and if necessary, revise.

In an initial Level III meeting, my data shows, senior employees come together as relative equals, yielding only in token ways to a chair, who may attempt to direct the conversation. Their primary objective is to deal with high-level issues for the writing of the proposal, such as the establishment of general business and rhetorical strategies. For these reasons perhaps—size of group, equal power, and an important goal—Level III collaborations are emotionally volatile, marked by idealism, acrimony, challenges, roleplaying and storytelling, predictions and warnings, joking and laughter, tension and high energy. Though charged with the quest to create themselves as the company team, the participants must balance the drama of the search with more pragmatic needs. Finally, then, Level III meetings are marked by what I have posited as three of the ongoing themes of collaborative proposal writing at Cerebellum: establishing and maintaining relationships, being sensitive to audience, and keeping a comprehensive proposal view.

Each of the eleven proposal production days features one or more events at different levels of engagement. An overview of the movement from level to level follows (see also Path of Document Movement Between Levels, Fig. 1). Every day is introduced with a summary of the proposal state achieved during the day. Then details of the day's events follow.

Day One

The first day of the Borden proposal results in the production of notes on the strategy decisions made at the Level III meeting. Collaborators also begin to assemble models of other proposals and outline a schedule of events which they hope will be followed during the next eleven days. Manager 1 and Accountexec 1 have also sketched out the relationships between Cerebellum and Borden personnel.

Event A. Level III. The Starting Gun

Event A is a meeting to decide whether or not the Borden business will be pursued and if so, what the general strategy will be to win the contract. The meetings involve a relatively large group, five of the most senior executives. The three directors would be considered at the top of the office hierarchy (except for the general manager) and therefore above account executives and managers. Director 1 is definitely the most powerful of the three directors. The account executive has company experience and has brought in the Borden business, Manager 1 is a new hire and unproven. The clash over the relative power of the players becomes obvious as the meeting progresses. Even this struggle serves a purpose, however, as it establishes the right of each player to a place at the table. Peace would perhaps show complacency.

The primary objective of any level III meeting is high-level strategizing. On the surface, the Borden meeting is successful and accomplishes its main objective. During this event, when Director 1 says "Let's bid Sauct equipment. We are prime," the meeting quickly ends: a general decision has been reached. The Sundial meeting shows even more clearly the level III general strategy objective. For example, Director 3 takes control of the collaboration and begins by setting an agenda for what they might work on together at the initial meeting:

D 3 What are the objectives you want to get out of this today?

AE 3 I want to get at least a high-level agreement on strategy or input on strategy where we can't reach final conclusion. So strategy, I'd like to have staffing for the bid and proposal effort and I'd like some concurrence on the budget we're working towards for these ....

The initial proposal meetings seem to have the same general objective. However, the Sundial meeting already shows signs of an account executive who has other objectives as well: a list of people to put the proposal together, and an agreement on the costs of the proposal effort.

As befits a meeting of high-level discussion, these executives spend some time sharing their visions with one another. Director 2 shows irrepressible optimism during both meetings. What lies ahead for the team? Director 2 says to Director 1 in an aside during the Borden meeting: "We can make a shit-load of money!" Business proposals are, for Director 2, at least, clearly a time to dream about wonderful opportunities. Even when Director 3 sees a possible "red flag" or risky situation such as an unconsidered problem which might deserve more discussion or at least a warning, Director 2 still maintains his excitement:

D 3 Will the customer live with these parameters?

D 2 We'll shoot for the moon and back up!

The opening Sundial meeting shows the same enthusiasm. Here we see Accountexec 3, who interrupts his own dutiful and dull listing of staffing requirements with a burst of enthusiasm addressed to Director 2. Discipline, always tenuous at Level III meetings anyway, is subordinated to idea generation, to hearing out possibilities which will not be realized until Level I but can be shared at the present time:

> **AE 3** That's the idea. When I say staffing, I want to fill in the gaps. They've got a great logo by the way.
>
> **D 2** Who?
>
> **AE 3** Sundial. You'll love it for graphics. It's in flaming orange...

Although Director 3 worries about the client's vision not being met, above, Director 2 is able to reassure him. However, this too serves to keep on the table the task at hand. Every business opportunity bears some risk as well. Director 2 and Accountexec 1, for example, wonder about a competitor's plans during the Borden meeting:

> **D 2** Is Azure going to propose on their own?
>
> **AE 1** They'll decide tomorrow. We don't want to bid with them. There are problems.

and Director 3 mutters darkly about yet another competitor: "[Sauct] has a lot to lose if they can't deliver." Level III meetings, especially those which initiate proposals, must weigh problems carefully. Manager 1, the new hire who would be doing much of the drafting on the Borden proposal, actually makes his first comment of the meeting as a warning. He raises what the group judges to be a valid red flag. The "somebody" referred to is likely the account executive. However, he makes no note of this advice (which does indeed, sound more like a dictate from a superior than a suggestion in the spirit of the collaborative proposal writing they are presumably working towards):

> **M 1** I'm reading this [the RFP] and if I was [Jake] [Borden's project manager], I'd be nervous about [Jobber] [a company presently working for Borden].
>
> **D 3** You mean their maintenance [of the new system]?
>
> **D 1** (to AE 1) Tell us about [Jake].
>
> **AE 1** He's very low risk.
>
> **D 3** So somebody's got to address this.

Working productively with Jake continues to be a challenge to the team throughout the proposal writing period. Director 3 has here identified a concern which will be carried forward by personnel into every phase of the project.

Conflict at a Level III meeting can be handled in various ways. During the opening level III meeting on the Sundial proposal, Director 5 and Accountexec 3 disagree on the client's RFP demand for a business case. Together, they search through the RFP document, looking for the relevant passage. Accountexec 3's body language during the following conversation is of interest. He does not make eye contact with Director 5, even though Director 5 comes over to look at the RFP document with him. Accountexec 3 continues to make plans for getting a business analyst (looking to Director 3 for a response) even while he looks for the passage under dispute. Accountexec 3 seems irritated with being questioned, even by Director 5 with whom he frequently worked quite amiably:

AE 3 It's three bullets ... (flipping and looking through RFP, continuing to talk). So we need to get a business analyst working through this -- here it is (reads aloud, then-) That's mealy mouth wording for "do it"! It came up in the bidder's conference as bad [ambiguous] as this, but I know from [Steve] [his Sundial contact] that only the bidders that do it [build a business case] will have a chance of winning ... if you're not smart enough to go to the client and say "what did you mean by this?"...

In this case, the collaborative spirit seems to be missing. The question is valid; the questioner, sincere. Director 5 does not press the matter further, unwilling perhaps to risk their working relationship over a minor issue. Clearly, Accountexec 3 collaborates well with the client, which seems to be enough at this juncture.

Disagreement also occurs during the opening level III meeting of the Borden proposal. Director 3 arrives late. Accountexec 1 has taken charge of the meeting, but Director 3 interrupts his comments frequently. Director 3 then begins to hold whispered conversations with Director 2 while Accountexec 1 tries to continue chairing the meeting. Matters come to critical point when members find that reaching a general strategy decision involves consideration of a number of possible partners for Cerebellum. Several problems become apparent. First, the collaborators are suffering from option exhaustion--too many choices of possible partners and the power relationships Cerebellum might exercise with each one. Second, rather than working together, Director 3 continues to challenge Accountexec 1, actions difficult to interpret as challenge Accountexec 1, actions difficult to interpret as anything but indicative of scorn for Accountexec 1 as chair, as chief contact with Sundial, even as valuable collaborator. Director 3 is pushing for a confrontation, which Accountexec 1 rejects. Third, Accountexec 1 turns the focus of the meeting on the process of consensus rather than addressing the problem in some more fruitful way:

D 1 What do we have to do to decide?

AE 1 There's still one more option.

D 2 (laughs) Absolutely.

AE 1 (names another possible partner)

D 3 Let's vote.

AE 1 No. We work on consensus.

Meeting members do not vote, but add one more option and then push for a perhaps too hasty conclusion on strategy. Director 2's reaction is noteworthy as well. There is certainly acrimony in this situation, but Director 2 also voices the ironic humour of a making a decision on a bid which already has too many options when Accountexec 1 wants to introduce yet one more. His laughter, however, is the one lighter moment in the meeting. The humour seems to serve as a gentle disciplinary act, warning a collaborator that they have transgressed in some fashion: in this case, made an impossible or ridiculous demand on others.

The opening Level III meeting of the Sundial proposal has more obviously humorous moments which function in the same way. Conversations which could turn into confrontations can be changed with humour, depending perhaps on the willingness of other team members to play along. For example, here Accountexec 3 is concerned about meeting a client's needs:

AE 3 They're concerned about security.

D 2 (laughs) We'll use blind people [to work with client's data]!

AE 3 (laughs) I'll put that in the proposal!

Still, an audience concern has been raised by the account executive and the collaborators made aware of the client's needs.

Humour, however, needs to be carefully handled lest it become a cause of dissent. For example, the Sundial meeting engaged in some ribald humour at Director 4's expense. Director 4 is a new company director. He has joined this meeting late. Unlike Director 3's lateness discussed above, which may indicate a lack of regard for Accountexec 1, Director 4's tardiness stems from time spent negotiating a major business deal for Cerebellum. His news energizes the Sundial meeting. They begin to discuss a possible team member, Technician 5, and wonder about his objectivity in evaluating hardware. Here Director 2 sees the possibility for an amusing double entendre, which is immediately picked up by the other team members. However, when Director 4 resists the hilarity, Director 2 backs off:

D 4 But he can go both ways (defend two different products), it sounds like.

D 2 (smiles) He can go both ways.

(general laughter)

D 4 (earnestly) But we want somebody who can go both ways!

AE 3 Speak for yourself! (laughs)

D 4 Because that way we can see the other side. The best debaters can go both ways, right?

D 2 (seriously) He can go both ways.

Director 2 avoids provoking an unpleasant situation. It is especially interesting that he uses the same words, "he can go both ways": first to begin the joke and second to end it.

On-going themes of collaborative groups are also present in these initial level III meetings. Building and maintaining team relationships and keeping a comprehensive awareness of the entire proposal process are evident at both the Borden and Sundial meetings. Although working on collaborative relationships is important also at Levels II and I, at Level III, Cerebellum employees work most strongly to establish themselves as a team. Level III offers, in the early stages of the proposal writing process, a first and crucial step in fixing the ground rules of the team. To this end, Level III relationships are constructed, in part, by members asking questions as the group tries to clarify its job. Such relationship building is especially evident at opening meetings, partly because the employees of Cerebellum come and go fairly rapidly, so team membership changes. Therefore, employees are often plunged into collaboration without a shared work or personal history. One way overt attempts to build the social network become most apparent is in the search for "differentiators" (what makes the company team different from other teams). Team identity and team advantage follow from the discovery of differences. The Borden proposal team struggles with this question at their initial meeting:

D 3 Does [Jobber] have a maintenance offering?

D 2 Could be a differentiator for us.

and later:

D 2 Do we have inventory list?

AE 1 Yes.

D 2 And others don't have it?

AE 1 No.

D 1 A key differentiator?

As I have previously noted, because price is often much the same in today's very competitive market, extra quality counts. So, apparently, does separating the proposal team from the other competitors, at least for now. In the future, a competitor may become a partner in a business proposal and the team will have to be created again.

Differences may be more subtly established by team members working to invoke a certain *ethos*, or moral basis that will also inform choices in the proposal. During the initial meeting on the Borden proposal, Accountexec 1 relates a story about three vendors under discussion as possible competitors and as possible partners. Vendor 1 had recommended Vendor 2 for a job. Later Vendor 2 recommended Vendor 3 to a client, rather than recommending Vendor 1 in return for the earlier favour. The consensus of all at the meeting was that such behaviour by Vendor 2 was "sleazy" and "nasty". The story has the flavour and effect of a morality tale. Team members distance themselves from the behaviour of Vendor 2, but they also draw together as a team by sharing a common reaction. It should also be noted that the story has the effect of a warning. If Cerebellum decides to work with Vendor 2, they must be aware of Vendor 2's business practices.

Humorous interludes, like stories, also have a positive effect on collaboration. Sharing a joke energizes the meeting, dissipates tensions and unites the group. Also, as we have seen before, humour tends to regulate what is appropriate. In the following interchange, we see the Sundial proposal group, during their initial level III meeting, take the unusual (and probably ill-considered) step of engaging in a Level II activity, detailed information gathering. Such level jumping might impede the collaborative process. Initial meetings usually engage in Level III activities only, such as setting a general direction to be specified during more detailed, Level II work which will be accomplished later. Accountexec 3 is recording the strategy when Director 3, acting decisively (perhaps as the general manager would), initiates a phone call to involve a technician in the meeting. He is not collaborating with the team but abruptly changing the level of the meeting without allowing any input from others present. Technician 6, suddenly joining the meeting over a speaker phone, seems awed by the high status of the group. Accountexec 3 would be entitled to be annoyed at such behaviour on the part of Director 3. However, Accountexec 3 manages to save the situation by using humour to acknowledge the difficulty of the task suddenly handed to Technician 6:

AE 3 Okay. So part of our strategy is ... (starts to write)

(D 3 has turned to the phone. He connects with Technician 6 in a distant branch office. AE 3 had said earlier he would call T 6 the following morning.)

AE 3 (looks up from his notes when he hears that a call on speaker phone is about to begin) Who's this? Technician 6? He (D 3) has been hanging around with [the General Manager] too long!

(D 3 introduces meeting members to T 6.)

T 6 I feel honoured -- such a senior audience! *

AE 3 (very briefly explains client's needs.)

That's it. What's the best solution?

(general laughter)

D 2 Quick now! Hurry up! (laughs)

T 6 (laughs) Do you want the bid too -- I mean the quote on the book?

AE 3 (when other laughing voices overlap, speaks more loudly) We'd also like a detailed configuration...

D 4 Yeh, can you get that on a fax right now?

(more general laughter)

Accountexec 3's jocular manner invites Technician 6 into the meeting, especially when other members join into the hilarity. The humour, as previously noted, also resituates the sudden Level II request as basically ridiculous, and acknowledged as

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* Double hyphens (--) are used in all dialog transcripts to represent breaks and pauses characteristic of oral language

such by the majority of team members. Technician 6 is nevertheless being welcomed as a team member for future more appropriate engagements at Level II, and given a minute to think, or perhaps to excuse himself, without losing a sense of his own expertise.

Further in this exchange, Technician 6 does indeed rise admirably to the situation and settles down to dispensing information and giving advice as a sympathetic collaborator. Accountexec 3 does most of the talking for the executives, posing questions and clarifying responses. He shifts flexibly into a Level II mode, allowing the technician authority as a source of expert information. The account executive further validates Technician 6's commentary by using his key phrases. In one interesting example, Technician 6 mentions a "roll your own" solution. Accountexec 3 echoes back the phrase in modified form over the next several sentences as a "grow your own" solution, and finally a "home grown" solution. This seems an interesting and effective way to build cohesion with Technician 6 and establish him as important team member. Accountexec 3 and Technician 6 have collaborated on meaning, and information has been gathered and mutually investigated for possible inclusion in the proposal text. However, the initial Level III objective, that of building a general strategy, has been disrupted and the time of several senior employees, wasted.

One final example of the importance of team building, this time to include the client, shows Accountexec 3 once again nurturing a relationship. He reports on Steve, the Sundial contact, as a man he genuinely admires and wants to include as a voice with vital impact on the proposal contents. Here, then, is audience sensitivity, a collaborative activity which appears at all levels to build team relationships:

> **AE 3** The sponsor of this is a manager, [Steve], a good guy, but he's totally a rebel, an anarchist. He imagines the project as a partnership between [Sundial] and the vendor with [Sundial] managing it.

He returns to his assessment later in the meeting and strengthens his evaluation of the Sundial contact:

> **AE 3** This guy, [Steve], is a rare breed of cat. He's a really good guy but he's a total anarchist. He's not politically motivated or power motivated. He's not going any higher in the hierarchy. He is where he is. He is where he's going to be for the next three years [before he retires]: he just wants to do a good job.

Jake, the client's project manager on the Borden proposal, never attains collaborator status but rather remains a constant concern to the Cerebellum team as a "loose cannon." In contrast, Steve, largely due to Accountexec 3's work, helps to advise and direct the proposal as a full team member.

Finally, the initial Level III meeting maintains a vision of the entire proposal process. In collaboration with each other, members realize that their general ideas must be detailed, even verified by Level II, information gathering activities:

> **D 3** There's nothing to stop you from talking to [Jobber] [a vendor currently working for Borden]. Why speculate? We could talk to them. They're the guts going into this. They're interested. See what you can get.

Director 3 here urges the team to remember Level II concerns. Although his suggestion seems rather Machiavellian, Director 3 does show that he is aware of what needs to be done in upcoming proposal stages. He seems uneasy, though, with his role as collaborator. Director 3 begins by advising that the team ("we") seek information; he ends by giving the responsibility to someone else ("you"). Similar behaviour is exhibited by Director 2, also anxious to move the proposal as efficiently as possible into Level I activities:

> **D 2** Give [Manager 1] an example of proposal to follow.
>
> **AE 1** (to M 1) For structure, use [Bellum]. For technical content, follow [Alpho] and [Crump].

Director 2 is trying to impose an order on the process, and help the manager to become one of the team: a group of collaborators who do things (like write proposals) in similar ways and therefore need models and general specifications. He suggests that points of reference be provided for internal and external text structure. The new manager will be able to collaborate with employees not necessarily on the current proposal by considering their work in previous successful efforts. Some of the text he encounters will even be recycled by him, as a kind of "clip-text," for use in the Borden proposal.

Another instance of overall process awareness comes from Director 1. The presentation of the general strategy is crucial to the success of the proposal, and an ideal approach can easily be lost in the time pressure of the looming deadline. As has been noted above, senior management is given to expressions of ideals, and their hopes for drafting procedures are no exception. Although Director 1 is aware that the technical solution will be built along with the text during Level I collaborations, he is clearly not happy with such behaviour. Here he attempts to maintain the boundaries between steps in the proposal process:

> **D 1** Let's decide what we're going to propose before we start to write. That's reasonable but unusual [for this company]!

However, such a lock step approach to text production may not be reasonable or even advisable, since, as we will see, the text and the solution are built together during Level I collaborations. Director 1 does, however, maintain a sense of "we," the group as collaborators, unlike Directors 3 and 2, and thus helps to maintain team relationships.

Event B. Level II. Opening Moves

Once a general strategy (Cerebellum as prime or lead partner with Sauct as secondary partner) is decided upon at the Level III meeting of the Borden proposal-writing team, the

Directors move off to other company business, leaving the Technicians and the Manager to begin a Level II information gathering session. As previously explained, those Level II activities in which the intent is to access and gather information tend to occur in small groups of collaborators, most typically two, and are often of relatively short duration. However, checkpoint meetings where information is considered for implications on the proposal effort are usually larger. Personnel involved vary in experience from Director to junior Technician. The hierarchy of authority among the members of level II teams rests on relative knowledge. The collaborator with more information quickly establishes the lead role, but the quality of these collaborations remains largely pragmatic and neutral in tone, unlike the cut and thrust of the Level III discussions among status seekers. Level II collaborations are quiet and deliberate, remarkable for activities such as seeking and recording, judging and clarifying. The drama of Level III has given way to practical matters, such as careful reading, talking and listening, and of course meticulous record keeping. Level II meetings are also concerned with the general themes of collaboration leading to text production: team building, audience sensitivity, schedule maintenance, overall process awareness, and level maintenance.

The primary objective of the Level II collaboration is to realize in specifics what Level III made clear only in generalities. Immediately after the initial Level III meeting on the Borden proposal, Accountexec 1 and Manager 1 situate themselves in Accountexec 1's office, where they begin to collaborate. Manager 1, as a new hire, uses Accountexec 1 as an information source who knows about the Cerebellum process for completing a document:

M 1 I need to walk through the process.

AE 1 We have a deadline of January 28th, Thursday. (begins to write on white board)1. by Tues. [19th] finalize plan and partners -- responsibilities 2. tomorrow [15th] content/outline 3. by Mon [18th]- team resources 4. checkpoint with Director 1 Wed. [20th] 5. writing until early following week -- by Fri.[22nd] a copy, by Mon [25th] comments back, by Tues.[26th] final review. And that's basically it.

Although information gathering might seem to be a fairly straightforward activity, obviously Accountexec 1's explanation is not well organized. This is ameliorated however by the written record of his thoughts to aid Manager 1's interpretation. It is interesting to note that when Manager 1 distributes this list as information for others on the team in an e-mail memo, it is in chronological order with the comment: "Attached is a tentative proposal schedule that [Accountexec 1] and I developed after the meeting." Manager 1 situates himself as a collaborator with Accountexec 1, and continues to establish his own team role as proposal manager.

Making meaning is not always as straightforward, however, when the information source is a document, and is open to various, more or less advantageous, interpretations. Here we see a sequence of charting, talking, more charting, reading, listening, more talking, still more drawing and writing being employed to access information from the RFP document. However, these collaborators are not merely discovering the correct information but rather creating an acceptable interpretation of the information:

> (On whiteboard, AE 1 draws his understanding of the RFP's requested hierarchy of relationships among Cerebellum, Borden and Sauct. M 1 demurs and draws a different interpretation beside AE 1's. AE 1 re-reads relevant section of RFP.)
>
> **AE 1** Ah, I didn't read it that way (modifies his own diagram: still unlike M 1's). We don't want (waves at M's diagram). We're arm's length. We want to minimize our risk.

Notice also that Accountexec 1 has obviously taken control of the meeting due to his authority as information source. He knows about the client audience. And although he is prepared to listen to and observe Manager 1's ideas, his interpretation of the RFP is clearly not to be further disputed.

These conversations indicate as well a general theme of collaboration: keeping a comprehensive view of the proposal. Manager 1 clearly bears much of the responsibility for completing the proposal on time, and will do a significant amount of drafting. His request for information on a timeline for Level I work is therefore not surprising. Then too, Manager 1 must also be concerned about the business strategy and keep in mind the general directions prescribed by the Level III meeting. He moves back and forth rapidly between these concerns which Accountexec 1 tries to treat largely as requests for information from a new employee, resisting a return to the open egalitarian banter of a Level III debate:

M 1 [Director 1] said we should do content before writing.

AE 1 Do a table of contents, then we'll fill in the outline.

M 1 Okay.

AE 1 I'm not going to be here tomorrow.

M 1 This is a high-risk project --

AE 1 The owner was told that this was problematic. But we will "minimize your risk". They know that....

M 1 So in the end, they take the risk....

AE 1 Our managing reduces risk....

M 1 What happens two years down the road when they need to spend another million?

AE 1 I don't know.

Further elements of a level II meeting are present here. Manager 1 attempts to reinforce his view of the proposal process, reminding his collaborator about an idea flowing from a Level III dictate earlier voiced by Director 1. Accountexec 1 suggests outlining as an appropriate step in the text production process, and perhaps as a way to respond to Director 1's concerns. However, he also tries to shut down the conversation in several ways: giving quick answers, indicating that he will be busy tomorrow (perhaps also hiding behind his status as a more senior employee with other duties), and finally refusing to answer a difficult question.

Manager 1 however, persists, indicating his awareness of and concern for items which he does not feel were satisfactorily resolved at the Level III meeting. Accountexec 1 clearly wants to resolve his difficulty by engaging in a rehearsal of the rhetoric needed in Level I to address the audience's concern for risk.

Another common theme evident in this Level II meeting is the maintaining of Level II activities. As noted above with Manager 1 and Accountexec 1, Level II meetings can be strained if conversants do not share the same view of the level and thus the objective of the collaboration. Accountexec 1 encounters such a reaction once again when looking for information in another Cerebellum branch office. He connects with Technician 3 on the phone:

AE 1 We're not going to bid Azure. The consensus was to go [Sauct]. It looks like [Jobber] doesn't have the capability. [Cerebellum] will take responsibility for the project.

T 3 Very risky for us. I'm reluctant. [Sauct] is technical plus. What do we have to gain....

AE 1 It's been decided. But thanks.

T 3 [Technician 1] has the files [you'll need].

Technician 3, like Manager 1, wants to debate in Level III fashion. But whereas Accountexec 1 seems to feel obliged to keep talking to Manager 1 in a role of information dispenser, *from* Technician 3 he needs information (Level II) and is not prepared to wait any longer or debate *with* him (Level III). He is engaged in level maintenance—indicating to a collaborator what behaviour is helpful at this level. He tells Technician 3 quite abruptly that the "decision has been made"—a Level III job since completed, reminding Technician 3 perhaps that his comments are inappropriate in a Level II information gathering session. Accountexec 1 does, however, try to soften his comments by thanking the technician, to maintain a positive relationship with at least superficial politeness. Technician 3, just as abruptly, indicates that the information sought is already in the branch office with Technician 1. He gives in to Accountexec 1, conscious perhaps that he is not in a position to argue further, although he has knowledge which should be a source of authority at Level II. As we have seen before in Level III collaborations, the corporate status hierarchy has been reinforced here by Accountexec 1. The collaborative activities possible are impeded by such level jumping. A potentially useful Level II meeting has been derailed by a jump to Level III.

Days Two and Three

Days two and three are consumed with various meetings with the Borden client, the client's project manager, and various possible vendors who are possible partners for Cerebellum's bid. Most of these meetings took place out of the office and were not made available for data gathering, and thus are not reported here. However, the net result for the proposal was a large amount of information.

Day Four

By Day Four, the proposal team has amassed a significant number of facts and opinions about their competitors on the Borden proposal, and more about the needs of their Borden client. By the end of Day Four, Manager 1 has made notes to outline a new business strategy, and Technicians 1 and 2 have drawn up a list of hardware needed to complete the project.

Event C. Level III. Changing Horses

Although the initial Level III meeting (Day One, Event A), established a general direction, Level II information accessing, gathering, and consideration results in a modification of the original plan. The following conversation takes place in a hallway, where a group of four senior employees (Director 2, Accountexec 1, Accountexec 2, and Manager 1) hold a hurried Level III meeting. These executives are trying to find a new strategy which will counter the risk of the competition's aggressive pricing. Emotional volatility, a quality of Level III collaborations, is apparent in the conversation. Clearly, the battle has begun. Decisions, even Level III ones, must be accomplished with haste. And so the collaborators make a daring leap, accompanied by the warnings and reassurances characteristic of Level III collaborative activities:

AE 1 We could make all three [competitors] part of the proposal.

AE 2 That would ensure [our involvement]...

D 2 They [would] all want us to be prime and take risk...

AE 2 ... so put us in charge...

D 2 but vendors won't say that [we will take all risk] and [Azure] will put in a separate bid...

AE 1 We'll discount...

D 2 [the General Manager] wants the business.

Cerebellum has a new course of action—but is it a risk or an opportunity? Or perhaps both? The decision is clinched by mention of the general manager's desires—he is clearly a team member, a fellow collaborator, if an absent one. Apparently also, the general manager is first in status amongst these collaborators, and his is the authority in a Level III collaboration.

The general themes of collaboration are present in the meeting as well. Maintaining team relationships becomes a crucial factor. The tension present in other Level III meetings is obvious. Although Director 2 slips into the role of the (reputedly parsimonious) client/owner, Manager 1, who now seems more sure of himself, is unimpressed and reacts as an equal. He feels free to reject Director 2's view that the relationships of everyone, client and partners, must be considered at the present time. As we will see, they encounter some difficulty in deciding on the primary audience for the proposal. Director 2 and Manager 1 do not seem to have in place an understanding of a very basic rhetorical concern—whom are we communicating with, and what is their primary interest? Director 2 hastens to maintain a positive relationship with Manager 1—"your points are valid"—reminding him perhaps that a Level III meeting must take a broad view of the possible consequences of their strategy:

(D 2 roleplays client's probable rejection of a higher price to M 1, who does not respond or react in any way.)

M 1 [Borden's project manager] doesn't know who to deal with.

D 2 This situation isn't fair to our possible partners. We have to make a decision.

M 1 Look at it from the client's point of view.

D 2 No -- I mean your points are valid, but I'm trying to look at the psyche of people [other than the client] involved.

Worthy of note also is that Director 2 has earlier reminded the group of upcoming Level I issues: "We'll have to do a lot of word-smithing on this one." His view extends not only to relationships, it seems, but also to a comprehensive view of the entire collaboration process as a venture which leads to a document.

Event D. Level II. Who's on first?

As the pace quickens, it becomes apparent that every new piece of information is causing ripples of concern amongst team members. Two examples will show how Level II meetings not only gather information, but also consider the effect of the information on the decisions made at Level III. The technical architect on the proposal effort, Technician 1, has spent several days acquiring and evaluating information. His remarks to Manager 1 show the ongoing competition between technical and sales concerns which permeates all levels and often threatens the ability of the collaborators to work effectively together:

T 1 I can't see how this [the Level III strategy decision] will work. How will we maintain our credibility with vendors? It feels like a sales decision.

M 1 Oh really?

T 1 Whose idea was this? [Director 2]'s?

M 1 I don't know.

As a technician, he finds himself uneasy with a Level III decision based, he suspects, on a sales motive without due regard for the difficulty of maintaining relationships with technical personnel in other companies. His role as an information gatherer, though, should be to ask questions which will enable Level III decisions to be enacted. This event is an example of level jumping. In the event described above, Technician I seems to feel vulnerable in his Level II role. He strikes out at a representative of the Level III collaboration which has resulted in a decision which he must implement.

In much the same manner as Accountexec 1 on Day One, Event B, now Manager 1 finds himself uneasy with the Level III aggressive feeling of this brief encounter. Clearly, he cannot make a Level III decision. However, Technician 1's comments are not Level II information gathering questions (ironically, in similar fashion, Manager 1's comments on Day

One, Event B were also uncomfortably forceful in nature during a Level II meeting). Although Technician 1 is concerned with his own relationship with his information sources, he does not seem to be concerned with his relationship with Manager 1 during this event. Such behaviour may result from unresolved Level III tensions, and may lead to less commitment amongst and between collaborators responsible for drafting proposals.

Event E. Level II. Decisive Action

The second example of a Level II encounter contrasts with the first. Here, Manager 1 is sharing information with Accountexec 2. There are multiple effects of one piece of powerful information. First, relationships are being maintained. The owner will be informed in a Level II meeting, which seems intended to keep him feeling like a member of the team. Such a meeting will be respectfully initiated by a senior executive. The project manager at Borden must also be considered. Finally, Accountexec 2 and Manager 1 are seen here to be collaborating smoothly. Accountexec 2 does not inform until asked. Manager 1 has correctly evaluated the information about the software and has informed someone who will be able to direct him further:

M 1 How can we guarantee software if it's not up [available] yet?

AE 2 I wasn't aware that was happening. That changes things. We need a meeting with the owner to clarify ....

M 1 I need some advice.

> **AE 2** Get Director 2 to call [the owner]. He can include [Jake] or not. We don't want to be seen going behind his back. We want to provide a solution, not just get business ....

It is interesting to note also that the sales person, Accountexec 1, does react to an important technical issue despite Technician 1's fears that the sales agenda takes undue importance in the proposal. The meeting between Accountexec 2 and Manager 1 shows information sharing, gathering and evaluating: rapid, pragmatic and unemotional. It also reveals a hierarchical collaboration--the more senior person directing subsequent activities.

Day Five

Day Five begins with collaborators still gathering, evaluating and considering the implications of information both to the building of a technical solution and a proposal which presents that solution. By the end of the day, Manager 1 has completed a Table of Contents for the proposal. The list of topics will serve also as the headings for a proposal workbook. Manager 1 has also reviewed the proposal plan with the support staff so they will be ready to schedule and accept data for word-processing work.

Event F. Level II. Under Consideration

The following meeting involves Manager 1, Technicians 1 and 2, Director 2, and Accountexec 1, and has been called by Manager 1 as a Level II information checkpoint meeting.

However, he initially has difficulty getting Director 2 and Accountexec 1 to co-operate with his agenda and collaborate at an appropriate level. In fact, the opening moments of the meeting bear many of the characteristics of a Level III meeting: banter, conflict, predictions and glowing visions. Accountexec 1, perhaps anxious to ally himself with Director 2, supports his attempts at humour. Manager 1 at first responds to the bantering, but quickly tries to re-establish the meeting as an Level II information session. As a newcomer, he is under considerable pressure to yield to the greater status of Director 2; however, he still asserts himself as the chairperson in a Level II meeting where authority usually rests with the information givers. He may be overly anxious, missing the opportunity to engage in team relationship building:

AE 1 You know what [the competitors will] do though, they'll guarantee a response time but they won't guarantee the platform...

M 1 OK, can we...

AE 1 ...that it's going to go on...

M 1 Ok, can we ... can we ... let's not resolve this today right now. We've got 6 minutes. [before D 2 must leave]

D 2 Three.

M 1 Three minutes.

D 2 Two.

AE 1 Two! (laughs)

M 1 The other thing we've got on our plate to get out is this generic list of equipment by location. How's that going?

Level II meetings are generally very pragmatic affairs, with relations being maintained in rather more indirect ways than in the drama of Level III. Note also that the technicians do not participate in the struggle to direct the meeting, perhaps due to an awareness of their relative lack of power, or perhaps due to their unease with an unfamiliar Level III situation.

Director 2 reminds Technicians 1 and 2 of the time pressures the proposal faces, and the interdependency of the proposal writing process: examples of schedule maintenance and team maintenance. Nothing can be finalized until the costs are known, and the costs cannot be known until the solution is built. The tension between due care and attention, and need for speed is apparent. Technician 1 may resent the need for cost information when he is still searching for the right technical solution:

D 2 OK. So we're going to have a network priced out, rough cut, either today or tomorrow --

T 1 Tomorrow.

D 2 'kay, smart man. (laughs)

Director 1 seems to acknowledge Technician 1's refusal to be rushed while trying to gather and consider information, and shrugs it off with a laugh. He is trying unsuccessfully to maintain the proposal building schedule which conflicts with Technician 1's role in the maintenance of technical quality.

A Level II checkpoint meeting also involves reports of other information gathering activities. Technicians 1 and 2 indicate a collaborative working relationship both within and beyond this particular meeting in gaining and sharing relevant information. Joint reports by collaborators are important at checkpoint meetings. Here we see an example of proposal content being reported without much success by Technician 2. Although these collaborators were later observed working in friendly fashion together at both Levels II and I, they do not co-operate in this event, perhaps due to differing notions of their team responsibilities in the meeting and to the Level III representatives present. Although Technician 1 is senior to Technician 2, he apologizes for his interruption, at least initially. However, he then interrupts again, perhaps because he has decided that the others at the meeting want estimates of completion and not a detailed technical listing of everything they have accomplished:

T 2 That's what we've been working on. [Technician 1] is going to talk to [Telit] to find out exactly which...

T 1 That's ... that's ... sorry.

T 2 Where the concentrators are going to go and...

T 1 That's very close [to being finished]. I mean the table itself will be populated....

During the rest of the meeting Technician 2 continues to contribute freely, apparently undeterred by this interruption. She refers to Technician 1's plans, and otherwise attributes the work to both of them—"we've been working". Her use of the plural pronoun is echoed by Technician 1 throughout the meeting.

Perhaps because the Borden proposal is now only eight days from deadline, much of this Level II meeting also shows participants maintaining an awareness of the proposal writing process as a whole, thereby helping to maintain the schedule, especially with regards to Level I drafting activities:

D 2 So the only thing left from a pricing perspective is the services and somebody should be working on that, and, we should have --

M 1 That's the next question ...

D 2 -- we should have some of the proposal finished this week -- *some* of it.

(AE 1 laughs)

D 2 Preferably more than less ... (smiles)

Director 2 is definitely trying once again to hurry the team along and maintain the schedule. Ironically, he and Accountexec 1 pause to banter in Level III fashion once more, interrupting Manager 1's attempts to discuss the information still missing and thus derailing maintenance efforts. Later, Manager 1 returns to the drafting discussion, indicating that he too is aware of its importance. While Manager 1 points forward to Level I, now it seems that Director 2 has neither the patience nor the time to discuss Level I activities further. As befits a Level II meeting, however, he does give a piece of information, an example of level maintenance. The suggestion, however, indicates his belief that Manager 1 should be doing the drafting. Director 2 is avoiding a fully collaborative role at Level I (a stance which will later prove to hamper schedule maintenance):

> **M 1** The other action item here is the writing of the proposal, right?
>
> **D 2** A pretty important part.
>
> **M 1** So we need to start dealing with that.
>
> **D 2** Yeah, yeah.
>
> **M 1** I can start outlining content with [Director 1] at 10 o'clock.
>
> **D 2** Get him to cite good quality examples and start cutting and pasting them. (he looks at his watch)

Although he obviously believes that the proposal drafting is important, Director 2, it seems, does not want any involvement in actual text drafting. He even suggests that Manager 1 would be well advised to cut and paste, that is use "clip-text," rather than compose original text, at least at this stage.

Technician 2 also indicates that she is aware of drafting duties, and indeed already involved in Level I activities. She even recites, or perhaps rehearses, sentences and ideas she and Technician 1 are using in their draft of the technical solution during what seems to be a Level II meeting:

> **T 2** .... so we're saying "put in a four port pad, because you have a choice ... so we're recommending four then you can have an option to upgrade it ...."

Here Technician 2 engages in content specifying and text rehearsing. Text rehearsal would perhaps be better suited to

Level I where she would have a collaborator focused on appropriate and precise working. She does seem to want Director 2 to understand what is being recommended very specifically to the client in the proposal, which will perhaps make her drafting more confident. She appears to be seeking reassurance, which she otherwise usually obtains from Technician 1 (seen in various glances to check his reaction to her statements). Technician 2 may feel unsure of her role on this team, or of her authority as a technical informant and presenter of the technical solution.

Such Level I conversations are especially interesting during this Level II meeting since Manager 1 indicates he is still concerned about Level III decisions:

> **M 1** .... we'll start getting requirements and parameters and start to do some of that scoping of the project that hasn't ... you know that needs to be done so ...

This is another example of level jumping arising from a sense of vulnerability. In general, this Level II meeting shows that information gathering is correctly placed between strategizing and drafting. Facts, it seems, mediate between high-level activities such as scoping (that is, defining) a project and rendering it into text. Information changes everything from the approach to the proposal to the very words which will describe the approach.

Event G. Level III. Quick Change Artistry

Although I was not able to record this meeting, late on Day Five the most senior executives met to consider modifying the strategy in the Borden proposal once again. The General Manager directed the meeting in a small office barely containing the participants all eager to argue and scribble diagrams on the whiteboard. Eventually, one possible partner emerged as the definite front runner. Azure would be presented as the partner/vendor of choice, with two others offered as alternates. The strategy, a full five days into the writing process, had finally been resolved. Clearly these collaborators needed much information in order to arrive at a final formulation. The sometimes chaotic nature of Level III meetings seems to make reaching an agreement somewhat problematic, given the tight time lines of proposal preparation.

The Level III meeting late on Day Five also marks the end of the early phase of the writing project. A final decision on strategy means that energy can now be devoted to other activities. The team has drawn together in common cause at last--at least on this issue. More shifts in direction, however, would come later.

CHAPTER SIX: PRESENTATION AND DISCUSSION OF MIDDLE EVENTS

"Curiouser and curiouser!" cried Alice ....
(Lewis Carroll, *Alice's Adventures in Wonderland*)

A general strategy was finally settled at the Day Five, Level III meeting of the Borden proposal-writing team. Cerebellum would test three optional partners for the best solution to Borden's hardware needs. Azure would be tested first, and if proven adequate, adopted without further testing of other vendor hardware. Much information has been gathered which prompts that decision by Cerebellum's senior staff. This information must now be further considered by all involved for drafting into text. Thus begins a series of Level I drafting sessions (though Level II information gathering also continues). Unlike Level II where information is gathered and then checked, drafting begins with a checking phase of reading, rehearsing, reviewing and justifying text. Checking is followed by building text in detail. As previously explained, Level I collaborations tend to occur in small groups of collaborators, most typically two (or even drafters working alone); however, meetings where drafting issues are checked are usually larger. Personnel involved in text drafting are managers and technicians.

The primary objective of a Level I collaboration is drafting text. These collaborations are intense and focused, remarkable for the building, checking and merging of various textual possibilities. Activities are often warranted by referring back to the audience and purpose articulated at Level III meetings, and to the facts gleaned during Level II work. Level I meetings are also concerned with the general themes of collaboration leading to text production: maintaining the schedule, working within appropriate boundary levels, and overseeing the entire proposal writing process; and maintaining the proposal writing group, building and sustaining member roles and inter-relationships, and including the views of the perspective audience.

Level I collaborations gradually result in more and more fine-grained and sustained text—points become sentences and sections as collaborators continue to meet. Finally, much text will be composed in physical (but not actual) isolation: even writers who seem to be alone are working with ideas from others on the team.

Some of the proposal will be lifted and adapted from previously written documents rather than originally composed for the present task. Throughout the proposal, writers turn to key extracts of text to help them maintain the proposal schedule, focus on the audience, and even write in a company approved style. Text borrowed from other documents is more quickly assembled than is text which must be composed word-by-word. Also, such "cut and paste" text, it seems, is assumed to be adequately written and presented given its previously published status. Recycled ideas have already been accepted by a client audience, either by this client in particular, or by some other satisfied party (another client in the case of a technical proposal, or the corporate executives in the case of a Cerebellum company profile). Finally, "clip-text" serves to keep writers employing company approved prose style as they will be writing words around previously approved text or using previously approved ideas.

Day Six

By the end of Day Six, collaborators are working to fill the workbook binder. The binder is filled with a series of sheets, titled with hand written headings. These form the major sections of the proposal and a list of appendices. Technicians 1 and 2 are using clip-text and writing original text to complete the section called "current environment," that is, what Borden has in place at the current time. A list of writing jobs is also complete.

Event H. Level I. Problems, Problems

Here we see Accountexec 1, Manager 1, and Technicians 1 and 2 meet to begin drafting the proposal. Their goal is to check out ideas and their presentation of those ideas by engaging in various collaborative tasks unique to Level I: composing aloud, thus checking by rehearsing in front of others, and justifying choices by referring back to levels II and III. Level jumping and task avoidance seem to interfere with progress in this Level I meeting.

This event begins with Manager 1 struggling to establish the meeting as Level I and maintain the proposal schedule (both ongoing collaborative themes), but encountering resistance from Accountexec 1. Accountexec 1 engages in task avoidance here perhaps as a way to attempt to escape from Level I drafting. He tries to establish a role outside of the one which the team needs to maintain their schedule--that of text composer. Accountexec 1 seems to feel that he should be exempt from this activity (except perhaps, as will be shown later, as an reviewer). The reaction of the others, especially the laughter from the technicians, indicates that they feel his behaviour is inappropriate (though perhaps not unexpected). A power play suitable to a Level III gathering, where disagreement over roles is expected and can be debated, is not helpful to the collaborative work of text production at Level I. Manager 1 reminds him of the ongoing concern of schedule maintenance--a time line which will not proceed as planned without co-operative action:

M 1 I want to talk about content and maybe talk about who can help me fill in the blanks or write certain parts of this for me.

(AE 1 points to T 1 and 2)

M 1 (to AE 1) Well, I think you can help too.

T 2 (to AE 1) Don't look at me.

M 1 I'd like to see -- if that's all right with you -- I'd like to see you participate in some of this.

AE 1 Yeah, some, but ...

M 1 This has been yours from the start.

AE 1 No, I know. I can do some but -- I've got a lot of things happening.(laughter T 1 and 2) No, seriously.

T 1 You've got a course today, right?

AE 1 I've got a course today and I've got another deal that I have to finish by next week. New business. But I'll do whatever --

M 1 (interrupts) Let's talk about our deadlines.

Of interest here too is Technician 1's acknowledgement of Accountexec 1's other responsibilities, a way to maintain team relationships by allowing Accountexec 1 to maintain his dignity and sense of belonging in the group. Team members bear responsibilities at Level I to build text (as well as debate it), and Accountexec 1 has been forcefully but not unkindly reminded of his role.

A second example of a conversation which disrupts this event as a Level I meeting is once again an attempted shift to Level III. In this debate we see Technician 1 engaging in debate over the strategy, rather than maintaining the Level I process. Clearly, Technician 1 is still unhappy with the strategy especially as it seems to him that it may involve behaviours which will jeopardize his relationships with vendors (see also Event D). He is jumping to Level III, trying to establish a different vision (and challenge the one they are encapsulating in the text) of the team which includes possible vendors as fully informed members:

T 1 It's a weighted approach --

AE 1 Yes.

T 1 It's weighted to [Azure].

M 1 Only because of other factors.

T 1 Right. But it still is weighted. I'm just trying to clear this up. The initial understanding from the vendors' point of view was --

M 1 We discussed this and [Director 3] said: "Don't stir anything up."

However, this is not an issue which can be resolved at a Level I meeting (although the text under production cannot help but remind him repeatedly of their strategy) and Manager 1 reminds him of the high-level decision, already made, which established the general approach. The debate continues. Eventually, however, Technician 1 begins to accede to the plan:

AE 1 Why have [the client] spend more money unnecessarily?

T 1 Right. So it puts a lot of the emphasis on Azure to get it right.

AE 1 That's right. Yeah. (long pause) Clearly it's the one that best suits the client and that's the driving factor here.

T 1 Maybe not technologically but --

AE 1 -- from a business perspective.

The ongoing competition between technical and sales issues is also evident here. Accountexec 1 reiterates that a business strategy is best for the client, one which takes technical and sales considerations into account. Technician 1 is reminded that he must take a broad view. This strategic issue, however, might have been resolved in a Level III meeting.

Maintaining an awareness of the whole process, rather than level jumping, is a legitimate collaborative activity and functions to drive the proposal forward. While discussing various topics in the proposal and deciding what will be found under each heading, it sometimes becomes obvious to collaborators that their Level II information gathering is incomplete. In such cases, speed is imperative in obtaining missing data and an experienced team member is an invaluable asset. The authority of Level II, based on knowledge, is evident here, both between Accountexec 1 and Technician 1 and then between Technician 1 and Technician 2. The collaborator who knows more takes charge. This brief interlude quickly and smoothly handles the information deficit. Technician 1 seems to know the answer to his complaint and is perhaps reminding the team that his role is not without difficulty:

M 1 Can you have that info by the end of the week or Monday?

T 1 Well, we can try. I mean, you know we have no control about that part of things.

AE 1 Well, what you can say to them is --

T 1 "If you're serious about the business --"

AE 1 "we need it by tomorrow. If it's not in by tomorrow --"

T 1 "then we won't use you."

AE 1 "We won't use you." Right?

T 1 Right.

M 1 You're going to handle that?

T 1 We'll split it, Technician 2 and I. (to T 2) I'll call half, you'll call half.

T 2 (writing) Yeah.

(discussion returns to headings and subheadings needed)

Technician 1 maintains his position as technical expert here by assigning work to Technician 2, but he also shares the load and includes her as a valuable team member by doing the same tasks. Accountexec 1 engages in schedule maintenance, in a fascinating example of collaborative sentence building, by reminding Technician 1 of the solution to his problem. He does not, however, offer to take on any of the information gathering work and maintains his pose as a somewhat distant team member.

Level I activities include the collaborative resolving of issues such as what should be included under each heading, and in how much detail, and who will actually compose the text. Discussions at checkpoint meetings must centre on general principles but will also deal with specific ideas. One such general issue is the assignment of sections which individual team members will draft:

M 1 Obviously the executive summary will be written last.

AE 1 I'll do it!!!

T 2 (laughs) Oh yeah, he'll just cut and paste.

T 1 He's already got a canned version.

AE 1 I've got one somewhere!

M 1 Are you serious?!

AE 1 No. I'm just kidding. Seriously, I will write it. 'cause I have a specific approach.

M 1 (vaguely, looking down at notes) Have you? We reviewed this outline with the client....

Although the humour here has an edge—the technicians seem to feel that Accountexec 1 must be unfairly avoiding yet another composing job—the manager remains focused, avoids being significantly drawn into the exchange, and once more maintains the collaborative level. The account executive tries to take the opportunity to re-establish himself as a collaborative team member by taking on a composition job, thus maintaining team relationships, and perhaps indicating by his laughter that he is aware that the team is not happy with his general lack of participation.

The team reinforces their expectations of Accountexec 1 as a Level I collaborator later in the same meeting, and he shows more sensitivity to his role as drafter. Accountexec 1 shows considerably more sensitivity to the collaborative effort. He graciously accepts more drafting work and still manages to maintain his role as sales leader. This is, after all, his account and his ultimate responsibility, and he is keeping a broad view of the proposal writing process. Accountexec 1 also rehearses his composition, perhaps for team approval. This is a behaviour typical of Level I and in this case the rehearsal does indeed engender a response:

M 1 We want to reiterate in this section our understanding of his needs....

T 1 I think that's an [Accountexec 1] category. What do *you* think?

(T 2 laughs)

AE 1 I usually refer to it as a business problem. (smiles) Thank you. (writes in his notes)

T 1 My pleasure.

M 1 You're going to write the whole thing?

AE 1 Yeah. Well, not get into the hardware/software...[but] how they're "looking for a hardware platform blah blah blah for efficiency of operation" ....

M 1 Are you just going to re-state what's in the RFP? Or are you going to comment ....

AE 1 We don't get into too much detail at the minute level but rather keep it at a high level so we can always get back to the business issues ....

Manager 1 pushes Accountexec 1 gently along in his efforts at text production, maintaining the team relationships while reminding him that he should be expanding on the RFP rather than merely echoing it back. One of the challenges of clip-text would seem to be how to enter it into a new text. Interestingly, Accountexec 1 has not said that he would simply repeat the RFP's phrases, but Manager 1 is gradually learning the strengths and weaknesses of fellow team members and improving his collaborative skills. He can also, perhaps, hear the echo of the RFP and is sensitive to it as a text of considerable presence in the formulation of the proposal.

Justification of text is another Level I activity. Once collaborators begin to rehearse wording, then they are often challenged (as above) or asked to justify their approach. As we have seen, Accountexec 1 often claims merit for his composition based on his notion that much of the document must be very general--broad principles rather than technical and procedural details. Despite continued reiterations, however, the other team members resist his direction. The team returns to this struggle again and again, wasting time and failing to recognize that their continuing debate threatens schedule maintenance:

M 1 (to AE 1) So you're going to write this. Their needs.

AE 1 The business problem ... then after that we say "here's how to do it". But keep this at a high level. (T 1 smiles and laughs looking at AE 1) "[Borden] has selected blah blah blah and now they're in the process of selecting...." That'll do it.

M 1 I understand you are trying to steer away from specifics .... but --

AE 1 Why highlight if they haven't asked for it?

T 1 He asked for very specific things.

AE 1 (reads from RFP, then --) That's it. That's all he's asking for.

The RFP makes a powerful source of justification for Accountexec 1, and he does seem to win this round. The argument, however, appears to be based in an ongoing debate between detail (as desired by the technicians) and generality (as desired by the account executive). Sales needs and business case, it seems, have become inextricably entwined in the minds of the technicians. Their problems with Accountexec 1 as a collaborator, perhaps, have begun to affect their sense of the business case which must be developed in the proposal: a business case consisting of sales and technical attributes.

In similar fashion, the Sundial group also discusses general and specific ideas for inclusion in the proposal.

Controversy arises. Many of the features of the heated exchange which follows bear remarkable similarities to the Borden situation. Once again, we have two technicians who work closely together and reinforce each other's ideas. In this case, the attack is focused directly on presentational ability, rather than somewhat more obliquely on the interpretation of the RFP, as in the Borden case:

AE 3 You're a goddamn lousy writer.

(general laughter)

T 7 No, it's already written.

T 5 Did you read the goddamn notes or not?

AE 3 But it's all in detail. I'm looking for major themes. I don't want detail. What are the themes? You keep burying me in detail. So they can get to the image enabling much quicker than with anyone else. Okay. So where does it say that?

T 7 So then we've got a definition of theme different. We put that all under the explanation of productivity.

AE 3 Swing your thinking around from thinking about the solution to thinking about what's his name, what he's going to buy this for. What's going to make him buy this system, from us?

M 2 For image enabling.

AE 3 That's all just weasel words to him.

In Sundial, as in Borden, the manager tries to support the technicians, once again to no avail, in the face of account executive resistance. And, most forcefully, Accountexec 2 bases his argument on an analysis of the audience, a point of view which he implies the technicians have ignored.

Accountexec 1 does not offer any rationale for his presentation preferences, although audience sensitivity is likely the primary reason as well.

Much of the collaborative text building and checking during Level I drafting surrounds the selection of information to use and the rehearsal and justification of proposal text. Ongoing tasks which maintain the process include maintaining the level, even after an attempted jump to another level. The authority in Level I collaborations is based on skill in presentation, not knowledge of facts. To maintain the level, Manager 1 must divert the behaviour of Technicians 1 and 2 who want to impart knowledge about the computer system in place rather than focus on the presentation problem:

M 1 Are you going to price options?

T 1 That becomes very time consuming.

T 2 Yeah!

T 1 You have to price wiring .... (continues to list items)

(T 2 begins to explain in detail the client's current technical configuration)

M 1 (interrupting) [I] Understand the problem. Just looking at this from the guy getting the proposal.

T 1 Well...

M 1 And he says "Okay, this is my base price. Now I've got all these options. Should I take it or shouldn't I?"

T 1 Well, we can ...

M 1 How can we help him with that decision?

T 1 We can give him a ballpark figure.

AE 1 Not detailed ones ... so we can say "Based on your standard, this is what you can expect to pay."

M 1 (to T 1) I like your idea of providing a constant.

T 1 Yeah, we did that before [on another occasion] ...

Together, the group works out a way of selecting and offering information in the text. Of interest too are their attempts at maintaining team relationships. Although Technician 2 is not directly acknowledged for her value as a skilled presenter, her technical problems are acknowledged. Technician 2 has a particularly challenging job as a collaborator: female, much younger, and much less experienced (see Day Nine, Event R. A Woman's Place). The technical point of view combined with valuable presentation ideas, as eventually expressed by Technician 1, is validated by the manager. The technical contribution is acknowledged as useful to the drafting decisions, here rehearsed by Accountexec 1. The text is justified by him because it is appropriate for the intended audience (Borden) and its expectations: audience sensitivity is an ongoing collaborative task. Technician 1 also demonstrates audience sensitivity by validating the text strategy from previous experience with the client.

The team continues to work fairly smoothly during this meeting. They maintain the process by accepting their text-building roles and thus supporting the team. Although the group is still doing some rehearsing of text, the exchange below focuses mainly on role building and team maintenance.

As collaborators, each member accepts responsibility for drafting assignments which they can best handle. Of note especially is the close working relationship between Technicians 1 and 2, who almost always speak of themselves as "we." Perhaps aided by their collaborative experience, they also offer aid freely to Manager 1 who will do first drafts of many sections largely on his own:

M 1 We'll say "Here's what you need to do ..." Whatever. Can you (T 1) help me in that? I'll take the lead.

T 1 Okay. Okay.

(M 1 reads the next heading from proposal outline)

T 2 That goes with technical strategy -- so we [T1 and T2] may as well do that.

****

(M 1 reads next heading)

T 1 It's a group thing.

M 1 I can draft something.

T 1 And we'll fill in.

M 1 (records roles) Okay. I'll draft.

AE 1 Just put beside it "H-chart".

M 1 "H-chart"? What's the "H" stand for?

AE 1 That's the way it looks.

M 1 Oh. (pause) Oh! Okay. (gestures in an H shape, smiles)

Accountexec 1 does not offer to draft text, maintaining his role as a senior employee but avoiding a task. Such behaviour is notable given his ultimate responsibility for the proposal's success. He limits his contribution here to a presentation suggestion.

Manager 1's lack of experience with the company is obvious here in his problems with the "H chart". Visual presentations of strategy abound in the proposal writing effort at Cerebellum. Accountexec 1 does not offer to build this chart, however, despite Manager's lack of familiarity with it. Manager 1 in fact does not ask what might be in such a chart, perhaps due to embarrassment or perhaps due to the highly focused quality of Level I text-checking sessions which seem to be characterized by a relatively rapid, straight ahead approach. At this point, collaborators are considering a large number of headings which represent topics for possible inclusion in the proposal. Each topic is discussed to ensure a common understanding, and then assigned as part of the text production work. To maintain the schedule, Manager 1 must make sure the meeting stays on track. He seems hampered by his own lack of in-depth understanding and the reluctance of Accountexec 1 to assist in establishing time parameters.

Level maintenance does not seem to be a problem during this part of the meeting, which does, however, feature some evidence of overall process awareness, and role maintenance which will help to sustain the process. This collaborative team has members skilled in different areas. Although Technician 1 here seems willing to accept responsibility for "pricing" (that is, the amount paid by client: cost plus profit), he is relieved of that duty by Manager 1 and

Accountexec 1. Cost-gathering is a part of Level II activities largely accomplished during the proposal effort by the technical staff, however, Level III meetings of senior management dictate the price which will be quoted to the customer. This sorting out of roles however, seems to distract Accountexec 1 and he jumps into Level II, drawing Technician 1 along with him. Manager 1 steps in to maintain the Level I activities by moving the discussion back to the outline: "Let's get --" back to our current work, perhaps:

M 1 (reading from outline) Pricing.

T 1 What? Ballpark? Estimate? Fixed price?

(general discussion, then --)

M 1 You guys do the data gathering.

AE 1 You do the costing ... we'll do the pricing.

T 1 Is [Director 1] going to review this document?

M 1 Yeah. And we'll want [Director 2]'s input.

AE 1 When you talked to vendors -- did they give you everything?

T 1 No. They're not sure it's right for them [to give prices].

AE 1 If they don't, call [an alternate source].

T 1 We'll fax them.

M 1 Let's get -- let's talk about timing.

There seems to be always a delicate tension between keeping the entire process in mind, thus maintaining an awareness of the different levels, and avoiding the urge to jump between levels, slowing the process and not accomplishing tasks important at the current level of engagement.

Presentation continues to be the main emphasis of the Level I collaboration. Arrangement and diction are two rhetorical concerns repeatedly addressed. This conversation demonstrates clearly the skill based authority in collaboration which characterizes Level I. Writers work together offering and accepting suggestions for the most effective presentation of ideas regardless of seniority. Here we see Accountexec 1, so often engaged in reinforcing his role as senior management and not as a team player, acceding to Technician 1 and Manager 1 as they rehearse and justify arrangement of text and its wording:

AE 1 We've got to sell them the benefits -- why we think it's right. I think we should do it in [this section].

T 1 There should be a general statement somewhere.

M 1 That would be in the executive summary.

AE 1 Yeah.

T 1 And then you [a reader] would go down and find it [in the subsection]. So you'll mention it -- very high-level --

AE 1 Yeah.

***

T 1 We'll have to work together on that one. We do the bare bones technical requirement and then we can wrap stuff around.

M 1 (writes) I'll just call it -- "selection" -- or (pause) better words?

AE 1 Well, we do have "strategy"....

T 1 No, it's got to be --

AE 1 Oh! Okay okay. It's got to be -- what did you call it?

Ideas for presentation, it seems, can come from any source. However, although Accountexec 1 accepts his role as drafter of the executive summary, he continues to be reluctant to take on other duties. His task avoidance unites the rest of the team against him, and leads to slow-downs (schedule interference), tearing at the solidarity of group members' interdependence (threatening team maintenance). Humour here functions to regulate the team member's behaviour. It begins gently, maintaining the working relationship among team members and yet reprimands the task-avoiding behaviour. Accountexec 1 has side-stepped the drafting task and proposed one for himself as a reviewer. The technicians challenge his ability even in that role. Manager 1 must once again maintain the schedule by cutting off the bantering, which is beginning to become sarcastic and potentially team threatening. He returns the discussion to the task at hand:

M 1 [Accountexec 1], do you want to write that? (silence. T 2 laughs) I mean that's our approach.

T 1 That's key. That's the most important thing in this whole document.

M 1 It's either you write it or I write it.

AE 1 How about if you write it and I'll QA [quality assure] it -- with a red pen.

T 2 You know how he loves his red pen?

T 1 I spent three weeks with him red-penning me (laughs).

(AE 1 laughs)

M 1 Did it wash off? (laughs)

T 1 I kept putting the same document in front of him --

AE 1 Yeah. It kept looking familiar to me!

(M 1 reads next heading from the outline.)

Of interest here is Technician 1's later private report to me that the document he mentioned here, after being reviewed numerous times by Accountexec 1, was eventually pronounced satisfactory. Technician 1 had not changed it from the first draft. Such events seem to threaten the team's confidence in each other as valuable team members all contributing to the text production effort. It is nevertheless interesting that Technician 1 does not disclose this information in the meeting, perhaps in an attempt to maintain the team.

Checking to see that writing styles are merged is another activity of Level I collaborations. Decisions on a format, for example, can help individual team members to compose a single document with unified presentation. The proposal becomes a "company authored" document. The appearance of the text on the page, for example, should be an issue relatively easy to decide; however, past frustrations can impede even the most straightforward collaborative task. Accountexec 1 is providing advice to Manager 1, and Technician 2 suggests, probably unfairly, that the standard suggested is one unique to Accountexec 1, not one decided on by the group or pre-ordained by the company. Accountexec 1 must call up the general manager (in absentia) as final arbiter of style, in order to defend the formatting he uses.

A more productive approach might have been to justify the presentation approach by, for example, ease of reading by the client, since Level I thrives on the authority of a drafting skills based collaboration. Instead, Accountexec 1 jumps to a Level III status based argument. The possibility for a learning experience is lost. Also, Technician 2 has not allowed Accountexec 1 his role as experienced proposal writer and therefore has threatened the timely production of the text. Debate is focused once again on the use of clip-text, in this case the use of diagrams and format taken from previously written documents:

M 1 Are you going to use diagrams?

T 1 The same ones we used before -- some minor modifications.

M 1 I'm thinking about the style now.

AE 1 This format (shows him a completed proposal).

M 1 (flips pages) Okay. Lots of bullets --

T 2 [Accountexec 1] likes bullets.

M 1 And tables.

T 2 [Accountexec 1] likes tables!

AE 1 It's [the general manager] -- he taught us to be simple. Not too many words. Simplicity.

Feeling pressed perhaps, Accountexec 1 retreats to the expertise of the general manager, rather than explaining, for example, how effective a point form document might be to the Borden audience. If he has indeed learned a presentation lesson from the GM, he does not seem able to pass the rationale on to the proposal writing group.

As members leave to begin tasks on their own (though not, probably, without remembering their team members), Manager 1 makes final efforts to keep each individual aware of the team effort and the time pressures of looming deadlines. Now that the group is moving from a checking phase of Level I to a building phase, it will be easy for them to drift apart. Manager 1 is maintaining the schedule by giving them a phase deadline, and by providing them with a place for pieces of text as yet another way to check on progress as well as quality of work:

M 1 Is everybody comfortable that they can get something to word processing on Monday?

T 2 Something!

M 1 I'll start a workbook.

T 1 We'll start slapping things in it -- a page or two and then you can start red penning enough that we can re-visit them.

AE 1 We should include -- put in your thoughts...

M 1 Notes -- lots of notes.

With aid of these notes, the proposal team may continue to work together even when apart.

Event J. Level I. Down To Work

A vivid example of collaborative text-building is shown by Technicians 1 and 2 immediately after Event H, as discussed above. Of note is the speed and intensity of the conversation they engage in. They deal quickly with difficulties of idea presentation as they arise and concentrate on getting words down on the page. Analysis of video-tapes reveals also that at this point collaborators begin to eat and drink together—apples, granola bars, pizza, chocolate, pop, juice, coffee—sharing sustenance and text production ideas! Here Technicians 1 and 2 settle in for the drafting effort. It is interesting to note the several collaborative tasks which are proceeding at once in this brief conversation. As time becomes shorter it seems team members must juggle more balls in the air. The image is particularly apt in this instance. Where are the balls? How many balls must we juggle? What pattern are we weaving with the balls? Will our audience like the results? What if we drop them at the crucial moment? Unlike jugglers, however, collaborative writers must also name the balls and acknowledge the effect of the names on the entire presentation:

T 1 (refers to list of headings) What else is in there?

T 2 "Information technology"? That's what's confusing.

T 1 I think that's the wrong name. It should be called "hardware architecture" or --

T 2 "Network architecture" -- no --

T 1 I think it's a combination. "Network and Platform". I'm treating it like that. That's what I want to cover off with [Accountexec 1].

***

T 1 We can extract this from our [previous report].

T 2 Are we going to be able to get all this to word pro for Monday?

T 1 It's going to be tight.

T 2 Some cut and paste --

T 1 We won't have ... (lists several missing pieces of information).

There is some evidence here as well that the solution to the technical problem is inextricably interwoven with the building of the text in Technician 1's comment that he is building the network and platform together as the solution, and not merely discussing them together in the same text section. Once again here as well is the concept of real world writing as "clip-text", of writers assembling the already-written in the text production effort.

Day Seven

Collaborative writing on Day Seven results in the completion of network management and a description of the Novell network by Technicians 1 and 2. Manager 1 is also drafting on his own.

Event K. Level I. Covering Off and
Event L. Level II. The Audience Awaits

Technician 1 and Accountexec 1 meet to further discuss the presentation of ideas. Technician 1 is "covering off," or checking for approval of his approach, both technically and rhetorically, with Accountexec 1. Although Accountexec 1 is carefully avoiding any contact with paper—which remains in the hands of Technician 1 at all times and thus, perhaps, remains fully his responsibility—Accountexec 1 and Technician

1 work together amicably for once, and resolve an approach for the drafted copy of the proposal:

> **AE 1** You've got to keep it sort of focused -- (makes a square with his hands in two chopping motions) otherwise you can spend a lot of time...
>
> **T 1** Well, that's what I'm saying. So we'll keep this sort of low level.
>
> **AE 1** I would not have any more than four options that could be added.
>
> **T 1** That makes sense -- two for each.

Technical and rhetorical issues are closely linked here once again. These collaborators agree that keeping the technical options limited will also limit the complexity of the text format. Also, as in many Level I collaborations, work is accomplished quickly between two motivated people.

Once this brief conversation on drafting is completed, however, the level shifts to Level II, and another meeting seems to begin. There is a new topic—dealing with the various audiences of the Borden proposal. An effective team effort would have drawn the vendor partners (one audience) and client (another audience, or perhaps audiences, Jake and Mr. B.) into a sympathetic joining with Cerebellum. Various factors, including the general proposal strategy of testing for the best partner, seem to be hampering team maintenance and audience sensitivity, thus making text production efforts more difficult. In response to Accountexec 1's query concerning vendor responses, Technician 1 reports: "Vendors? They're not happy with us .... They're not too impressed. And also they're not too co-operative on pricing." Obviously, not only are relationships being strained by the general strategy which favours one vendor, but Technician 1's information gathering efforts have been severely hampered as a consequence. Vendors no longer feel as though they are team members, and furthermore have ceased to be even co-operative outsiders. They strike back at Cerebellum by withdrawing access to information, thus obstructing the proposal team's text production in general and hampering especially schedule maintenance efforts. Missing vendor information will continue to hinder the proposal building effort from this point forward.

The adversarial roles of audience and speaker continue with the Cerebellum team's efforts to deal with the Borden project manager, Jake, and Borden's owner, Mr. B. Manager 1 enters the Event K meeting above between Technician 1 and Accountexec 1 who, ironically, have just been discussing how to deal with formerly sympathetic vendors turned unco-operative. They must now deal with the ongoing problem of a project manager (Jake, first mentioned in Event A) with whom no one has developed rapport, and a rather distant client-owner, Mr. B., who seems to be the real decision-maker. Manager 1 has engaged Jake on the phone in what could be an effort to include him as a team member, and reports his conversation to Accountexec 1 and Technician 1. How does one deal with a difficult audience? In this case, team members seem to agree that the project manager is foolishly keeping vital information from them, thus hampering the proposal effort which is after all intended to solve Borden's problems:

AE 1 And he [Jake] was very open with you?

M 1 Yeah, and in the end we kind of closed. I said, "Is there anything we've missed, or anything you think is important in this approach, anything you still have a problem with? And he said, "No, we'll weigh it against the criteria."

AE 1 Yeah. He doesn't have the selection criteria in the proposal, does he?

M 1 No.

T 1 No.

M 1 Which is a mistake. How can people bid if ... or write a proposal if --

T 1 They'll go with their best knowledge.

Although such agreement builds the cohesion of the Cerebellum team, it does so in a rather unpleasant manner. Cerebellum members do not invite the audience in as an equal team member. Instead, they close ranks and maintain themselves as a group by turning the audience into a target. Having agreed once again that Jake can be safely ignored, perhaps because he is difficult to relate to, or more likely because he has now been judged by the group as less important than the rather shadowy Mr. B., the team works out the owner's probable criteria as a member of a group they call "senior executives":

M 1 So I think their selection, for [Jake] because he's the delivery guy, are times, limits and costs.

AE 1 Yeah. In that order. (laughs)

M 1 'Cause he's the delivery guy. If you asked [Mr. B.] what his --

T 1 Business related --

M 1 Would be costs and flexibility.

T 1 He can plan -- he can budget --

M 1 He can stretch things out. And my experience -- I don't know about you guys -- with senior executives is they don't want to make huge decisions. They want to make little decisions.

AE 1 Yes. Absolutely.

Echoes of Aristotelean advice reverberate here. Members of groups share common behaviours and likely reactions to rhetorical ploys: little decisions on options should win over Mr. B as the primary audience.

The Sundial proposal also faces problems with deciding on a presentation which will convince the client-audience. In common with all potential clients, such audiences are powerful decision makers who are often weak in technical knowledge. Especially for technical specialists, finding the appropriate stance towards the client which can be embodied in the proposal, often proves to be difficult. In the Sundial proposal effort, however, Technician 7 proves to have the ability to relate to an audience. Here is a conversation which seems to be on the cusp of a traditional adversarial view of audience and a competing sense of audience as a member of the team. Technician 7 shows an understanding of the client's confusion over technical matters, and a willingness to work with them to draw them onto the technical team by giving them knowledge and a new way of defining terms. His conception of the audience as new to the implications of technology leads him to an interpretation of his role as facilitator, one who would help them to become informed. The reaction of the Director shows immediate suspicion--a view, perhaps, of the audience as capricious, powerful, and petulant. Such an audience, in the more traditional view, must be carefully handled, kept at arm's length, and watched in case they become annoyed:

T 7 They've said through these meetings: "Don't touch the workflow, just leave it as it is." I've said, "Fine, I hear you. I'm going to produce a workflow and a modified workflow. Why? The technology changes the workflow." The other vendors are avoiding that, the conversation of workflow, because they get shot down. "Don't touch that, don't touch the workflow." We're going to touch it.

D 4 Why?

T 7 Because when I sat down and asked them the question: "You recognize the technology is going to change the way you do business," didn't use the word workflow, "that means some of the steps in your workflow are going to be different." "Oh, yeah, yeah." "What are those changes?" "We don't know. We're looking at the vendor to tell us."

D 4 They said that.

T 7 Exactly.

D 4 Who said that? Someone with authority?

T 7 [Allan T.] Guy that owns the thing.

***

D 4 Why did they say "don't touch the workflow" then?

T 7 It's a definition-syntax thing. Okay? They don't want you to go in and do a re-engineering effort which is what the people [some other vendors] want to do. They also want to make it clear that there isn't a clear linear flow in central records, there isn't .... I said, "What are you trying to achieve there?" He said, "What we're trying to achieve is work teams." I said, "You're not there yet." He said, "No". I said, "Are you looking at the imaging solution to facilitate this?" He said, "No -- could it do that?" And that's where I see our vision as unique, I don't think the others have caught that.

AE 3 This is where the vision starts to come in. Let's have some more. All right, I like yours.

D 4 We just have to present that very carefully so it doesn't sound like we're throwing out their assumptions.

The technician persuades the others that his bold and risky plan can work, if presented carefully. He is able to modify his view to include the director's concern and suggest a way to word the "vision" to win the audience's trust *and* educate them about their needs. Technician 7 is a collaborator endeavouring to be sensitive to two audiences, both the client and the Cerebellum team.

Event M. Level I. A Decisive Dyad

Despite Director 1's assertion (see Event A) that the Borden solution should be complete before the writing proceeds, the text and solution building proceed concomitantly. Here we see Manager 1 engaging Accountexec 1 in a discussion of the solution which must be clarified. Although Accountexec 1 initially moves physically away from the problem, and continues to avoid it through language, Manager 1 presses him sharply. Together they do eventually grapple with the search for a completely detailed and recordable solution, coming back to the task of rehearsal, of deciding which sorts of words fit:

> **M 1** This is where it gets a bit fuzzy in my mind. How are we going to do this?
>
> **AE 1** (moves back from looking at M 1's computer screen) I don't know.
>
> **M 1** Do you have any ideas?
>
> **AE 1** No.
>
> **M 1** Does [Technician 1] have any ideas? We're going to be asked this.
>
> **AE 1** Yeah.
>
> **M 1** "How are you going to do this?"
>
> **AE 1** I don't know. Well, I presume that what we have to do is -- uh -- set up some sort of test ... (outlines idea)
>
> **M 1** ... so maybe "Our ideas are flexible but one idea might be ..."
>
> **AE 1** Yeah .... That's possible right? So we could have multiple levels, right?

Accountexec 1 seems enthusiastic at last about accepting Manager 1 as an equal team member. Skill-based authority lies equally with both team members in this instance. Equal partnerships are relatively rare in the Borden proposal effort, with the notable exception of Technicians 1 and 2 as previously discussed (for example, during Event H).

During the remaining portion of this event, Manager 1 and Accountexec 1 continue to maintain the team, working quickly to resolve differences, include ideas from absent team members and build the text as they develop the solution:

M 1 Director 2 was suggesting this kind of chart (draws).

AE 1 Yes yes -- .... that could be on the second page -- then we could have (points to page, then draws). How does the [project] team mesh?

M 1 Yeah. It meshes this way (draws). Right?

AE 1 So, we've said "This is the whole project -- this is yours ...." But his [Director 2's] thinking and mine [differ] (draws difference) .... but we can massage that later on.

M 1 But what happens is that here (draws) you're together. So we'll call it "Acceptance Criteria" -- it's less threatening to him [Borden].

AE 1 Right. A selection. Absolutely. I like it.

Charting is writing, or composing, too, in a very important way. Building the chart together functions in several ways. First, the chart will form part of the final proposal package; therefore, drafting is accomplished and advances the process, keeping the team on schedule. Second, charting allows writers to discover and merge different ideas on the approach which will be presented. It provides a concrete referent for collaborators to demonstrate their thinking and evaluate ideas brought by fellow collaborators. Finally, it serves to remind them of the broader audience they must address. Director 2's ideas must be recognized, as must the reaction of the client. Given earlier noted problems with audience, it is not surprising that Borden remains somewhat nebulous here—is the "him" mentioned Jake or Mr. B? The collaborators seem content that it could be assumed that no audience likes to feel threatened and the chosen wording is therefore safe. Notable too is the fact that the visual here is original text, unlike clip-text art referred to previously by Technicians 1 and 2 (Event H).

Day Eight

Day Eight marks the first and second drafts of many sections of the technical solutions, written by Technicians 1 and 2 and Manager 1, and thus the proposal can be said to be in a first version. For example, organization of personnel and the work plan for the project are in a rough draft. The project team members' descriptions are begun, with two positions outlined. In addition, Accountexec 1 has completed a draft of the executive summary.

Event N. Level II. Collabo-tech

Technician 1 continues to gather information, checking for problems which have been raised during his involvement in text drafting events. He realizes that, as technical architect, he will bear much of the responsibility for the testing process which forms the heart of Cerebellum's proposed approach. For assistance, he seeks out another technician with more specialized knowledge than he has. Worthy of note is that Technician 4 is two steps lower on the office hierarchy; however, he holds the authority of knowledge during the following conversation:

T 1 (describes strategy) How much effort would we require? Two weeks?

T 4 You know who's the best person to talk to (searching for information as well in a trade journal as he speaks)? [Barb] ... to do it properly, they've budgeted two to three months.

T 1 We don't have that. We have max two weeks and we don't want to spend a lot of money doing it.

***

T 4 Well, you'll have to simulate the process (T 1 records). Design is two weeks in itself .... (discussion continues)

Ever present time pressures necessitate a course of action different from the one proposed by Technician 4 as a model. He listens to new information and suggests an alternative which might meet Technician 1's criteria. The Level II activities of information gathering and considering continue despite the now fairly advanced state of the document and general predominance of Level I activities.

Event P. Level I. Enter the Dragons, Part A

The RFP document both initiates and sustains the proposal writing process. It lays out the requirements and even the format for the proposal, and as such should be consulted constantly and frequently by the writers. If regarded as yet another collaborator or member of the team, it could serve as a chief facilitator in text production. Like all such documents, however, the RFP is open to interpretation. Often, alternate interpretations are valid, even after careful reading, and must be discussed by the team to ensure a common interpretation. At other times, however, a lack of close reading leads to problems which could have been avoided by investing extra time in analyzing the RFP text. The proposal writing process is also complicated here by the presence of other documents prepared for Borden by Technicians 1 and 2 which have been used by Borden in the preparation of the RFP.

Here, for example, we see Manager 1 and Technicians 1 and 2 struggling with the RFP and other documents in their attempts to draft their own text. The proposal manager wants to maintain a simple and straightforward approach: the RFP asks for this; therefore here is our response, in a one to one correspondence. The voice or *ethos* projected by the RFP becomes, for him, a clear audience. For the technicians/engineers, however, no such clarity exists. Although they allow that the RFP asks for certain specifics, they see, perhaps because of greater technical knowledge, that the answer is not straightforward. There is rather a continuum of answers, all of which satisfy to some degree. The answers, moreover, are not completely pre-packaged but are, to some extent at least, chunked (and available as clip-text). They have been previously rehearsed in other proposals, and chosen from among a repertoire of technical possibilities and all of which come with hefty price tags:

M 1 Does each option relate back to a requirement in the RFP?

T 2 Well, there's different options to the degree you want to go and satisfy that requirement.

M 1 Yeah. I think we've got to be -- I don't think they're looking for a study. I think what they're looking for is a proposal ....

***

T 1 We'll make it clear to them that these are all the possibilities -- and they'll use that information to make that decision. So if they need this [option] -- they'll go to that section ....

M 1 I think if we can tie it back to his requirements in the RFP --

T 1 He was very vague .... He wants total availability [of the computer system] -- 99.8 percent [of the time].

T 2 I don't think he realizes what it's going to take -- the dollar figure ....

T 1 It's a busy little section. So -- we just have to round it out, polish it off and make it clear in the document.

M 1 Where is the document?

T 2 The RFP? I've got it here.

M 1 You see the way I was looking at the RFP was these requirements are outside the base system (he points to relevant section, and all three move in close to read).

Text drafting here is also complicated by the presence of other documents prepared for Borden by Technicians 1 and 2 which have been used by Borden in the preparation of the RFP, and by the technicians' prior experience working with the audience (probably Jake, given the rather pejorative tone of their comments) who is regarded with some suspicion. All of these factors (technical knowledge, previous documentation, and previous audience experience) lead to audience side-stepping. The technicians will not ignore the RFP or Jake as its probable author, but instead attempt to transfer their responsibility to propose a solution by listing possible solutions and asking the audience to pick their own. Thus, perhaps, they try to avoid writing persuasively. Manager 1, however, continues to insist that the RFP be more closely scanned for text drafting ideas.

Although Manager 1's lack of experience with the audience may be leading him to rely too heavily on the RFP document, he does remind the team of important audience concerns. The technicians, over-reacting perhaps to their previous somewhat negative experiences with Jake, agree to reconsider the RFP document. All collaborators then discover that they have not been reading material closely enough:

T 2 (reading aloud from RFP, then --) Can the application be split like that?

T 1 No.

T 2 I didn't think it could ....

T 1 It could be in the future [rumoured updates not yet available].

T 2 (ignoring T 1, pointing to RFP) He's gone and thrown all these things back in -- we went through this [with him] and told him [which ones could not be done] ....

M 1 Okay, what about this next thing?

T 1 Those are the words. We have a table [which shows the idea] in the smaller document --

M 1 I missed that.

(T 2 searches for and points out diagram)

Lack of close reading has lead to difficulties in drafting text. Schedule maintenance is also threatened by continuing problems in casting the audience in some helpful fashion (rather than as an obstacle). We see here also the continuing importance of visuals in the drafting effort, as ways to encapsulate the technical solution. Nevertheless, "the words," as these collaborators frequently say, must be written. The drafting process, however, has been aided by the close reading of relevant documents.

Merging of text to achieve a single version with a single style, or corporate "voice," is yet another collaborative task considered during Level I. Although one writer will eventually resolve differences in presentation, the group must recognize the problem and minimize the time it will take to correct. The maintenance of Level I roles within the team continues, it seems, to be a problem here. Both Accountexec 1 and Technician 1 are unhappy with drafting duties, and indeed there seems to be no commonly accepted understanding of who must accept drafting activities, other than the proposal manager. Interestingly, Accountexec 1 has written one summary before the proposal document is substantively complete, and yet uses lack of "meat" in the rest of the proposal to excuse his lack of progress in his other summarizing duties. Such task-delaying impedes the progress of text production or at least points to an unusual conception of a summary. The group has, however, agreed that a draft must be completed before styles can be merged:

(AE 1 enters room and remains standing)

M 1 Is that your [executive] summary?

AE 1 Yeah.

T 2 Thank you.

M 1 They've just been fixing mine [the text he has drafted] -- told me to take out my lies.

AE 1 So you guys can take a look at it. It's rough. The concepts are there.

T 2 The system objectives?

AE 1 Pardon?

T 2 You did the system objectives?

AE 1 Uh, no. I want to make sure this is okay first. And then once I have some meat from your stuff, I can summarize it in the system objectives (starts to leave).

M 1 When are you coming back for changes?

(general laughter)

AE 1 Whenever -- I'll be in my office.

T 1 *Mañana*.

(AE 1 leaves)

M 1 (reading AE 1's text) Two different styles.

T 2 No -- we've got about four different writing styles!

T 1 What we were thinking was -- we've got to get it to a level where it works and then integrate them. Otherwise, it's not going to read very well. Once everybody's happy, then I think we just have to do it in one style. And it's not me!

(T 2 laughs)

More collaborative reviewing and editing might aid this process. However, in a document which inevitably involves several writers (and pieces of clip-text lifted from other documents written by still other writers), style merging, or the formulating of a single company voice, will always be a concern.

Mid-process activities may thus be seen as intense work in Level I activities—building and checking text for presentation in the proposal. The middle phase also includes Level II information gathering and considering which furthers the Level I drafting of text. Several collaborative text production principles give this real world writing its distinctiveness. These principles include the use of clip-text, the importance of visuals, and the constant merging of strategies and tactics to achieve a unified and consensual approach to the writing of the proposal.

CHAPTER SEVEN: PRESENTATION AND DISCUSSION OF LATE EVENTS

> "Now! Now!" cried the Queen. "Faster! Faster!" And they went so fast that at last they seemed to skim through the air, hardly touching the ground with their feet, till suddenly, just as Alice was getting quite exhausted, they stopped, and she found herself sitting on the ground, breathless and giddy. (Lewis Carroll, *Through the Looking Glass, and what Alice found there*)

Time pressures and other accumulating problems (such as the lack of role maintenance as leader and participant by Accountexec 1 and lack of audience focusing by all collaborators) leads to a sudden increase in the involvement of senior management in the proposal effort during Day Eight. As Alice finds in her dealings with the Queen, being involved in a sudden decisive act by a senior player can prove disconcerting. In the collaborative text production process of the Borden proposal, the time, it seems, has come to accelerate the pace. Authority begins to rest with high status Level III personnel. Directors 1 and 2 take prominent leadership roles over all collaborations.

Event P. Level I. Enter the Dragons, Part B.

As Event P on Day Eight continues, we see Director 2 enter the meeting in his role as senior technical director, and begin to collaboratively resolve problems over drafting issues earlier discussed by Manager 1 with Technicians 1 and 2. At this point in Event P, Manager 1 has been diagramming on the white board, sketching approaches to the presentation of the solution in the proposal and using a visual to share and check his understanding with the group. Due largely to the explanation of Director 2 during the sketching activity, Manager 1 finally realizes why the RFP requirements cannot be more simply answered in the proposal:

M 1 Ah -- so we've got base systems that look like this (he draws a very small square and a very large square)!

D 2 Yes!

T 1 Some are not even square -- they could be round!

(general laughter)

***

T 1 Past a certain point -- there's nothing similar between those machines. And how you manipulate it becomes really difficult. So it's not as straightforward --

Visual approaches, to both sharing and checking understanding, seem to be one effective way for collaborators to discuss ideas. The group's affinity for diagrams of various sorts, as supplementary text, continues to be a theme in this meeting. Director 2, who now emerges forcefully as the leader of this Level I drafting session, invests a great deal of confidence in charts and tables as effective textual devices, which can serve as guides for the drafting of paragraphs. Time is clearly growing short, and Director 2 tries to deal with schedule maintenance by taking control of the group's collaborative drafting process. He and Technician 1 have been working together on a spreadsheet, obviously without Manager 1's knowledge:

D 2 I wouldn't worry in the words as to what our recommendation or approach is. I think we've got it fairly clear.

M 1 I know the approach. I'm just trying to organize it.

D 2 We don't want too many choices for them to make. "If you want the absolute base, it's this." The words aren't difficult and the spreadsheet....

M 1 (not hearing last few words) Can we get them a spreadsheet that shows that --

D 2 I've got it all made up ready to go.

M 1 With the technical requirements --

D 2 I've got it all made up ready to go. That's our problem -- we need the numbers. I just phoned --

M 1 Can I see a copy [of the spreadsheet] --

D 2 Umm, hmm -- so if we write the words according to what our schedules and spreadsheets look like, it's not that difficult. (T 1 sighs) Right?

T 1 For the words I can just put down little blobs of information right? (laughs)

Role maintenance and team maintenance are clearly at issue here. In a Level I drafting session, an employee's skill in presentation usually has precedence over status and technical knowledge. However, lack of technical understanding has hampered Manager 1's ability to draft at this point, which shows the importance of collaborators having a broad base of skills at all Levels. As effective collaborators, Technicians 1 and 2 and Director 2 have helped Manager 1 to overcome the problem. However, they have also avoided collaborating with him by developing a new textual presentational device without informing him or asking him to participate. Director 2 has the status and the technical knowledge to effect such a change, and is prepared to impose presentational style (which is not one of his strengths) in the interests of meeting the proposal deadline. The team must now survive by accepting this sudden change in roles.

As leader, Director 2 is forcefully taking over Level III concerns with maintenance of the strategy, Level II concerns with information gathering, and Level I concerns with the rhetoric of the final text. Other team members are less satisfied with their roles. Technician 1's comment ("little blobs of information") indicates perhaps that he is happier dealing with Level II information gathering than drafting and general problems of presentation at Level I. And as the meeting progresses, Manager 1 still seems to be overwhelmed with his drafting role, despite further reassurances from Director 2. As an attempt to check Level I drafting issues (the original intent of this meeting), the conversation which follows demonstrates collaborative tasks in conflict, threatening the team relationships.

Director 2 seems to be attempting to relieve Manager 1 of a role he cannot handle—that of technical expert, encouraging him to record the broad strokes of the strategy and leave the details of the technology to other text producers. His advice however, is somewhat contradictory. Whereas previously (as noted above), Director 2 seemed to be pushing the primacy of the visual, which would be built and then reiterated by the words, here he seems to indicate that the words should come first and then the visuals will inscribe them in a visual form:

M 1 Use the technical requirements in the RFP, right? There's a base and options. (sighs)

D 2 Don't wor -- to me, it's really important to get the words down that describe what our approach is, in terms they can understand, and we'll make sure the schedule supports those words ...."We recommend this is what you do" or "we do, collectively" but from a words perspective, as long as we know what they are, we can make the numbers match them.

M 1 I just want to tie it back to the [RFP] statement of need.

D 2 Fine. Great idea. So what's next?

The breakdown of collaboration may lie with the sudden change of roles at this point. Level III, Director 2's usual collaborative site, is concerned with the general strategy which must be made clear in the proposal and which may reasonably be expected to be drafted by the proposal manager and then further reinforced by diagrams. Technical information, however, might most easily be presented in a chart and then supported by surrounding text. Director 2 is not as skilful at Level I, however, as he is at Levels III and II. He forces this drafting issue not by citing rhetorical advantage, but rather by level jumping. His status and generally extroverted free-wheeling style, so appropriate to a Level III meeting, and his considerable knowledge of information sources and pragmatic need to get the job done, appropriate to Level II, are used here to mask the lack of expertise at drafting, which is a Level I issue. He is not flexible enough to engage with the text production activities necessary during drafting, such as rehearsing ideas, working intensely with questions of organization, for example. Manager 1's repeated attempts to engage collaborators in a close reading of the RFP are quickly dismissed again by Director 2's concerns about schedule maintenance: "What's next?"

Day Nine

During Day Nine, the technical staff works on completing the first drafts of the solution, now called the "Technical Strategy." Most of this work is done by Technicians 1 and 2. Their drafts are reviewed by Director 2, who also adds to their work. He and Technician 2 review results and make further modifications together. Director 2 also does a first draft of the costs of the project which will be needed later by a Level III group to decide on prices. Meanwhile, the proposal manager writes a new executive summary since the one drafted by Accountexec 1 has now been judged to be inappropriate by the team. Manager 1's work becomes the new first draft of the executive summary which will move on to Director 1 for further review.

Event Q. Level I. The Recyclers

Text building continues apace with the technicians still working closely in concert at drafting the solution and simultaneously building the text. Consider the difficult reality of their situation. They are trying to produce a document with insufficient information. However, they are largely responsible for gathering that information, as well as building the technical solution and shaping the text which persuasively presents that solution. They turn once again to the use of clip-text from previous reports they have written, and from letters composed by vendors to assist them. The material they are attempting to build consists of both words and visuals, and they assemble it in much the same fashion as they usually gather information:

T 2 Okay, so this is generic (reads aloud, then) Where's that --

T 1 What are you looking for?

T 2 That diagram you just showed me. Where's the wording around that?

(T 1 locates previously written text on the desk)

T 2 Okay. (scans page) Not going into these specifics.

T 1 It starts with recommendations ... (points out parts) and that's just a "come-back" ... Maybe, what I have that's better are those three letters I got vendors to send me [on another occasion]. That's not a bad source of information.(he leaves and returns)

(T 2 begins copying text into proposal)

T 2 I'm just putting this as an overview --

T 1 And then this (points) gets merged in there?

T 2 Right. (she reads aloud as she types)

T 1 Where did [Director 2] get this amount [of money]?

T 2 (writing on the hard copies and eating an apple) Does it add up?

T 1 All the numbers? No, but there are a lot missing. (writes on his copy as T 2 continues to type)

Some agitation seems inevitable. Technician 2 is transcribing from one document to another. She and Technician 1 are assembling bits of information which they hope will need little if any re-writing. However, such pre-composed text must be inserted with some skill. Writers must pay close attention to headings and to the general cohesion of logic and style. Such behaviour, while not guaranteed to produce an effective document (see their earlier comments concerning Borden's lack of ability in including previously written text in the RFP), does nevertheless save time, time which Technicians 1 and 2 need in order to keep pursuing missing information. In addition, because one source document, which they themselves wrote, is familiar to the client, it likely will be easier to integrate into the proposal document. Writing here is most obviously a "clip-art."

Event R. Level I. A Woman's Place

At this juncture, the technical staff involved in the Borden project (Director 2, and Technicians 1 and 2) are continuing to experience difficulties with the presentation of the technical solution. The proposal is centred on a suggestion that three different hardware platforms be tested in order to ensure that the client will get a satisfactory product to meet their computer needs. As struggling Level I drafters, the technical collaborators seem to realize that the words are important, that the phrases they use to explain their solution will have a significant effect on the client and are worth discussing. However, an authority issue arises in the debate, one which most significantly involves the female technician.

These collaborators are all more experienced with Level II collaborations, such as gathering and considering the impact of information. We see them here in a Level I collaboration. Director 2 asks for confirmation on an appropriate heading from Technicians 1 and 2. Whereas Technician 2 is almost always in a situation where she lacks authority (being less knowledgeable and having less status), as a drafter, she seems to feel more on an equal footing. Here, she attempts to exert her authority by challenging all others at the meeting with their choice of the word "trial":

D 2 One thing we do have to spend time thinking through are all the things under this "proof of" -- I don't know if I want to call it "proof of concept", or "proof of practice" or "proof of --" something, but that's what we're talking about. It's "proving in" the technology. "Prototype"? No.

M 1 "Trial".

D 2 "Trial". Yeah! "Hardware application trial". (to T 1 and 2) Is that what you'd call it?

T 1 Yeah. "Trial" is good.

D 2 Well shit. We're not doing "proof of concept". The system's in production.

T 1 We're just putting all the new technology together.

T 2 We've moved from "benchmark" to "proof of concept" --

M 1 "Prototype" -- "trial" --

D 2 I don't want to scare them that we're doing anything significantly leading edge -- "proof of concept" suggests something that's never been done before, but this has all been done before. Different packaging. So we're just trial-ing the environment and the application.

T 2 "Trial?"

T 1 "Trial." That's good.

D 2 Fine. We have to talk about what the activity entails.

T 2 I don't know if I like "trial".

D 2 Which?

T 2 I don't know if I like "trial". It sounds as if we're trying something --

D 2 Director 1 will come up with a different good solid word.

T 1 Oh yes, oh yes. Well, we've got the base system, so do we want to identify ... (continues discussing testing procedure)

Her attempt at disagreement in this instance is short lived, however. The ultimate drafter, Director 1, is waiting in the wings to solve these problems, according to Director 2. The meeting participants return to discussing the details of the technical solution, a more comfortable topic for most of these participants and one that maintains their work on Level I drafting.

Later in the meeting, however, Technician 2 objects to wording once again, this time with quite different results. Technician 2 establishes her authority in this debate over a properly worded heading by using technical knowledge which she has, and Director 2 obviously does not. Here, however, she seems to prevail partly because she establishes her point of view by using a technical explanation to support (or rather not support) a choice of technical terms:

D 2 That's what I call "LAN expansion".

T 1 That's key stuff.

M 1 Is that a third option besides --

T 2 I don't know if I'd call that "LAN expansion".

D 2 What would you call it?

T 2 Because they're still going to be going over just the dial-up lines ... (explains, over top of T 1's supporting explanation)

D 2 (maintains eye contact with T 2) Oh oh oh oh oh. So it's not "LAN expansion". (writing) That's part of "Fault Tolerance". (looks at T 2) "System Fault Tolerance?"

T 2 Yeah.

Such knowledge is more likely to gain respect with a group of technical experts than her attempts to protest the word "trial" based mainly on her sense that the group did not want to be seen as merely "trying" to find a solution. Director 2 reinforces Technician 2's role as a valuable team member by validating her explanation, and asking for her approval of a different heading. With these conversations, Technician 2 has established more authority as a valued collaborator in both Level II and Level I. Director 2, in fact, will later invite her (see Event V) to be a reviewer of text which he has written. Technician 2 has indeed found a place for herself on the team.

Event S. Level II. Pulling Rabbits From Hats

One of the most challenging collaborative activities of Level II is the estimating of personnel and time which will be needed to put the proposal into effect once it is accepted and becomes a project. Level III pricing quotations cannot be formulated until the costs of the project, including the wages of employees, are factored into the proposal pricing. Good estimators are a rare breed. They understand the technical and business solution intimately, know the expertise and time needed to put the solution into practice, and are able to balance complex issues (such as employees who might handle different jobs as long as those duties do not overlap). Other factors, such as travel time and flexibility to deal with unexpected contingencies must also be worked into the equation. In the end, however, good estimators work from a felt sense of rightness, based on experience and general expertise, rather than on equations or rules.

Here we see Director 2 enjoying a demonstration of his expert knowledge as an estimator. The marked contrast between Technician 1 and Manager 1 in their responses to this rather remarkable display of estimating may be due to their different views of their own roles as team members. Manager 1 has initially looked for a consensus, or at least averaging among several estimating worksheets. Clearly, however, Technicians 1 and 2, with greater experience in working with Director 2, are prepared to sit back and watch, conscious of their relative lack of knowledge in estimating. They bow, as Level II collaborators often do, to the one with the most knowledge, and prepare for roles as reviewers of numbers generated. Director 2's demonstration seems to result in some difficulty for Manager 1 as a proposal leader. Of special note as well is that the building of text here is both rapid and original. Director 2 does not rehearse or seek other text to support his work. Numbers may be handled differently (much the same activity will be done later involving the development of pricing quotations):

D 2 This is how we do estimating, right? Pull a number out of the air. Comfort level. (he starts to record figures on a worksheet. Manager 1, Technicians 1 and 2 watch, although they each have a worksheet of their own. Minutes pass.)

M 1 Is everyone doing their own estimate?

T 2 No.

T 1 No. I'll argue any number though.

(Minutes pass. D 2 still scribbling)

D 2 (looks up) Who's doing user training?

M 1 (D 2 already has head back down) I had an "x" under us for doing some --

D 2 There we go!

M 1 Are you a fast estimator?

D 2 Yup! Always have been.

M 1 Fast and accurate, right?

D 2 What was funny was -- we had this other guy here and we'd read the RFP, flip through it, go away. And [come back and] say "Here's our estimate!" and inevitably we'd be less than five percent apart. No dialogue. No discussion. Let's go! (totals numbers, *sotto voce*)

T 1 Amazing stuff.

D 2 137! Divided by seven [months available] is --

T 1 Three days off! [assuming twenty-two days in a month]

M 1 Don't forget we have some overlap --

D 2 (hands sheet to M 1) Do I pass?!

M 1 I have to put these against the time line --

D 2 Oh sure!

M 1 But for now I guess --

D 2 I mean I was not thinking seven months when I did that -- but it comes out to seven months!

Director 2's ability has, it seems, been developed with the collaboration of another employee. Together they learned how to estimate and helped to shape each other's work by comparing numbers. We do not see the struggle here which Director 2 faces in composing words, just straightforward invention of numbers which can be used as information in the proposal.

Day Ten

Day Ten marks the production of the first total proposal draft which reflects a complete re-organization of the proposal according to the headings and subheadings as defined by the RFP. Although much of the re-ordering is fairly straightforward, some sections are new and must now be drafted from the beginning. Assembling different versions of text also reveals that some sections have been done twice by different writers. Many sections have been drafted but not yet reviewed. By the end of the day, three sections still need a first draft: the covering letter, pricing, and the appendices. The text has become a document of some twenty-six pages. In addition, by the end of Day Ten, the style of the proposal has also been modified; the proposal will be rewritten to include more "sell." The draft now enters its final version.

Event T. Level III/I. Asking the Tough Questions

As time grows ever shorter on the second to last day before deadline day, we see one more senior employee, Director 1, step in to try to maintain the schedule. Next to the general manager, Director 1 has the most status in the firm and is also the most respected writer. This makes him a formidable presence as both a Level III and Level I collaborator. We see him here for the first time since Event A. As a Level III collaborator, he uses his authority as an employee of very high status to challenge the now questionable role maintenance of Accountexec 1. As a Level I drafter, Director 1 must also understand the state of the document so far. He institutes a text-checking procedure, which quickly becomes a check on team maintenance. This is obviously a difficult situation. Director 1 asks brusquely for a report of Accountexec 1's role maintenance behaviour on the team.

Manager 1, responding to his higher status, reluctantly tells him the problem, which it seems, Director 1 knows already. Team maintenance now must give way to schedule maintenance:

D 1 [Go through this] just so I get a feel for how things are.

M 1 Right. (points to list of sections) This needs a re-write. Don't have that.

D 1 And [Accountexec 1]'s doing that?

M 1 Well, yeah, he was going to do that.

D 1 How much is [Accountexec 1] in this process?

M 1 Um --

D 1 In and out?

M 1 He's basically not in the last day or two -- at all.

D 1 Does he need to be?

M 1 Um -- I'm not sure how much value added -- now with Director 2 --

D 1 Uh -- okay. *Time* might be all. If we need him to -- because Director 2's not going to get to it --

M 1 Uh -- my experience [says?] re-write here --

D 1 So, who's got this (pointing to a section of text)?

M 1 Uh, leave that. Let me check with [Accountexec 1].

D 1 Even if it doesn't have the best structure, just the ideas on a piece of paper ....

Collaboration, it seems, struggles—especially when team members do not maintain their roles. This will more certainly happen when they are not satisfied with what those roles are, or do not fully understand what they must do to fulfill those roles. The progress of the text will suffer because sources of text portions, such as those which could be provided by Accountexec 1, are no longer available. Director 1 must therefore move to another approach, shifting Accountexec 1 into a new role as a reviewer and finding someone else to provide the text needed.

Trying to change the roles of individual team members at the eleventh hour seems a generally inadvisable tactic. However, precisely because of the closeness of the deadline, this is what happens. Because Accountexec 1 has not maintained his role as team leader and drafter, the group is now in danger of not maintaining their schedule. Director 1, earlier in the event, has suggested that even though Director 2 has picked much up of the responsibility as proposal leader, Accountexec 1 should still be composing some portion of the document. Now however, Director 1 seems to feel that others should be drafting and Accountexec 1's role should be reviewing and maintaining audience focus. Manager 1 has been put in the uncomfortable position of breaking team solidarity once again. He must also defend his own attempts at responding to Accountexec 1's lack of contribution to the drafting of the proposal. Director 1 forces the issue somewhat brusquely, no doubt annoyed at the difficult position the proposal team now faces. Understandable or not, however, Director 1's actions strain team relationships. However, he also points out an important issue in writing-as-clip-art: the provider of text must have appropriate experience, in this case with the intended audience:

D 1 Why are we leaving [Accountexec 1] out of all this stuff? (leans back and looks at M 1)

M 1 (pause) Well--good question. He begged off on a lot of stuff because of his involvement in the other project. Before he left Friday, I walked through content and Monday, I got this back.

D 1 Okay. So. We've got a lack of focus here.

M 1 Well, umm--yeah.

A 1 (nods vigorously) Let's not hold back--we have a lack of focus.

M 1 But I wasn't upset about it after the results of this (points to section), because I figured with the time we've got now I don't want to wait for something--

D 1 The kind of thing I'm thinking is--[Accountexec 1] could review this. He's known the client for over a year and knows what the current environment is. He could say, "Oh no, that statement's not true." We could pick up what the right statement is.

As strategist and chief drafter, Director 1 might perhaps have played more of a role not only in the early stages of the proposal development, but also in the middle stages. At this late time, Director 1 now begins to re-cast much of the proposal, even re-visiting issues previously discussed in Level I sessions among Manager 1, Technicians 1 and 2. Such a repetition of activities is obviously one reason that the proposal is so far behind schedule. One such activity is the close reading of the RFP:

D 1 How much of this structure is demanded by the RFP? Some of it? All of it?

M 1 We can look in the RFP--

D 1 This (points) is an unusual section.

M 1 (surprised) Is it? It's a statement of our understanding--

D 1 Yeah, I agree .... but to have it as a separate section in a very prominent place is unusual. But I quite like the idea .... Why don't we sit down, scratch on the white board, get down our points there. I'm probably not qualified to go away and describe the points but maybe we can raise some questions and refer some questions to some people and come up with answers fairly quickly.

Here we see Director 1 stepping into the role formerly occupied by Manager 1, reminding him of the importance of carefully reading and following the directions set out in the RFP in much the same way that Technicians 1 and 2 were reminded. Director 1 also re-asserts his authority as a Level I drafter and a Level III strategist, while denying that he has any Level II authority in technical knowledge. Later in the same event, Director 1 tries to build a relationship with Manager 1 as a more understanding collaborator. Team relationships are re-established here with Director 1 admitting that his rules of proposal text production, for example "Follow the RFP," cannot be slavishly followed:

M 1 I don't think we're far off with that structure [for the proposal].

D 1 No. (laughs) They [Borden] don't ask for pricing anywhere? (both laugh) This is fairly typical. And they often don't ask for a solution.

What clients ask for and what they need are, apparently, often at odds. Director 1's self-deprecatory humour helps to establish his role as a team member with the same difficulties as other team members in focusing on the audience. He also makes valuable and expert comments about the shaping of the proposal draft which Manager 1 seems to need.

Unfortunately, Director 1's comments concerning the strangeness of client audiences in general trigger Manager 1 to recall his problems with Jake, Borden's proposal manager. A failure to deal effectively with a difficult audience has already slowed the production of the proposal, and here distracts Manager 1 once again:

M 1 I mean -- it [the RFP] is all mixed up! Under section one, "Company Information", he wants an overview of the project and the projected time table --

D 1 And section 2 is executive summary? (re-numbering and grouping, referring to RFP headings) Okay.

Director 1, who has not been a part of the drafting collaboration until now, has also not shared in the frustration which the team has often experienced in trying to respond to Jake. He does not reply to Manager 1's irritation here over yet another example of Jake's peculiar desires. Rather, he continues to follow the general drafting advice: "Follow the RFP" and do what the customer wants, as far as is possible. When interviewed during this event, in response to my question "Who is the audience for this proposal?" Director 1 said "Mr. B." Manager 1 said "Jake," and then added "And Mr. B. And Director 1!" Audience focusing, it seems, continues to be a problem. However, once Director 1 takes over the drafting leadership, his vision of the audience, of course, prevails:

D 1 Is there -- a lot of "sell words" -- [Cerebellum] hype kind of stuff? Or are we more into factual solution kind of stuff?

M 1 What I meant -- what I thought you meant by "sell words" is -- are we explaining how that solution meets the customer's need.

D 1 Those are the right kind of sell words. Often the sell words we put in there are hype "We're the best qualified company". Very important once -- but after that it gets rather tiresome.

M 1 I'm not sure it's in there once!

D 1 Once is in the letter on the front. We do more of that with customers that don't know us.

Director 1's suggestions on helpful ways to focus on the audience would certainly have been more useful much earlier in the process. He no doubt assumed that Accountexec 1 would have been more in the process than he was. An experienced employee could have kept Manager 1 better informed about the general approach to the proposal which Cerebellum prefers. However, as a senior executive, Director 1 also bears responsibility in knowing the strengths and weaknesses of employees, and their other duties. For example, Accountexec 1 was perhaps too committed with other work to give the significant assistance which Manager 1 needed to handle his first Cerebellum proposal.

Within an hour, Director 1 re-appears in Manager 1's office with a general evaluation of his drafting. Not only has Manager 1 written sections which now have been rejected by

Director 1, he has also adopted, according to Director 1, an inappropriate drafting style. Lack of leadership earlier in the text production process is beginning to cost dearly:

D 1 Too much justifying and explaining. We don't need a lot of words.

M 1 Give me an example.

D 1 "Minimize risk". What does the following sentence add? Maybe what kind of risk but -- Right now it's logic/persuasive driven. It needs *sell*. (enter Director 2 and Accountexec 2) My temptation is to take it away to a corner, but we've got three people working on it -- we'll get three different drafts. Let's not panic and stay until midnight!

D 2 [Because] then tomorrow will be a total write-off.

D 1 We'll each take a chunk and spend an hour before bed with it. I'll take four and one. (They divide sections. Director 1 and Director 2 leave.)

AE 2 (to M 1) It will come together.

M 1 I should have redone this table of contents last week to check this. I've done a lot I can't use.

Valuable collaborations possible with sufficient time must now be hurried in an attempt to maintain the schedule. More general expertise in drafting by all team members would certainly help the text production process as well. For example, it would not have been assumed by the team that Director 1 would do all the "word-smithing" required, thus relieving everyone else of the responsibility.

In contrast, the Sundial proposal group are more able to discuss their problems and come to a common understanding of the difficulty and what needs to be done to address it. Such behaviour more clearly reflects a collaborative spirit in writing the proposal. For example, Manager 2 realizes that she cannot successfully edit the document; however, Accountexec 3 takes the lead in assuring her that other team members will handle these presentational challenges as part of the proposal process. Such assistance from the account executive marks one of the difficulties not resolved by the Borden team until a decisive final effort by Director 1 must be made to satisfactorily answer proposal presentation problems. Here the collaborators both engage in and discuss the importance of text checking as part of Level I drafting:

M 2 I don't even know how that got in there; it doesn't even make proper English. All this has to be gone through.

T 4 There's quite a few awkward sentences.

M 2 It needs to be wordsmithed. That's what they're doing over there. That's their job, that's what they get paid to do. (waves to word processing)

T 4 I don't know if they'll check for grammar that way.

AE 3 Give it to [the General Manager's assistant]. Give her two days.

M 2 Yeah, well, that's what she said. I'm not checking it for grammar or anything else. I said, "I'm French Canadian. They're lucky I speak the language."

AE 3 By gar.

M 2 So don't count on me for proper grammartization(?) .... Okay, so then we get to just high-level business (continues to point out sections to AE 3)

AE 3 (stops and takes a sheet. M 2 leans to see what he is changing.) No longer passive! You could get used to this, couldn't you?

M 2 (laughs) I'm assuming you're going to go over every last sentence.

AE 3 Yes, and then [Director 5] will go over every last sentence, and then [the General Manager's assistant], and we may get [Director 4] to do it as well, considering the piles of money that are going to roll in ....

Such a difference between the approaches of the Borden team and the Sundial group is more understandable given that Sundial reaches the final draft point some seven days before the deadline--Borden reaches the same point one day in advance of submitting the proposal. Such collaborative activities require sufficient time to work properly.

Event U. Level II. Rounding Up the Stragglers

Although Level I activities are now the most crucial to the production of the proposal, collaborators still struggle with specific problems resulting from a lack of information. As we have seen, Accountexec 1 has become a general reviewer of material, and Accountexec 2 now takes a very late but important role in information gathering and text composition. Here we see him working with Director 2 and Technician 1 to locate and access missing prices from unco-operative vendors. Accountexec 2 has entered enthusiastically into his role as team member in a number of ways. He not only has ideas about where to access information, but also is willing to act quickly to access a possible source rather than asking a technician to do the job. Accountexec 2 is most familiar with the employee in question and will likely be most effective at gaining his quick co-operation. However, since his authority base is not in technical knowledge, he must seek the collaborative support of Director 2. The information he gleans from the branch office, however, is not immediately usable. Nevertheless, it does serve to remind Director 2 of an indirect information gathering method. Technician 1 quickly acknowledges and acts upon the new idea:

AE 2 (to person on phone) We're trying to get list pricing -- (looks at D 2 for assistance)

D 2 (to AE 2) They [the vendor] won't give us list pricing -- they won't give us anything!

AE 2 (listens to phone, then, to phone) Oh -- it's very similar to [Soma]?

D 2 (laughs) [Soma] what?!!

AE 2 Yeah (laughs). (to phone) Technologically we don't know .... (continues)

D 2 (suddenly excited, to T 1) Phone [Soma] and ask them what their price would be with a comparable ...

T 1 Okay! Give me the config!

D 2 Hang on! Let me get the other piece of paper -- we can fax it! (rushes off)

AE 2 (to phone) Do you have any contacts you might be able to tap? Any var's [value added retailers] you had relationships with?

Such team work shows collaboration working at peak speed with all team members entering enthusiastically into activities and doing jobs for which they are well suited. Accountexec 2 even continues to gather alternate sources for information once Director 2 and Technician 1 leave to act on a possible lead, preparing, it seems, for the possibility that their efforts will be futile. He will also be able to use any further information later on other proposals, and must be careful to treat his information source with respect.

Event V. Level I. Words, Words, Words

Drafting continues well into the night on the day before the proposal is due. The technical experts (Director 2, Technicians 1 and 2) are busy talking through the solution which will be presented to Borden. They work out the wording while working out the technical solution. Technician 2 now seems well entrenched as a respected member of the proposal team. Here she and Director 2 succeed in sharing authority in an effective Level I collaboration:

D 2 Usually we select -- uh, define -- test criteria -- or acceptance criteria? To me --

T 2 Don't we have to first of all determine what it is we're going to measure?

D 2 So that's what you mean by "test criteria". Okay --

T 2 What we're going to measure and how we're going to measure. So, it should be broken into two things then --

D 2 Okay (writes).

T 2 (looks at paper) What does that say?

D 2 "Technical Commissioning". I use the word "technical commissioning", which means making all the components work together (waves his hands and explains) ....

T 2 Okay.

***

D 2 Instead of "set-up", can I say "configured"?

T 2 Yeah, that's no problem ....

T 1 Configure original.

D 2 (reading and writing) Configure network application, set up system components. Yes. But, configure the application components -- populate -- right.

T 1 Yeah, that's too vague. You do the proofing there, right?

Technician 2 has done much of the initial drafting of the technical solution and is prepared to justify her wording. Director 2 accepts her definition, and then adds to the draft and is in turn prepared to explain the reasons for his own wording choice. Although Technician 2's work on writing has been at least partially due to Technician 1's reluctance to draft (leaving the job perhaps to a lower status member), changes during the late stages would appear to be of higher status. Both Directors 1 and 2 are involved in wordsmithing at this point, and Technician 2's involvement in the conversation here shows that her opinions are respected.

We see also the close relationship between drafting the text and building the technical solution. Technician 1 is able to listen to Director 1 reading and adding to the text and make the evaluation that the text is vague. Such comments indicate the emerging criteria for judging the text production. His query about doing the "proofing" seems to indicate that the wording may be vague because their understanding is vague, and they need to talk further about their plan for testing the hardware system.

Event W. Level III. If Only

Later still in the evening, Director 2 continues to struggle with the wording of the proposal. Not only is he reviewing text but also making considerable additions to the technical sections of the proposal. Accountexec 2 has continued during this time to try to access the still missing information on vendor costs. He has managed to track down the elusive Accountexec 1 who has successfully contacted the only vendor still holding out on prices for hardware. Accountexec 2 reports to Director 2 the results of the phone conversation with the vendor:

> **AE 2** Yeah, [George] said he didn't like the way he was treated, da da da da da da da da ... if we had told them right up front that we were going to do this, there would have been no bid from their perspective.
>
> **D 2** Shit. It would have been all over. They [Borden] woulda had one bid and we wouldn't have had to worry or piss around with this stupid thing (leans his head on the desk and laughs).

Although Director 2 can appreciate the irony of the situation, the proposal bid must still, unfortunately, be guided by the strategy established during the early stages of the process. The general approach was re-formulated twice, but the final plan put Cerebellum in *what seemed to the other vendors* to be an adversarial situation. If in fact, this last vendor had known that their product would be tested, thus making them a possible team partner, then they would not have entered a bid, as they are now doing. It might have been a co-operative effort rather than a competitive one. The Cerebellum collaborators have seen too late the problem with their strategy, and the results of failing to include, or even communicate clearly with, a possible team member. Director 2, Accountexec 1 and 2 decide that they have gone too far into the bidding process now to try to change their approach.

Event Y. Level I. Coming Together

Much later that evening, after many slices of pizza and many hours of drafting and reviewing, the team tries to pull back together again and consider their product so far. They sit together, going through the proposal page by page, trying to see the proposal as a single coherent document instead of a number of pieces, or a number of versions of one large document. Collaborators are here most clearly involved in text checking. A number of other activities are also suggested by their conversation. Role maintenance and schedule maintenance concerns are expressed by Director 1. Interestingly, although he is concerned with the best use of time and the best use of personnel, he offers to be a word processing operator (since the support staff has long since left the office) to help deal with the problem of version control:

D 2 Okay. Next page. I like the company information one. Very succinct, straightforward.

D 1 Where's [Accountexec 2]?

D 2 He's writing.

M 1 He told me it [the letter] was the easiest one to do. I said, "Is that like the guy who lives closest to work: he's always the last one to get there?"

(group laughter)

***

D 2 (to D 1) So, have you made any [changes to document] --

D 1 No. I honestly haven't .... I wouldn't mind playing word processor [being a secretary] for awhile.

(more editing discussion)

D 1 We're not making the best use of everyone's time here.

D 2 No, I know. Why don't you go away and read?

D 1 If you feel like that, I will. (smiles and leaves with one copy. Discussion continues using another copy.)

This event in fact featured five people all trying to read the same copy of the proposal document in an effort to get all comments on one master copy. Director 1 finally decides that the attempt to maintain one version of the proposal is not worth the loss of time such an activity seems to require, and retires to do more checking and drafting on his own. The rest of the group (Director 2, Manager 1, and Technicians 1 and 2) continue to check the text, and discover that much remains to be done.

The activity of *actually writing* is particularly marked in this event. As I have earlier noted, remarkably little time is spent in drafting, with most of the writing process dominated by various other events: such as talking, reading, searching for clip-text.

Day Eleven

On this day the proposal is finally delivered. Last day drafting includes a complete overhaul of the project work plan, review and re-drafting of the pricing section initially drafted by Director 1 during the very early hours of the morning, building and insertion of various colour diagrams, and of course, much editing, word-processing, photocopying, and assembling of proposal binders.

Event Z. Levels III, II, I. End Game

It is difficult to construe the final day of proposal writing as anything but one large event which moved through levels of engagement so quickly that collaborations often occurred over a spoken sentence or two, with a decision made, and then on to the next crisis. The air was tinged with panic but also excitement as the group suddenly grew to include a full complement of support staff. A junior word processing operator dissolved in tears and was replaced by a more senior operator, the office manager shook her head with disapproval over the number of last minute changes, the copy machine operator misplaced the identification labels which belonged on the proposal binders. Senior executives leaned on piles of empty supply boxes (with the copier roaring at full tilt) and held frantic conversations about pricing changes. The general manager's administrative assistant insisted that even the receptionist help by typing names on envelopes. Here then are a few snapshots of that last day:

M 1 Have you seen these prices?

D 1 Well, I wrote it [the pricing section]. But I don't know as anyone else has seen it.

The text checking process has almost broken down. However, a Level III pricing meeting is clearly in order. Therefore, Accountexec 2 and Director 2 take the pricing page and check it, coming up with a new pricing strategy which is then discussed with Director 1 in a hurried Level III meeting, conducted while standing in the hall while the first half of the proposal is already being reproduced.

The senior executives retire to an office to read through the proposal in its latest incarnation:

AE 2 You can't have a five word opening statement. ["Borden is in a high growth market."]

D 1 (laughs) Oh, really.

AE 2 A high growth market -- of what? Raspberries?

At such a late hour, and in such a tense atmosphere, Accountexec 2's attempt at introducing a presentation rule is likely not appreciated by Director 1 who, after all, drafted and re-drafted much of the text. It is clearly difficult for the same collaborators to both build and check the same text. Accountexec 2's role here as checker is a problematic one.

Collaborators hope, this close to the deadline, that his job will be limited to finding typographical mistakes and mislabelled diagrams. The tension here may also be caused by the group of senior employees who usually find themselves together in Level III strategy meetings now thrust into a Level I activity. The levels seem to collapse as, finally, it all comes together. Authority now is based on the person with the best presentational knowledge, who also happens to be the executive with the highest status: Director 1. Members seem generally on edge, but disagreement is at a minimum.

Most amazing of all is the final example of Level II activity. The copier is running for the final time, punctuated by cries from the senior word processor of "Stop the machine!" every time she is asked to make one more change and a page must be re-copied. The final version, approximately the fifth (though some sections have been re-worked more than others) totals twenty-eight pages. Binders also contain the resumes of the technical staff (Director 2, Technicians 1 and 2), the Cerebellum annual report, and a covering letter (one copy each to Jake and Mr. B).

Suddenly, the fax machine beeps to life, and the numbers arrive from the last vendor giving list price on their hardware configuration. Even more astounding, these numbers exactly match those numbers which Director 2 estimated and wrote into the proposal mere hours before. Technicians 1 and 2 check the figures, share them with Director 2 and generally enjoy a moment of success.

Twenty-five minutes before the proposal is due, Technician 1, laden with proposal binders, leaves for Borden's office which is located forty-five minutes away. He delivers the proposal twenty-three minutes later, and phones Cerebellum to report success. Accountexec 1 is relieved. The rest of the team has already dispersed—gone home or moved on to other activities.

Finally, then, we have witnessed in these three chapters a detailed chronological account of the collaborative text production efforts surrounding the writing of a business proposal. Early events were dominated by the struggle to develop a winning strategy, what I have called Level III activities. The strategy sessions were fed by information gathering activities, what I have called Level II. During the middle events, drafting sessions come to the fore, though these are still mediated by Level II information activities. Final events show a continuing emphasis on Level I drafting, with some Level II activities continuing, and a return to Level III strategy sessions. These later Level III events focus on approaches to the rhetoric of the proposal. The levels finally dissolve in the last burst of energy to complete the proposal packages.

A Postscript

The Borden proposal was initially rejected. The general strategy of offering a number of vendors as optional partners proved to be unsettling for the client. The uncertainty of not knowing exactly who they were dealing with caused them to accept the bid from Sauct. However, after twelve months of dealing with the other company, Borden called Cerebellum and asked them for assistance. Cerebellum was able to enter Borden as systems integrators, co-ordinating the work of Sauct and adding other system components (such as project managers). In the interim, Accountexec 1 and Director 1 had left Cerebellum. Nevertheless, Accountexec 2 and Technician 1 initiated plans to form a Cerebellum project team to help Borden with its business needs.

Sundial did not accept Cerebellum's proposal. Sundial accepted a higher priced bid from a firm which had extensive "imaging" experience in British Columbia, which Cerebellum lacked. Cerebellum continues to enjoy an excellent long-term relationship with Sundial and hopes to have future business opportunities with them.

CHAPTER EIGHT: CONCLUSIONS

> [A]nother beginning, a chance to continue the conversation pursued in and between these pages with you. (Lisa Ede and Andrea Lunsford, *Singular Text/Plural Authors*, p. 143)

The collaborative text production process is tremendously complex, and, at first, seems to refuse all attempts at discovering pattern and lesson. My ethnographically-based research with the writers of Cerebellum reveals the intricate social dynamics of writers at all levels of the company hierarchy as they interact to write a business proposal. Cerebellum writers construct the text together, both face-to-face and in concert with others who may be absent in time and place and represented in previously written texts. Various activities enhance or impede the collaborative writing process at every level of engagement and throughout every phase of the text production process. A close analysis of these activities helps us to see more clearly the social construction of the document.

The focus has remained steadily on **text**, as it is negotiated by collaborators. That writing is indeed a social process is perhaps nothing new. We see in this study, however, that sophisticated drafting skills are necessary in the group writing project. As much as writers constantly rehearse and discuss ideas, they seem far stronger at developing strategy and gathering information than in actual text drafting. However, our understanding of the nature of that process obviously needs continuing in-depth study, and a way to deal with the resulting details still perplexing in their intricacy. The way I have chosen to show the proposal writing process at Cerebellum, in a form more manageable and accessible by business writers, is by constructing a model, which, though in need of further testing, begins the job of representing the collaborative writing process as levels of engagement with text. Thus, I hope to make further conversation on the "multivocal, multiplicitous collaborative writer/text" (Ede and Lunsford, 1990, p. 143) more open to my informants.

The preceding three chapters have described and discussed some twenty-three events. These collaborative activities are undertaken by a core group of eight employees writing a business proposal. My focus has been the development of the Borden proposal, supplemented and corroborated with events from the Sundial proposal effort. Such a re-telling should give readers a sense of the narrative of the proposal writing, a drama complete with heroes and villains, conflicts and climaxes, successes and failures. However, in an attempt to represent the collaboration in a manner more helpful to those who would seek to analyze and then intervene productively in improving collaborative text production, I also offer a category system of levels. The Levels of Engagement with Text, developed after extensive viewing and reviewing of video-taped events, will serve, I hope, to begin the process of ordering some of the complexity inherent in the social process of writing.

Further to the end of informing my various possible audiences, in both academe and business, I will now draw together some conclusions by looking at patterns discernible in the events assigned to each level. All writing is writing, and yet has specific demands, whether a proposal, school report or a poem. Here, I address my comments as possible lessons for teachers of writing in various settings. Once again, as in my introduction to the levels in Chapter Four, I will discuss Level III, then II, then I. The progression represents the appearance of the level in the chronology (that is, proposal efforts begin at Level III), and is the sequence most familiar to the collaborative writers under examination. I have maintained the same presentation order in each level so that readers might more easily compare comments under various topics: level objective, issues of time, lists of building and checking activities, personnel, and finally behaviours which enhanced and impeded collaboration.

Level III Findings

Events are classified as being at Level III if the main objective of the meeting is to discuss the general strategy which will be undertaken to win the bid. Examples are the collaborators' decision during Event A (The Starting Gun) that Cerebellum partner with Sauct, and Event G (Quick Change Artistry) in which they establish three optional partners, clearly favouring an association with Azure. General business strategies, it seems, may be simply stated in a single sentence, much like the controlling thesis in an essay (and much like theses, are rehearsed and repeated as well). Cerebellum employees call such statements "high-level" declarations to emphasize their function as general headings. Strategy decisions apply not only to questions of the vendor partnership described in the proposal, but also to the general rhetorical flavour in which the partnership is presented. Event T (Asking the Tough Questions) shows how a rhetorical strategy structured in logical arguments gives way to a sales-driven approach.

Major changes in business strategy cause problems throughout the proposal. Collaborative Level III events (strategy discussions) dominate the early days of the proposal construction, completely disappear in the middle phase and then re-appear late in the text production process. Common sense might indicate that a strategy should be decided upon first, and then the rest of the process might be taken up with detailing the strategy within the proposal text. However, during the Borden proposal, there are two shifts in the general direction of the business strategy (for a total of three). These shifts dominate early events. During late events, for example, frustration is revealed in the conversation between Director 2 and Accountexec 2 in Event W (If Only) when they bemoan their Level III decision, and in level jumping by Technician 1 during Event D (Who's On First?)

when he ignores a Level II meeting objective to criticize the business approach in a Level III manner. Finally, I note that according to Director 2, the business strategy was a contributing factor which caused Borden to reject the Cerebellum bid.

A late shift in the rhetorical strategy, which improves the text's selling focus, also causes a loss of time and increase in anxiety. During Event T (Asking the Tough Questions), Director 1 rejects Manager 1's rhetorical approach, which focuses on lengthy arguments for the proposed solution, and also assigns re-writing roles to ensure that the proposal will be completed in timely and efficient fashion. This event marks a change in rhetorical strategy (for a total of two different approaches). Such recursion would seem to be a feature of collaborative writing, unlike the more linear processes of some solitary writers such as the engineer observed by Selzer (1983). Returning to jobs thought complete is perhaps a function of the large number of people who must be satisfied with the strategy. As some informants in other collaboration research have commented, collaboration can often take more time than would a process undertaken by a single writer, however, the superior quality of the final document makes group work worthwhile (see also Allen et al., 1987; Bryan, 1992).

A lack of collaborative Level III events during the middle of the process is perhaps a result of senior management, especially Director 1, assuming that Accountexec 1 had taken leadership or at least a major consulting role in overseeing the proposal. Such ownership is no doubt inferred by Director 1 since the role of the account executive during any proposal is to assume final responsibility. In the case of the Borden proposal, such responsibility is assumed by Director 1 especially because of promises made by Accountexec 1 during Event A (The Starting Gun) that Manager 1, new to Cerebellum, will receive his significant assistance. Accountexec 1's reluctance to enter fully into the collaborative process creates tension within the Borden proposal group. Such an outcome might be inferred from the work of organizational communication researchers (such as Stohl and Schell, 1991).

In summary, then, I have discussed five Level III events during which the general strategy is discussed, with primary emphasis placed on idea generation and trying to differentiate the Cerebellum approach from those of possible competitors. Ideas are collaboratively evaluated, modified and elaborated, in order to reach agreement on a single, high-level approach. Level III meetings may be further classified into "building" and "checking" events.

Business strategies seem to be adopted for a number of reasons. In the Borden and Sundial proposals, we see examples of approaches based on the most powerful technology, the least risky solution, and the most politically astute strategy. The first shift in strategic approach during the Borden proposal is marked by a very informal meeting in the hall, which I have called Event C (Changing Horses). Apparently, a new strategy is being "checked" (evaluated and found attractive enough to warrant a change in direction). The original strategy, based on the strongest technical solution has been rejected in favour of evaluating three possible partners which will reduce the risk of a possible misfit with Sauct. The second strategy undergoes final modification and elaboration during Event G (Quick Change Artistry).

The final approach retains the testing of optional partners but adds the politically motivated preferential treatment given to Azure, which will be tested first and adopted if satisfactory with no further testing of other potential partners. Event W (If Only), most obviously a "checking" event, indicates the further evaluation of the strategy enshrined during Event G (Quick Change Artistry). The strategy is now found by Director 2 and Accountexec 2 to be problematic at best, but the closeness of the deadline date makes further changes inadvisable. Such behaviour may be attributed to the general tendency noted in individuals and groups to persist in "losing causes" once a great deal of time has been invested (Staw and Ross, 1989).

Event T (Asking the Tough Questions), the only Level III event discovered which deals with rhetorical approach, may also be called a "checking" event (of one strategy) which later becomes a "building" event (of another strategy). Of crucial interest here is Director 1's approach: he evaluates and then modifies the style of the proposal to reflect more "sell" (for example, fewer words to increase speed and ease of reading). Finally, Event Z (Endgame), notable for its collapsing of levels, features a short and hurried checking of pricing, which will be one of Cerebellum's major selling strategies, followed by evaluation and then modification of the price quoted.

Certain patterns can be noticed as well in the personnel who attend Level III events. All Level III meetings demand the attendance of high status employees, but the large numbers of executives involved in the early phase drop to pairs making high stakes decisions in the late phase. Director 2 appears at four of the five events, as does Manager 1. Other executives (D1, AE1, AE2) appear three times. Director 3 appears twice and the General Manager once.

If quantity alone were considered, it is notable that Accountexec 1, who bears ultimate responsibility, is not present as often as Director 2 and Manager 1. Director 2 appears most often, quite surprising for such a senior employee with responsibilities on several projects. Total numbers for early and late Level III events also markedly contrast. Early events feature large numbers of employees at meetings: Event A (The Starting Gun), five people; Event C (Changing Horses), four; and Event G (Quick Change Artistry), seven. Late events (T and W) at Level III have only pairs at work together.

If meeting topics and significance are considered, other possible conclusions might be reached. One might speculate that early strategy decisions are important, important enough to involve all of the most experienced employees in a very public performance of power and knowledge. Early strategy meetings also seem to carry high status—being left out, perhaps, is a diminution of power. Late strategy meetings such as Events T (Asking the Tough Questions) and W (If Only) are hurried and best accomplished in small groups, where two can agree and quickly move on. Events T and W involve Directors 1 and 2, Manager 1 and Accountexec 2. They form the nucleus of Level III personnel during the final days of text production.

Collaborative activities during Level III events show behaviours which enhance text production and those which impede it. Topics which I will address are team relationships, audience sensitivity, schedule maintenance, process awareness, and level flexibility.

Team relationships at Level III events function largely to support text production. The initial meeting, Event A (The Starting Gun), shows in some detail the dynamics of Level III collaboration. It involves all three directors, the proposal manager and the account executive (whom I have called Accountexec 1). Although a hierarchy exists (for example, Director 1 has the final word), these executives work together in a loosely-structured meeting, generating ideas and options for group consideration. Team discipline is lax with free-wheeling conversations and brainstorming sessions occurring frequently with the focus on holding the group together. Roles are kept largely undefined and everyone is encouraged to participate in at least a semblance of equality.

Two recurring subthemes of building and maintaining team relationships are the search for differentiation and the use of humour. An important way to form a team for Cerebellum seems to be in establishing a group identity, in answering the question, "who are we?" One way to accomplish such a task is to ask, "who are they?" and then use the differences to identify the "home" team. Several examples of this behaviour occur during Event A (The Starting Gun). Competitors are discussed and labelled. One group is found to be "sleazy" for failing to return a business favour. The implication seems to be that "we" as Cerebellum employees agree that such behaviour is reprehensible and are more united because we agree. This is not to say, however, that group decisions on differentiation always work to the benefit of the team. For example, the unique strategy developed by Level III meetings in Event C (Changing Horses) and G (Quick Change Artistry) results in a system of optional partners which the client finds too risky, too "different" to be attractive. The revealing discussion in Event W (If Only), where Director 2 and Accountexec 2 lament the final strategy, marks a team determined to work together until the end, united at least in a losing cause.

The sub-agenda of a power struggle, on the playing field of text production, runs throughout Level III meetings, sometimes assisting the maintenance of team relationships and at other times threatening it. Obvious uses of authority based on company status are notable in Event A (The Starting Gun) and Event T (Asking the Tough Questions). In Event A (The Starting Gun), Director 3's verbal and nonverbal behaviour threatens the role of Accountexec 1 as the proposal leader. His experience in sales matters is lost when the account executive fails to take note of his ideas, for example in dealing with Jake's aversion to risk. In contrast, Director 1's forceful handling of Accountexec 1's lack of "focus," discussed in Event T (Asking the Tough Questions), serves to re-direct the team to meet their deadline when he assigns Accountexec 1 a new role as reviewer and allows Director 2 to continue in a general leadership capacity. Cross (1990) also notes that the presence of a group hierarchy is a convertible factor--it may tend to draw a group together, or tend to force it apart.

Humour also assists the text production process during Level III. The ironic laughter shared by Director 2 and Accountexec 2 during Event W (If Only) serves to relieve the tension produced by a text well behind schedule, and unites them for the moment in sharing a joke. Similar behaviour can be found in Event A (The Starting Gun), the Sundial proposal, when the bantering surrounding "he can do it both ways" allows a group excited about a Cerebellum success (albeit on another contract) to share laughter. Humour also seems to regulate behaviour within a group, to warn team members about inappropriate actions. When Director 3 suddenly involves an unprepared technician in the Sundial discussion during Event A (The Starting Gun), the jokes and laughter remind him that he has erred, and also ease the discomfort of the hapless technical expert newly drafted onto the proposal team.

Building a shared notion of audience, which will be borne out by the proposal text, has an impact upon team relationships as well. Since, however, Cerebellum's attitude teeters between an adversarial and an inclusive role for the audience, I will consider it separately. Three examples show Level III collaborators trying to deal with the audience. In the Borden effort, Event W (If Only) marks a final realization at Level III that the vendors have not been treated well by Cerebellum (a realization which Technician 1 voiced in Level II and I meetings very early in the process). Ironically, a "red-flag" was waved as early as Event C (Changing Horses) when Director 2 says: "This situation isn't fair to our possible partners," but the vendors, as another audience which could have been included on the team, have instead been shunted aside by competitive concerns.

The treatment of the client company as audience proves to be a challenge throughout the Borden proposal writing process. Cerebellum tries two quite distinct approaches which they use to imagine their readers: audience as specific person, and audience as general abstraction. Articulation problems in the early and middle phase seem to be centred on history of the Cerebellum in dealing with a specific person: Borden's project manager, Jake. During the current proposal, Manager 1, influenced by Technicians 1 and 2, gradually conceives of Jake as an adversary. By the time he discusses audience with Director 1 during Event T (Asking the Tough Questions), very late in the process, his frustration with Jake has almost overwhelmed him. Director 1 can offer a general view of the audience and even joke about the difficulties of all clients. From this point forward, a more dispassionate view of audience dominates the text production effort. In contrast, the Sundial proposal offers a clear and sympathetic view of a specific audience ("Steve") from the first Level III meeting, as constructed for the team by Accountexec 3. Accountexec 3 reports that Steve "imagines the project as a partnership between [Sundial] and the vendor [hopefully Cerebellum]." This is an actual, identifiable person interested in being a member of a team, and invited to be one by a Cerebellum employee. Inviting the audience to join the community is a rhetorical strategy advised by scholars such as Perelman (1982).

Clearly not a characteristic activity, the only recorded instance of schedule maintenance at Level III occurs during Event T (Asking the Tough Questions). Such infrequency may be a result of the general quality of the Level III meeting: it is free-ranging and relatively undisciplined, encouraging active participation and idea generation. The exception occurs during a markedly hierarchical meeting wherein Director 1 inquires about Accountexec 1's involvement ("Time might be all"). Manager 1 misunderstands, thinking perhaps that Director 1 wishes to reintroduce Accountexec 1 as leader ("I figured with the time we've got now I don't want to wait for something"). In the interests of schedule maintenance however, Director 1 is proposing that Accountexec 1 become a text reviewer. Time pressures help the team to stay on task, but also work against the thorough examination of the best possibilities for text development.

Overall process awareness is shown in Level III Events A (The Starting Gun) and T (Asking the Tough Questions). Participants in Event A point to level I drafting. Director 2 instructs Accountexec 1 to provide examples of proposals, and Accountexec 1 instead gives names for Manager 1 to get for himself. These samples provide models of "structure" and "technical content." Event T (Asking the Tough Questions) also shows strong awareness of Level I concerns, which is not surprising given that the proposal is almost due. Event A (The Starting Gun) also points forward to Level II information gathering concerns. Director 3 asks Accountexec 1 to seek information from another vendor involved with Borden ("See what you can get").

Perhaps because Level III tasks are generally high status, and other levels are of lower status, level maintenance concerns, that is, comments designed to ensure that the team keep to the current meeting objective, are almost absent during strategy collaborations. As previously mentioned, discipline is generally lax at Level III, with participants usually not engaged in imposing restrictions on each other. Scant evidence was found of Level III collaborators cautioning team members to remain on task. High status employees would almost never be tempted, it seems, to jump to Level II, information gathering, or Level I, drafting. The only example of such behaviour comes during the Sundial proposal, Event A (The Starting Gun), when Director 3 contacts the outside technician by phone, a jump to level II. However, the account executive reprimands the director for his action indirectly with humour (as discussed above).

Level II Findings

Events were classified as being at Level II if the main objective of the collaboration was to obtain or discuss information. Examples are Accountexec 1 drawing up a proposal timeline to inform Manager 1 during Event B (Opening Moves), and the display of estimating by Director 2, Event S (Pulling Rabbits out of Hats), which is based on a consideration of information gathered thus far and offered for checking by others. Level II reaches out beyond the immediate team further into the company, and then beyond into other companies, government documents, or wherever material might be found. Information, it seems, supports and mediates all proposal writing activities, and is, indeed, treated as an important commodity. It is usually traded for future business opportunities or for more information. When access to information is blocked, it can seriously hamper a company's ability to build a proposal, as we see during the Borden bid effort (see especially Event U Rounding Up the Stragglers).

Collaborative Level II events play a strong mediating role throughout the proposal process during early, middle and late phases. Level II events are more frequent, however, during the early phase, as might be expected. Most of the information needed to decide on a strategy is discovered during Days Two and Three. Other information gathering occurs in tandem with the building of the solution for the client's business problem. Information crises continue to occur even very late in the text production process: witness especially the costing figures arriving and being discussed during Event Z (Endgame) in the final hours before the deadline. Throughout the entire time spent on the proposal, Level II activities continue to serve as intermediary events, informing strategy decisions and drafting approaches. Readers are directed especially to consider the rhythm of movement between Levels, for example, the shunting between III and II during the early days, and that between II and I during middle and late phases. Event F (Under Consideration) especially shows a meeting which, although intended to be at Level II, begins at Level III and ends at Level I.

To reiterate, then, I have discussed eight Level II collaborations in which collaborators are gathering or considering pieces of information which may later be added into the text. Readers will note also that there are more Level II events than Level III. Even more Level II events could have been observed and discussed had not company security issues intervened. Technicians were reluctant to have me record conversations with vendors. Also, many of these events occurred off-site in vendor offices. Strategy discussions are less frequent than are conversations to acquire and consider information, even in the Borden proposal effort where the strategy undergoes several changes.

These eight Level II events may be considered as either building or checking conversations. However, such activities, as we saw above in Level III, are not entirely discrete. Two clear examples of information building may be seen in Events B and N. Event B (Opening Moves), already discussed above, concerns Manager 1 asking for and receiving scheduling information from Accountexec 1. The gathering of such information would probably not be necessary except that Manager 1 is new to Cerebellum and its business approaches. Since Manager 2 finds herself in the same position as a newcomer during the Sundial proposal, however, I speculate that such information seeking may be fairly common if a company prefers to hire necessary personnel only when required as Cerebellum does.

During Event B (Opening Moves), information is also sought outside the branch office by Accountexec 1. The source, Technician 6, proves reluctant to provide information but eventually does so. Event N (Collabo-tech) is an excellent example of a senior technician (Technician 1) seeking and receiving information from an in-house expert (Technician 3) who is more junior in the company hierarchy, but more knowledgeable on a particular technical issue. In both events, conversants engage in more than a simple question and answer session, discussing problems (Event N) and interpreting documents (Event B) collaboratively.

Information is reported and often comes under further consideration, briefly or at length but always with major impact on the text, during what I have termed "checking meetings" at Events E, F and L. Event E (Decisive Action) concerns a brief report by Manager 1 to Accountexec 2 about information on a software product which is not available, contrary to what the team previously thought. This information results in a meeting with Mr. B. to keep him informed and changes the proposal's technical solution. Manager 1 reports information of great concern on Jake, Borden's project manager, to Technician 1 and Accountexec 1 during Event L (The Audience Awaits). He seems to be checking his negative reaction to Jake with them, perhaps for confirmation, but also trying to build a picture of what Mr. B. might value in a proposal.

Event F (Under Consideration) is the longest Level II meeting on record at 178 minutes and another event primarily given over to checking. Here Technicians 1 and 2 are reporting on their work thus far in building the technical solution. Director 2 is reviewing their information in collaboration with others at the meeting.

Because they occur so late in the process, Events S and U are subject to time pressures which may be beginning to cause a convergence of the functions of building and checking. In much the same way, the levels themselves begin to collapse only a short time later. Cross (1990) considers time to be a factor which draws groups together. However, my research shows that a lack of time can also work against the building of team roles. For example, additional time might have provided opportunities for junior members such as Technician 2 to learn more about working together on the information-gathering processes. Event S (Pulling Rabbits out of Hats), for example, involves Director 2, Manager 1 and Technicians 1 and 2 developing and considering estimates of time needed to complete the Borden project. Event U (Rounding Up the Stragglers) considers a small piece of information arising from a telephone call initiated by Accountexec 2, and shows Director 2 and Technician 1 using the resulting idea to seek vendor information from an alternate source. They are building, checking and then building again.

Consideration of Level II events must also include the rather aberrant Event D (Who's On First), in which Technician 1 accosts Manager 1 looking for information. However, we must call this a "false" Level II, because Technician 1's real agenda seems to be the resolution of an argument over strategy suitable only for a Level III meeting. The conversation's purpose, as established by Technician 1, is to air a grievance, or perhaps affix blame, and not to seek information on proposal writing issues. Event Z (Endgame) also contains elements of Level II during the final remarkable arrival of the costing information. The last vendor has relented, perhaps hoping that the information will not be more than minimally useful but unwilling to make a permanent enemy of Cerebellum.

An examination of the personnel present at Level II events shows a division of labour. Many of the information gathering phone calls and meetings were conducted by the technical staff, especially Technician 1. My data shows him at six of the eight events I observed, and he also conducted much of the work on Days Two and Three. Technician 1 works quickly and effectively. He seems to know his role on a team and such knowledge may help him to work effectively as a collaborator (see also Newman, 1988).

Manager 1 also appears at six events in a general capacity as proposal manager. Director 2 appears at three events as both technical expert and leader, as does Accountexec 1 as client expert. Accountexec 2, serving as substitute writer and sales expert, and Technician 2, working as technical assistant, each appear twice. Two other technicians, 3 and 6, also provide information on one occasion each. Two team members, Directors 1 and 3, never appear at Level II meetings, perhaps feeling that they have no expertise at either gathering or considering information, especially as most of the ideas under discussion at Level II are fairly technical. Even Manager 1 has difficulties coping with this level of information (see, for example, Event P Enter the Dragons).

Directors seem to feel that their role is to launch the proposal, and they only step in during the late phase when it seems in danger of floundering. A further look at kind and placement of meetings attended shows that Director 2 appears only at checking meetings (Events F, S, U) and he does not appear during middle phase Level II meetings. (In fact, no director appears at any middle phase meetings at any level!) More attention by Directors during middle events may have solved problems of information consideration from a more experienced point of view much earlier in the text production process. Unlike Level III collaborations, Level II meetings remain fairly consistent in size; that is, late phase meetings are generally as large as early meetings. Information, it seems, retains its power to influence proceedings.

As in Level III, collaborative activities at Level II reveal behaviours which enhance text production and those which impede it. Team relationships are both strengthened and threatened, audience is considered wisely or unwisely, schedules are maintained or ignored. Collaborators show both flexibility and inflexibility in persisting with Level II tasks.

Team relationships at Level II are fairly pragmatic. Sources of information are sought and discussed quickly during building events. The goal is straightforward, "tell me what I need to know." Technicians 3 and 6 (Events N and B) are company employees invited to collaborate briefly and then return to other work. Information sought from vendors who are not controlled by Cerebellum is not quickly supplied, because of vendor annoyance over Cerebellum's approach (see Events L and U). The cut and dried free market of information is certainly tempered by more volatile notions of "fairplay" and trust.

Power and authority are held at Level II building meetings by persons with information, irrespective of their status (see Events N and U). Strains in the hierarchy occur, however. Events B and D show attempts by less knowledgeable people to put themselves on an equal or superior plane with the more knowledgeable employee. In each of these events, a question is asked which is less a request for information than a challenge. During Event B (Opening Moves), Manager 1 asks Accountexec 1: "What happens two years down the road when they have to spend another million?" and in Event D (Who's On First), Technician 1 quizzes Manager 1: "How will we maintain our credibility with vendors?"

Often, however, the hierarchy at Level II appears to be the same as at Level III (by status) because the most senior employees also often have the most knowledge and experience (see Events B, E and F, which show the experience of Accountexecs 1 and 2, and the technical knowledge of Director 2). Readers should also note that the high status, experience and knowledge of Director 2, in conjunction with his dominant, extroverted personality tends to put him in the leadership role at any Level II meeting he attends. When time is short and the list of tasks long and complex, Director 2 does an undeniably remarkable job. His approach, however, does not lend itself to promoting the ideas of junior team members and helping them to become stronger team members. Often, as Veiga (1991) has noted, the presence of such an employee can cause other team members to contribute less.

The most stalwart collaborators, who usually work on fairly equal footing, are Technicians 1 and 2. Several steps separate them officially on the Cerebellum hierarchy: one is a senior engineer and the other is a junior associate engineer. As I have noted, Technician 2 finds it challenging to work her way onto the team especially at Level I checking meetings. However, Technicians 1 and 2 work together at Level II, both alone and with others, without the hierarchical quality so obvious in most Level II collaborations. They share tasks, support each other during meetings, and even use the plural pronoun "we" to report their findings or describe their work to date at Level II checking meetings. They work together in a more dialogic (Ede and Lunsford, 1990) fashion. Past experiences too may contribute to their effectiveness as a team (Tebeaux, 1990).

Audience concerns, focusing on the difficulties of imagining the enigmatic Mr. B or the unreliable Jake as the primary reader, permeate Level II. Although Kirsch (1991) showed how experienced writers compose for audiences which they perceive as either above or below them in the same community, clearly the formulation of an audience for these collaborators is a more problematic activity. They have trouble reaching an agreement to decide if the audience is to be represented as within their community, or even whether the audience may be considered as above (as Mr. B. seems to be) or below (as Jake appears to be).

Event B (Opening Moves) concerns Manager 1 accessing Accountexec 1 as an information source knowledgeable about Borden and Mr. B. Accountexec 1 seems to base his replies on previous experience with Mr. B., rather than on the information contained in the RFP. For example, he wants Cerebellum to avoid taking any risks associated with the project, but later in the same meeting informs Manager 1 that Borden must be told in the proposal that Cerebellum's management of the project will "minimize" their risk. No one, it seems, will be at risk, which Manager 1 seems to have difficulty believing ("So in the end, they take the risk".)

In contrast, when Manager 1 takes a problem to Accountexec 2, his handling of audience is more sensitive. Event E (Decisive Action) shows Manager 1 concerned that software needed for the project will not be available as Borden has been lead to believe. Accountexec 2 immediately suggests a meeting with Mr. B., which will include Jake, at Mr. B.'s discretion. The owner will be kept informed of new developments, and Cerebellum will avoid unpleasant surprises, or the possibility of alienating Borden's quixotic project manager.

Still, however, Manager 1 must use Jake as a source of information on which he will base his writing of the proposal text. Event L (The Audience Awaits) shows the frustration Manager 1 feels at having to use Jake's facts to inform the proposal writing process. He strongly suspects that Jake is inventing the rules as he goes, even vital information such as how the text is to be judged. Jake becomes the obstructing audience which can be neither ignored nor dealt with as a reliable source of information. He has been alternately scorned as a project manager and consulted as a representative of Mr. B. Later in the same meeting, when information is further discussed, Manager 1 suggests that Jake and Mr. B. have different priorities, further complicating the proposal effort. At this point, Manager 1 seems to be more concerned with the reaction of the "senior executive," Mr. B., whom, he hopes, has reactions typical of executives in general: "They want to make little decisions." Presumably, consensus on such information by the collaborators present in this meeting will make targeting the audience easier. It will also help to shape the proposal into a series of sections which argue small points one after the other.

Although there is often a tone of urgency in voices, for example in Event E (Decisive Action) (Manager 1: "How can we guarantee software if it's not up yet?!") and Event U (Rounding Up the Stragglers) (Technician 1: "Okay! Give me the config!"), schedule maintenance is only infrequently mentioned at Level II as a direct reminder from one team member to another that they must hurry. Event N (Collabo-tech) shows Technician 1 consulting Technician 3, a very peripheral team member, and rejecting his first idea because it would take too much time: "We've got two weeks max." A far more direct reminder comes from Director 2 in Event F (Under Consideration) when he pushes for completion of network pricing: "Okay. So we're going to have a network priced out, rough cut, either today or tomorrow," even though such work is far from complete. Technician 1, in fact, quickly says: "Tomorrow," and as we know from later events, networks were still being priced out on the last day.

Being aware of the process as a whole becomes a topic of conversation in Events B, F and L. Manager 1, during Event B (Opening Moves), shows that although the prime objective of the meeting is to gather information, he is cognizant of both Level III and Level I concerns. Such awareness shows once again the mediating role played by Level II activities. For example, he worries that "This is a high-risk project," a strategy concern, and also wants to discuss scheduling for the drafting activities. Event F (Under Consideration) shows both Director 2 and Manager 1 reminding the team of Level I, drafting, activities; for example: "I can start outlining content with Director 1 at 10 o'clock" (Manager 1). Finally, Event L (The Audience Awaits) shows Manager 1 considering the impact of information on future Level I activities, drafting the proposal to assure maximum effectiveness. He leads a collaboration which agrees on a likely list of selection criteria for the proposal's acceptance by Borden's owner: costs and flexibility.

Maintaining the level, that is, focusing on the task at hand, is more obvious at Level II than Level III. Technicians especially are most comfortable at Level II and rarely seek to jump to another level (though they often want to return to Level II when in Level I). One notable exception is Technician 1's behaviour during Event D (Who's On First), which, as we have seen already, sounds like an information session, but the information Technician 1 desires seems intended more to attack the strategy (a Level III concern) than to advance the proposal.

Such level-jumping has an impact upon the text production process. Other collaborators are also given to shifts in focus as we see in Event F (Under Consideration). Here Director 2 and Accountexec 1 struggle to remain in Level III, bantering about strategy, rather than focusing on information consideration which should be the goal of a Level II checkpoint meeting. It is interesting to note that collaborators seek to jump up to Level III and not down to Level I.

Some further consideration of level-jumping and level maintenance in the model would seem to be appropriate here. Flower and Hayes (1981) consider recursion to be a valuable part of the cognitive writing process as it applies to the individual writer. Recursion during a group meeting, however, is more difficult than would be the case with a solitary writer. The collaborative group is a social organism. If one member disrupts the meeting by trying to jump to another level, then the group's progress as a group is damaged, as is progress on the document. Each level of collaborative engagement is important but different. Level III meetings, for example, need Level III members such as directors to meet their strategy objectives. Level II meetings usually lack the personnel necessary to discuss Level III topics, even if doing so would help the proposal effort.

Level I Findings

Events were classified as being at Level I if the main objective of the meeting was to draft text (words, visuals) or the technical solution, activities which often happened in tandem. As other researchers have noted, knowledge is built by communities as they write together (Bruffee, 1986; Winsor, 1990). Examples of Level I events are Technicians 1 and 2 collaboratively building text during Event J (Down to Work), and Event Y (Coming Together) which finds a large group (Directors 1 and 2, Manager 1, Technicians 1 and 2) all engaged in checking text by reading and discussing it.

A major finding in the building of the proposal at Level I is the prevalence of the activity I have called recycling text, or using "clip-text." Cerebellum writers refer often to the use of "cut and paste" as a drafting practice, and my observations show that drafters rely on text chunks from previously written proposals, technical reports, and letters from vendors for assistance in many ways and at many stages of the text production process: in planning and building prose, in formatting, in using visual aids, and in dealing with numbers. Although others have reported the prevalence of using boilerplates (Selzer, 1983) by individual, confident writers, my research shows collaborators who are often frustrated by writing also using clip-text extensively. In addition, however, I conceive borrowing in a rather more plastic fashion, as a process of drawing together ideas, experiences, and texts, of gathering knowledge and representing it in text.

Event A (The Starting Gun), at Level III, contains overall process awareness comments which include writers pointing forward in the process to suggest Level I recycling activities. Manager 1 is directed (by Accountexec 1 at Director 2's suggestion) to seek out two previously written proposals as places to look for guidance. And again in Event

F (Under Consideration), at Level II, Director 2 looks forward to Level I as he reiterates his belief in using already composed texts: "Get him [Director 1] to cite good quality examples and start cutting and pasting them."

The first event which shows collaborators building text, Event H (Problems, Problems), contains references to "cut and paste." Writers do not really cut; rather they copy appropriate sections from already complete documents and insert them into the current document. Using writing as clip art is spoken of with some derision as yet another example of Accountexec 1 trying, perhaps, to avoid the real work of original composition. Technician 2 says in response to Accountexec 1's exaggerated offer to write the executive summary: "Oh, yeah, he'll just cut and paste." Technician 1 supports her in deriding Accountexec 1's proposition: "He's already got a canned version." In no other event, however, was clip-text referred to in anything other than positive terms. Discussion of the use of clip-text visuals also occurs in Event H (Problems, Problems) when Manager 1 asks: "Are you going to use diagrams?" and Technician 1 replies: "The same ones we used before—some minor modifications."

Collaborators (themselves cutting in and out of the process) reinforce the use of recycled ideas to and with each other. They re-use ideas for the more effective drafting of text, as later in Event H (Problems, Problems), when Technician 1 refers to his use of a "constant" as a presentation device borrowed from other piece of writing:

"Yeah, we did that before". Such reinforcing also occurs when Accountexec 1, Technicians 1 and 2 show Manager 1 what "style" (what might be called format) to use in the proposal. Manager 1 leafs through a completed proposal and notices the use of "bullets" and "tables." Even the RFP is consulted as a place from which format and phrases can be borrowed. We see Manager 1, Technicians 1 and 2 consulting the RRP in Event P (Enter the Dragons), so that their options in the proposal's technical solution will echo the requirements in the RFP.

The degree to which the previous material can be used depends of course on the experience of the writer. This is certainly one reason why collaboration is so useful to new employees working on a proposal. Sometimes, however, the Borden proposal writers find themselves struggling to resolve different levels of knowledge, as in Event P (Enter the Dragons). Technicians 1 and 2 have not really used pre-packaged text, but borrowed at least partially chunked pieces of information on ways to make a computer system available at close to one hundred percent of the time. The choice of which solution to use must be made carefully, in this case because of cost.

While clip-text must be chosen carefully and often modified to work well, it can save time and help to target the audience. Technician 1 and 2 quickly decide in Event J (Down to Work) on sections which can be extracted from previous work, such as technical reports written for the same client, which can be inserted into the current proposal. When

Technician 2 expresses concern about getting material in for word-processing by a deadline date, Technician 1 replies that "It's going to be tight." She comments further, however, that they will be able to use "some cut and paste," presumably as a way to save time. Such assembling of already written text is even more obvious in Event Q (The Recyclers), where what might seem at first to be level-jumping (to Level II information gathering) is really quintessential Level I drafting. Technicians 1 and 2 are more confident of their skill in dealing with gathering and considering technical information than in their ability to draft.

Text recycling by technicians, therefore, may be seen as an effort to recast their work in a more comfortable Level II form; however, they are not the only writers to engage in such an activity. Observations also suggest that Manager 1 and Accountexec 1 use clip-text, and Director 1 recommends recycling. All of these employees are executives comfortable at Level III. Director 1, who seems to be the one Cerebellum writer most comfortable with original composition, discusses the prevalence of clip-text in Cerebellum documents when he comments to me how he often recognizes previously used phrases in "new" documents. He further wonders how far back such word-chunks could be traced in older documents.

Collaborative Level I events are completely missing during the early phase of text production. In fact, over the course of an eleven day proposal, drafting is not observed until Day Six, almost halfway through the allotted time.

Drafting then dominates middle and late events, as indeed it must in order to meet the deadline. In total, there are ten collaborative Level I events discussed: four in the middle phase, five in the late phase, and one (Event P (Enter the Dragons)) which serves as a bridge between the middle and late phases. Event P also marks the entrance of Director 2 as the obvious leader of the proposal effort at all levels (until Director 1 takes over the chief drafter role during Event T Asking the Tough Questions).

Half of the ten events (Events J, M, Q, R, V) at Level I show collaborators primarily building text. Of the other four, three (Events K, T, Y) are primarily text checking events and two (Events H and P) reveal writers building and checking fairly equally. Drafting the proposal text progresses hand in hand with building the technical solution, despite Director 1's wishes to the contrary (see his final comment, Event A The Starting Gun). It is difficult to believe that, given the time pressures, any other approach would be possible, however. Writing the words reminds technicians of missing or contradictory parts of the approach, and discussing the approach directs them to write new sections of prose, or build a chart. Examples may be found in Event J (Down to Work) and Event V (Words, Words, Words) with the comments of Technician 1, the technical architect in charge of building the solution and also drafting much of the technical section of the proposal. In Event V, Technician 1 debates the use of terms and sentences with the comment: "Yeah. That's too vague. You do the proofing there, right?" The explanation is unclear, and so, it seems, may be their understanding of the technical steps which must be taken. Winsor (1990) noticed similar behaviour in the drafting of an engineer.

In both cases, Technician 1 seeks collaboration for his decisions on the words and the solution. Much the same process, building text and solution together, may also be seen in Event M (A Decisive Dyad) with Accountexec 1 and Manager 1. Here they discuss the proving procedure for the solution. Accountexec 1 suggests a technical procedure: "what we have to do is set up some sort of test" and Manager 1 responds immediately with a text idea: "so maybe [we could say] 'Our ideas are flexible but one idea might be ...'"

The review and discussion of text in events K, P, T, and Y are especially important in view of the large number of collaborators working on the Borden proposal. There are seven major contributors actually drafting text during the eleven day proposal effort (Directors 1 and 2, Manager 1, Accountexecs 1 and 2, Technicians 1 and 2). Consideration must also be given to the large number of other writers present through clip-text taken from the RFP, other proposals, letters, and reports. Text must be reviewed to check for completion, accuracy, effectiveness and also to smooth all of these voices into one voice to speak for Cerebellum through the complete Borden proposal.

Collaborators meet to ensure that they are gradually building a unified document. "Rehearsal" seems to be one of the major collaborative activities of Level I, and it most often takes place during checking meetings. Writers rehearse text by practising phrases with each other for possible inclusion in the document.

Such behaviour is first revealed in the data during Level II Events B (Opening Moves) and F (Under Consideration). Although Events B and F are information sessions, during each one we see writers looking ahead to Level I, when they will be drafting text. In Event B, Accountexec 1 voices the wording he prefers: "But we will 'minimize your risk,'" even as he tries to inform Manager 1 about the client's expectations. He wants the proposal to use the phrase, and may be seen as offering it to Manager 1 so it can be clipped and added to the document. Technician 2 uses the same technique of rehearsal in Event F, when she says to the group: "so we're saying 'put in a four port pad, because you have a choice ... so we're recommending four then you can have an option to upgrade it.'"

We see such behaviour more frequently in Level I events. During the middle phase, three events reveal examples of rehearsal from four different collaborators. For example, in Event H (Problems, Problems), Manager 1 says: "We'll say 'Here's what you need to do.'" Rehearsal seems to serve a checking or previewing function in this event, and is also used here by Accountexec 1 to explain how he plans to word his section of the proposal: "Well, not get into the hardware/software ...[but] how they're 'looking for a hardware platform blah blah blah for efficiency of operation.'" Event M (A Decisive Dyad) also shows Accountexec 1 and Manager 1 engaged in rehearsing text. Technicians 1 and 2 also rehearse, perhaps as a way of making the document as clear as possible by ensuring that the headings match the accompanying explanations, as is shown in Event J (Down to Work).

Late Level I events also show several examples of rehearsal, but now they seem more to be a way of hurrying the group along. Director 2 dominates the rehearsal activities (except for one example by Manager 1 and one by Director 1) with comments in Events P (Enter the Dragons), R (A Woman's Place), and V (Words, Words, Words). Event P marks his entry as the leader of the proposal effort. He comments, during a discussion of a spreadsheet, that, "We don't want too many choices for them to make. 'If you want the absolute base, it's this.'" During Events R and V, Director 1 looks for quick consensus on headings and titles. In this case, the presence of a high status and extroverted personality seems to usurp the rehearsal behaviour.

Rehearsing ideas and exact words seems an ideal way to work with fellow collaborators. Writers are able to practice before hand, get confirmation or rejection on text in progress by giving words to ideas, keep the group acting in concert since everyone can hear plans and adjust their own text, and hasten the decision process by getting input, which should also cut down on the possibility that final reviews will reveal major problems.

Other reviewing behaviours involve reporting on ways of presenting ideas. Event K (Covering Off) for example, shows Technician 1 checking his approach and the text he is writing (what he would call "covering off") with Accountexec 1. Accountexec 1 drafts text as well, but is less effective at taking advantage of opportunities to check it, and perhaps thus misses the opportunity to merge his style with that of other writers. This problem is particularly evident in Event P (Enter the Dragons), when Accountexec 1 submits a piece of writing and then leaves. The others, especially Technician 2, realize that the proposal has several styles. Technician 1 comments, "Once everybody's happy, then I think we just have to do it in one style." However, he will avoid being the writer to bring about a unified voice, a role we see Director 1 take late in the process. Indeed, trying to control the "versions" becomes a major job in the late phase of text production as we see especially in Event T (Asking the Tough Questions) where Director 1 notes, "My temptation is to take it away to a corner, but we've got three people working on it--we'll get three different drafts." The problem continues during the panic of the final day when writers struggle to keep track of which sections of the proposal have been checked and which have not.

As previously mentioned, seven writers collaborate at Level I. During the ten events observed, Technician 1 appears eight times, and Technician 2 on seven occasions. Manager 1 and Director 2 contribute during five events each. Accountexec 1 appears three times, Director 1 twice, and Accountexec 2 just once. Patterns of attendance are noteworthy. Technicians 1 and 2 always appear together, except for one event (K) where Technician 1 collaborates with Accountexec 1 on his own. Technicians 1 and 2 work well together, and form a true partnership both in developing text and technical solution and in checking and justifying ideas with others.

All three of Accountexec 1's appearances occur in middle phase meetings. None of the directors appears at any middle phase meetings, but Director 1 or 2 or both are present at all but one of the late phase meetings. Accountexec 2's only appearance is also during the late phase. Manager 1 appears twice in the middle phase, and three times in the late phase. It seems that the more senior, experienced personnel dominate late phase Level I collaborations.

Relationships among team members and the roles of the individuals on teams change considerably during Level I events from the early through the middle to the late phase. As noted above, Level I groups have more senior participants during the late phase, and it is no surprise that the directors take over a leadership role, beginning with Director 2's appearance in the middle of Event P (Enter the Dragons). Much of Manager

1's non-collaborative work, it seems, has been completed without significant input from Accountexec 1. My observations of collaborative work show that his attendance at meetings stops on Day Seven, and when Director 1 discusses the situation with Manager 1, it is already Day Ten. Accountexec 1 has missed two full days of collaboration (as corroborated by Manager 1 in Event T (Asking the Tough Questions)). Accountexec 1 becomes a text reviewer, and Manager 1 a drafter. Directors 1 and 2 become the leaders of the text production effort.

Other issues in team relationships are those surrounding Technician 2. The relatively young and inexperienced female engineer begins to assert herself as an important team member. In early large group text-building sessions, she has been very quiet, limiting her comments and taking very little part in meetings. She supports Technician 1's ideas in Event H (Problems, Problems), especially in opposing Accountexec 1. However, Technician 2 works equitably with Technician 1 in their own small group, expressing herself forcefully and effectively. In Event J (Down to Work), for example, she comments on a section heading: "That's what's confusing" and Technician 1 readily agrees: "I think that's the wrong name." Her major challenge in the Borden proposal is to find her confidence in larger sessions, where Technician 1 tries to avoid interrupting her (see for example, Event F Under Consideration) but Director 2 proves more impatient--even insensitive until she finds a way to assert herself as she does in Event R (A Woman's Place). Here she manages to get and keep Director 2's attention despite Technician 1's attempt to "assist" her by taking over a technical explanation himself! By Event V (Words, Words, Words), Director 2 is even asking for her input on drafting issues: "Instead of 'set-up', can I say 'configured'?"

Several shifts in authority, based on drafting ability, occur during Level I. Accountexec 1 has his text completely removed from the proposal, and the sections are re-drafted by Accountexec 2, Manager 1, and Director 2. Manager 1 has his work severely criticized by Director 1, but will do some of the re-writing himself with Director 1 doing most of the re-drafting. Director 2, Technicians 1 and 2 work well together, with Technicians 1 and 2 doing most of the original drafting and Director 2 reviewing. However, Director 2 also drafts additions to technical sections and his work is reviewed by Technicians 1 and 2. Tensions surrounding these changes are minimal except for one comment by Manager 1 ("I've done a lot that I can't use") and the problems of Accountexec 1's behaviour which are more obvious (see for example, Events H and T). Much time is wasted on constant shifts in leadership, however, and much of the drafting takes place under considerable pressure during the final two days before the deadline.

Audience sensitivity, and the lack thereof, so evident a challenge at Levels III and II continues to be a problem of articulation and realization at Level I. Perhaps the strongest example is in Event P (Enter the Dragons) where Manager 1, Technicians 1 and 2 struggle to get a unified idea of the audience's needs based on a close reading of the RFP. What is straightforward to the manager, however, is more problematic to the technicians, based perhaps on their greater technical knowledge of the problems and their previous experience with the audience: "I don't think he realizes what it's going to take—the dollar figure."

Obviously, there is a challenging tension here between knowing the audience well enough to be sure the proposal specifically addresses their problems on the one hand, and not allowing a knowledge of audience eccentricities to overwhelm attempts to focus the presentation on the other hand. This subtle difference is handled by Director 1 in Event T (Asking the Tough Questions), when he jokes about audiences and shows Manager 1 a way to give them what they want AND what Cerebellum wants. Director 2, in Event R (A Woman's Place), also prefers a general perspective on audience which informs word choice, based on his skill with technology, and, perhaps, in dealing with audiences fearful of things they do not understand: "I don't want to scare them that we're doing anything significantly leading edge—'proof of concept' suggests something that's never been done before, but this has all been done before."

The schedule is maintained directly with comments only occasionally during Level I. This may be because the drafting begins so late in the process that writers are all too aware that time is pressing. Event H (Problems, Problems), the first drafting meeting, shows examples of attempts to maintain the schedule, and attempts to avoid that maintenance. Manager 1 urges Accountexec 1 to take on drafting roles, which Accountexec 1 avoids. Four days later, during Event T (Asking the Tough Questions), Director 1 changes Accountexec 1's role, rather than leaving him out of the process, in order to gain his experience with the client and maintain the schedule. Finally, Event Y (Coming Together) shows text checking hindered by many writers trying to share one version of the document. Once again Director 1 suggests a change in approach because, "We're not making the best use of everyone's time here."

Whereas Level III and II showed awareness of the rest of the writing process, Level I has almost no evidence of looking forward, perhaps because drafting is the ultimate objective to which the other levels have been pointing. One exception is brief mention, made in Event M (A Decisive Dyad), to the oral presentation of the proposal which may occur if Cerebellum is short-listed. Manager 1 opens a conversation on the testing process which the proposal must outline by reminding Accountexec 1, "We're going to be asked this." Otherwise, writers do look ahead to upcoming drafting tasks, as in Event P (Enter the Dragons) where Technician 1 comments, "It's a busy little section. We just have to round it out, polish it off and make it clear in the document."

Similarly, collaborators working at Level I do not engage to any great extent in level-jumping. Once again, time pressures seem to act as a motive to focus on Level I drafting activities. One exception occurs in Event H (Problems, Problems) when Technician 1, still annoyed at the strategy he must detail in words, attempts a jump from Level I to Level III: "It's a weighted approach ... weighted to [Azure]." He is quickly diverted away from Level III, however, by Manager 1: "We discussed this and [Director 1] said: 'Don't stir anything up.'"

In conclusion then, Level I events show collaborators struggling to draft a proposal while still concerned over unresolved issues from Levels III and II. They seem to be well trained to debate strategy, information and technical solutions. Choosing and using clip text, nurturing junior team members, learning to deal with problematic audiences and generally dealing much earlier with drafting problems might help to make the writing process more efficient and more effective. Collaborative groups provide opportunities to learn all of these skills, given the right team members and more awareness of the issues. Then later, when some of the drafting of the proposal is done alone, writers might carry with them, into their offices, advice and ideas and approaches gained in concert with others.

CHAPTER NINE: IMPLICATIONS

> [I]n those communal endeavors whose goal is symbolic knowledge, the more we understand the way symbols are used in the activity, the better we can carry out that activity. (Bazerman, 1988, p. 317)

As promised in Chapter One, my research has addressed some gaps in knowledge about the collaborative writing process in the workplace. First, I have provided a detailed observation of business writers at work (as urged by Ede and Lunsford, 1990), and represented those observations in a model designed to provide the necessary structure to organize and render more schematic a complex process and focus further comments and research. Second, my observations have looked at a broad inclusive definition of writing, which embraces talk, the interactions surrounding planning and drafting, and the merging of authorship (encouraged by Couture and Rymer, 1989). Third, I have endeavoured to categorize various activities which surround the creation of discourse. Most especially, I have looked at the relationship of one text to other texts (as suggested by LeFevre, 1987) in what I have termed the use of "clip-text." Embedded within my main emphasis on levels of engagement with text is the importance of each writer's relationship with others as collaborators. I have defined collaboration in one more setting and thus contributed to our store of knowledge about how writers work together.

General Implications for Advanced Literacy Development

The results of my research have general implications for the development of better collaborative writing on the job and in the school.

It is difficult to predict how Canadian businesses will be operating in decades to come. Communication skills, however, will continue to form the foundation of competitive and co-operative ventures in the future. Therefore, it is imperative that business communicators have the opportunity to improve their ability to read and write, speak and listen in order to further their own development and meet the needs of their company. Well-trained writers not only have valuable and transferable job skills, but are more able to assert themselves and influence any company's culture. If it is true that communities define themselves by the discourse projects they adopt, then employees who learn better writing approaches can more fully participate in the life of the community. This can only be accomplished by a continuing emphasis on literacy education.

While educators frequently feel harassed by what often seem to be the demands of corporate Canada for workers who will contribute to the realization of profits, perhaps it is time for schools to stop resisting or ignoring the concerns of business. Rather, we might look at our goals for writers, especially in the high school. There can be no doubt that there are differences between school writing and business writing. Our goals and therefore our approaches vary. The primary goal of business writing is to realize financial gain, and attention to process, therefore, centres mainly on ways to improve writers' approaches so that they can improve the product and its ability to please a client.

The main goal of the schools on the other hand is to help all students to learn. Any given collaborative writing project may be used to teach skills in such areas as group relationships, composition, and problem-solving. Approaches focus on all students having an equal chance to participate, regardless of their skills, in order to develop abilities gradually. Business needs to understand where our goals must differ. Students must be allowed to learn from mistakes that would get an employee fired! Educators could, however, offer some opportunities for students to work in groups as businesses might organize them, with time provided to discuss the effects of hierarchies, for example, on the group process.

One of the main goals of my research, then, is to build a bridge between business and the academy to improve the possibility of future research completed together. Such connections need to be maintained, and more work needs to be done in sharing objectives, procedures and problems in endeavouring to work in concert. Looking at two proposals in one company, even in the context of a two-year project in this office, still gave me only a glimpse at what might be possible with more time spent working together on questions of mutual interest.

Implications for Reading, Writing and Using Texts

Since Cerebellum writers rely on clip-text strategies to a great extent, work also needs to be done to investigate the best ways for employees and students to use other texts. Choice of sources is obviously crucial, but so is developing criteria to help writers decide what to borrow (just a format or a whole section of a proposal) and how to integrate it into the current proposal (with or without modification, for example). These recycling skills are sometimes not positively acknowledged in professional literature (Wallace, 1994) and need more investigation.

Ways to merge the resulting patchwork of text needs attention as well, perhaps by having less experienced employees work more closely with more skilled employees. Such skill could also of course help writers to deal with text contributed by different writers currently producing original text or contributing their own clip-text. Cerebellum writers show confidence at strategizing and information gathering, but are far comfortable as flexible composers. Talented drafters, such as Director 1, find themselves left with much of the work in presenting ideas effectively during the late phase of writing. In the Borden proposal, problems with organization and style in the written work were not discovered until the penultimate day, which left very little time for re-drafting. As also advised by Bizzell (1982), training in discourse analysis (for example, recognizing active and passive sentence structures) could help writers to develop and then influence the corporate writing style of their own community.

Reading and writing are complementary communicative acts. My research shows that a lack of careful reading, crucial to the use of other texts, resulted in difficulties and delays for at least four writers. The Request for Proposal (RFP) issued by Borden was read and debated by Manager 1 and Accountexec 1, and subsequently interpreted. Their discussion, however, reveals a lack of careful attention to the text, in analyzing the rhetorical problem (noted also as an important skill by Flower, 1989b). Rather than re-reading to understand the client's desires, Accountexec 1 moves quickly to an interpretation which would minimize Cerebellum's exposure to risk, without adequate consideration of other possibilities. Further problems are experienced by Technicians 1 and 2 in writing the proposal as a response to the RFP document, and by Manager 1 in following the format suggested by the RFP. More training in ways to interpret texts, such as looking for patterns of organization and creating an outline, would help both business employees and students to gain and use valuable information from documents.

Given the predilection of business communicators to borrow extensively from previously written documents, teachers need to examine if and how such a skill might be taught in the schools. It is difficult to escape the similarity of using clip-text to engaging in plagiarism, a much scorned practice which is cause for failure or even expulsion in many schools, and yet remains a common student habit. How ironic, even disconcerting then, to find that adult business writers routinely employ such "borrowing" of text chunks, both words and diagrams, in composition tasks. It seems a natural outcome of using other documents as models for format and style, an exercise used also by teachers to help students. And yet, where business writers progress to harvesting other documents for phrases, paragraphs, and even whole sections to insert in current texts, students are forbidden to engage in such practices.

In my own teaching experience, I was once berating a competent Grade Eleven writer, Rod, for lifting large chunks of text out of an encyclopaedia and inserting them into his report. When asked why he would do such a thing, he replied: "Why not? I couldn't say it any better." When adjured to remember the rules of citation, he shrugged his shoulders. He was disinclined to use such a ponderous system of footnotes and references when he just wanted to get through his work quickly and efficiently. If he was sorry at all, it was because he had been caught. At Cerebellum, his ability with clip-text would have been lauded, and herein lies the problem. What are the implications for us within the school system?

One view would no doubt be that students like Rod need to learn to write original compositions and they will not do so if allowed or encouraged to use clip-text. Business writers, after all, have different objectives. They draw on a corpus of discourse, owned by the company, in order to compete efficiently in winning business contracts. In this sense perhaps, they borrow from themselves in much the same way academics do in writing articles which refer to previous research done by the self-same author. One major issue is that of text ownership. We want students to understand proprietary authorship as it pertains in different communities. Perhaps, then, students could be shown how to develop one paper which builds on a previous paper, using some of the same sentences, paragraphs and diagrams, but also adding new material. Or students could work on essays on their own and then do group projects which borrow material from these previous pieces of writing.

The alternative is to proceed as we are now, ignoring the inclinations of students and the realities of business writing practices. I believe it is better to consider the work of the classroom, at least from time to time, as a body of discourse and show students how to use each other's work as sources of text. The integration of text is, after all, by no means a simple matter, requiring new skills such as merging of style by the final writer. I am not advocating the unacknowledged use of words and ideas by students. Such academic behaviours need to be learned as the habits of one discourse community which students may wish to enter. However, other ways of using text sanctioned by other communities also need to be acknowledged.

Implications for Representing Audience and Community

Cerebellum is a community with varying degrees of understanding about developing relationships among community members, within proposal teams of employees, with other businesses and with clients. Some collaborators are already quite adept at including potential audiences as community members, for example, Accountexec 2 on the Borden proposal and Technician 4 on the Sundial proposal. Both of these employees indicate a willingness to establish and maintain relationships with clients which focus on meeting their needs (see also Beck, 1992 for similar advice) by involving them in the proposal process. The experience of Technician 1, who also values his relationships with vendors, indicates what harm may be done when a collaborator cannot interact honestly with other businesses (for advice on this issue, see Bryan, 1992). Time needs to be spent in discussing varying approaches to the client as an audience. In that Technician 1 is frequently critical of Cerebellum's approaches, his experience could be examined by students as an example of how disagreement might proceed (Harris, 1989).

Various behaviours enhance or impede collaboration: team relationships and audience sensitivity most clearly relate to the ability of the community to expand and include audiences as members. Disagreement also contributes to effective collaboration, suggesting that group members should be taught when and how to introduce opposing points of view. Both the Borden and Sundial proposals show disagreement at Level III benefiting the invention process. At other levels, conflict is usually not tolerated, and is often seen as a challenge to authority or a threat to schedule maintenance. Technician 2 finds she must persist strongly to gain a place on the team, which under more nurturing conditions would be encouraged by more senior team members. Both assertive action and listening to others need to be seen and encouraged as important skills (see also Lay, 1992; Tebeaux, 1990; Lunsford and Ede, 1990).

Total Quality Control (TQC) principles (Deming, 1988; Goldman, 1993) suggest the characteristics of the best communication situations. Many of these qualities mesh well with theories about the primacy of the social context to the communicative act currently favoured by the rhetoric community. In order to foster a social environment which supports writers' attempts to work effectively together, traditional barriers must begin to fall. These barriers may be physical ones, such as separation of writers by office space, or social ones, such as a counter-productive hierarchy. If communication is to be "decentralized, vertical-upward, interdepartmental, interdependent, trusting, long-term, group-oriented, reciprocal, immediate, nurturing feedback, flexible, and characterized by close proxemics" (Goldman, 1993, p. 29), then the current approach to writing together must be analyzed and steps taken to encourage a more supportive writing atmosphere. Managers need skills as coaches in helping team members to work together at each phase of the writing process (Zaslow, 1991).

Too much writing in the schools is for teacher-as-examiner (Britton, 1970). Although teachers have sought to give students other audiences, often these writing tasks are thinly veiled tests which fool no one. If students are asked to "Write a letter to a business client" which they know will never be posted, but rather evaluated by a teacher, then very little is being done to advance the ability or motivation of students to write for real audiences. Involving the audience, as I discovered in my research, is difficult even for business writers who face such tasks every day. Students need to write for a variety of audiences and for a variety of real life purposes, both on their own and with other writers. Although this is a rather familiar refrain in education, more connection between schools and business would make possible mentoring situations, in person or via e-mail, where students contribute to the writing of projects for which audiences are carefully realized. Students need to experience the powerful effect of a group coming together to adopt a discourse project and see it through to fruition.

The ubiquitous and frequently problematic group project, however, which might be assigned to give students practice in debating audience representation, needs to be re-examined. Although my research shows that writing together in business is not without its problems, it persists as an approach because of time pressures and the need for various specialists to contribute to large writing tasks where high quality is important. Students need training in better ways of working together by building team relationships, identifying and involving an audience, maintaining a schedule, looking forward to upcoming writing tasks and focusing on different levels of engagement with their text.

My research shows business writers writing collaboratively in both hierarchical and non-hierarchical groups. Leadership and authority change according to meeting objectives, resting sometimes with one person, sometimes with another. Although status as a senior executive still commands power in business, there are signs in my research that change is possible. More equal, or what Ede and Lunsford (1990) might call "dialogic", groups are present in business and might serve as models for schools to imitate. Also, a way needs to be found for the exceptionally bright, extroverted individual to learn to contribute to a group effectively without dominating inappropriately (Veiga, 1991). This suggests that the best students need a chance to work together, as top executives do at Level III, and that they also have time to work on their own, using other documents as collaborative sources.

Implications for Further Research

In studying collaborative writing using ethnographic methods to provide the detailed description needed to develop a model, I have begun a research path which I would hope to follow myself and encourage others to join. Although I was prevented from sharing much of my video-taped data due to proprietary concerns expressed by Cerebellum, I was still able to gather much more detail of actual writing behaviours by using video-tapes than would have been possible using fieldnotes or audio-tapes, or by engaging in surveys or interviews. The model I developed was intended to respond to the needs of business writers for a concise, pragmatic representation.

Much more might be done, however. As my data becomes less sensitive with the passage of time, it might be digitized and organized in non-linear format (on video-disc, for example) for use by teachers, business writers and researchers to investigate issues beyond what I have attempted in my own research. In addition, of course, using ethnographic approaches and then developing models could also be used to study other collaborative writers in both business and school settings as a way to gather and study data, represent findings, and establish relationships across various cultures.

My research indicates that collaboration takes place at what can be roughly described as three levels of textual involvement. Each level has its own objective which is realized by more or less unique activities. The basis for authority shifts from level to level, as does the tone of meetings. Business writers need to observe, analyze and discuss the descriptions of collaboration in order to become more aware of approaches which may be helpful in developing proposals (as advised as well by McIsaac and Aschauer, 1990). For example, the egalitarian spirit of Level III strategizing may work well in text checking meetings during Level I drafting. As well, non-hierarchical collaborations, such as those shown by Technicians 1 and 2, could be highlighted as models (as in Ede and Lunsford's 1990 dialogic mode) for other pairs or small groups learning to work together. Hierarchies based on status (see also Cross, 1990) could be re-ordered so that more experienced collaborators might assist the less experienced to learn team skills.

Such a representation as my model of levels of engagement with text needs to be investigated in other settings and with other kinds of documents with various groups of collaborative writers. A logical next step for an educational researcher would be to take video cameras into a high school and film group writing tasks. Researchers could then examine this case for similarities and differences with the Borden proposal process, and look at the model to suggest changes to it, or to suggest new ways for schools to organize and teach group writing skills.

In future, I would spend more time looking for ways to involve informants more directly in the research effort. Time pressures at Cerebellum mitigated against any but the most fleeting conversations on my research. I would also like to modify my methodology to include more time/record keeping by informants of total time spent working on the project. This would allow me to examine what portion of time I had captured, and what portions of time informants worked face to face with collaborators as opposed to more private activities. Finally, I would like to find some way to make the research process seem more immediately valuable to business writers, and thus perhaps more deserving of their attention.

Finding common ground, working collaboratively, seems to me to be a valuable goal for future research with business writers and students. The benefits touch on a number of issues common to education and business, most crucially insights into, and the development of, advanced literacy.

Bibliography

Allen, N., Atkinson, D., Morgan, M., Moore, T., and Snow, C. (1987). What experienced collaborators say about collaborative writing. *Journal of Business and Technical Communication, 1*(2), 70-90.

Anderson, G. L. (1989). Critical ethnography in education: origins, current status and new directions. *Review of Educational Research, 59*(1), 249-270.

Anderson, K. and Jack, D. C. (1991). Learning to listen. In K. Anderson and D. Jack, *Women's words* (pp. 11-26). London and New York: Routledge.

Anderson, P. (1985). What survey research tells us. In L. Odell and D. Goswami (Eds.), *Writing in nonacademic settings* (pp. 3-83). New York: The Guilford Press.

Aristotle (1932). *The rhetoric of Aristotle* (L. Cooper, Trans.). London: Prentice-Hall. (Original work circa 300 B.C.)

Asner, M. (1991). Creating a winning proposal. *Business Quarterly*, Winter, 36-38.

Bazerman, C. (1988). *Shaping written knowledge*. Madison: University of Wisconsin Press.

Beck, C. E. (1992). Toward a rhetoric of technical proposals: Ethos and audience analysis. *Technical Communication, 39*(Feb.), 122-126.

Bereiter, C. and Scardamalia, M. (1987). *The psychology of written composition*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Berkenkotter, C. (1991). Paradigm debates, turf wars, and the conduct of sociocognitive inquiry in composition. *College Composition and Communication, 42*(2), 151-169.

Best, J. W. (1981). *Research in education* (4th ed.). Englewood Cliffs, NJ: Prentice-Hall.

Bizzell, P. (1982). Cognition, convention, and certainty: what we need to know about writing. *Pre/text, 3*(3), 213-243.

Bizzell, P. (1987). What is a 'discourse community'? A paper presented at the Penn State conference on rhetoric and composition.

Britton, J. (1970). *Language and learning*. Harmondsworth, England: Penguin Books.

Brodkey, L. (1987). Modernism and the scene(s) of writing. *College English, 49*(4), 396-418.

Brown, R. L. and Herndl, C. G. (1986). An ethnographic study of corporate writing: job status as reflected in written text. In B. Couture (Ed.), *Functional approaches to writing: Research perspectives* (pp. 11-25). London: Frances Pinter.

Bruffee, K. A. (1983). Writing and reading as collaborative or social acts. In J. N. Hays, P. A. Roth, J. R. Ramsey, and R. D. Foulke (Eds.), *The writer's mind* (pp. 159-169). Urbana, Illinois: National Council of Teachers of English.

Bruffee, K. A. (1984). Collaborative learning and the 'conversation of mankind'. *College English, 46*(7), 635-652.

Bruffee, K. A. (1986). Social construction, language, and the authority of knowledge: a bibliographical essay. *College English, 48*(8), 773-790.

Bryan, J. (1992). Down the slippery slope: Ethics and the technical writer as marketer. *Technical Communication Quarterly, 1*(1), 73-88.

Burke, K. (1957). *The philosophy of literary form*. New York: Vintage Books.

Collier, J. and Collier, M. (1986). Ethnographic film. In J. Collier, Jr. and M. Collier, *Visual anthropology* (pp. 151-173). New Mexico: University of New Mexico Press.

Cooper, L. (1932). *The rhetoric of Aristotle.* Englewood Cliffs, New Jersey: Prentice-Hall.

Corbett, E. P. J. (1989). What classical rhetoric has to offer the teacher and the student of business and professional writing. In M. Kogen (Ed.), *Writing in the business professions* (pp. 65-72). Urbana, Illinois: National Council of Teachers of English.

Couture, B. and Rymer, J. (1989). Interactive writing on the job: definitions and implications of collaboration. In M. Kogen (Ed.), *Writing in the business professions* (pp. 73-96). Urbana, Illinois: National Council of Teachers of English.

Creative Research Group. (1987). Literacy in Canada: A research report. Ottawa: Southam News.

Cross, G. A. (1990). A Bakhtinian exploration of factors affecting the collaborative writing of an executive letter of an annual report. *Research in the Teaching of English, 24*(2), 173-202.

Doheny-Farina, S. (1986). Writing in an emerging organization: An ethnographic study. *Written Communication, 3*(2), 158-185.

Doheny-Farina, S. and Odell, L. (1985). Ethnographic research on writing: Assumptions and methodology. In L. Odell and D. Goswami (Eds.), *Writing in nonacademic settings* (pp. 503-535). New York: The Guilford Press.

Doheny-Farina, S. (1993). Research as rhetoric: Confronting the methodological and ethical problems of research on writing in nonacademic settings. In R. Spilka (Ed.), *Writing in the workplace: New research perspectives* (pp. 253-267). Carbondale and Edwardsville: Southern Illinois University Press.

Debs, M. B. (1991). Recent research on collaborative writing in industry. *Technical Communication, 38*(4), 476-484.

Deming, W. E. (1988). *Out of the crisis.* Cambridge, Mass.: Massachusetts Institute of Technology.

Dewey, J. (1938). *Experience and education*. New York: Collier Books.

Doland, V. M. (1989). Hypermedia as an interpretive act. In V. M. Doland, *Hypermedia*, (pp. 6-19). Hypermedia (IEEE).

Driskill, L. (1989). Understanding the writing context in organizations. In M. Kogen (Ed.), *Writing in the business professions* (pp. 125-145). Urbana, Illinois: National Council of Teachers of English.

Durst, R. K. (1990). The mongoose and the rat in composition research: Insights from the RTE annotated bibliography. *College Composition and Communication, 41*(4), 393-408.

Ede, L. (1984). Audience: an introduction to research. *College Composition and Curriculum, 35*(2), 140-154.

Ede, L. and Lunsford, A. (1984). Audience addressed/audience invoked. *College Composition and Communication, 35*(2), 155-175.

Ede, L. and Lunsford, A. (1985). Let them write—together. *The English Quarterly, 18*(Winter), 119-127.

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

Elbow, P. (1987). Closing my eyes as I speak: An argument for ignoring audience. *College English, 49*(1), 50-69.

Emig, J. (1971). *The composing processes of twelfth graders*. NCTE Research report no. 13. Urbana, Illinois: National Council of Teachers of English.

Etter-Lewis, G. (1991). Blackwomen's life stories. In G. Etter-Lewis, *Women's words* (pp. 43-58). London and New York: Routledge.

Faigley, L. (1985). Nonacademic writing: The social perspective. In L. Odell and D. Goswami (Eds.), *Writing in nonacademic settings* (pp. 231-248). New York: The Guilford Press.

Faigley, L. and Miller, T. P. (1982). What we learn from writing on the job. *College English, 44*(6), 557-569.

Farrell, T. (1976). Knowledge, consensus, and rhetorical theory. In J. L. Golden, G. F. Berquist, and W. E. Coleman (Eds.), *The rhetoric of western thought (4th ed.)*, (pp. 608-622). Dubuque, Iowa: Kendall/Hunt Publishing.

Flower, L. (1989a). Cognition, context, and theory building. *College Composition and Communication, 40*(3), 282-311.

Flower, L. (1989b). Rhetorical problem-solving: Cognition and professional writing. In M. Kogen (Ed.), *Writing in the business professions* (pp. 3-36). Urbana, Illinois: National Council of Teachers of English.

Flower, L. and Hayes, J. (1981). A cognitive process theory of writing. *College Composition and Communication, 32*(Dec.), 365-387.

Flower, L., Hayes, J. R., Carey, L., Schriver, K., and Stratman, J. (1986). Detection, diagnosis, and the strategies of revision. *College Composition and Communication, 37*(1), 16-55.

Forman, J. (1991). Collaborative business writing: A Burkean perspective for future research. *The Journal of Business Communication, 28*(3), 233-257.

Forman, J. (1992). Introduction. In J. Forman (Ed.), *New visions of collaborative writing* (pp. xi-xxii). Portsmouth, NH: Boynton/Cook.

Freed, R. C. and Broadhead, G. J. (1987). Discourse communities, sacred texts, and institutional norms. *College Composition and Communication, 38*(2), 154-165.

Freedman, S.W., Dyson, A. H., Flower, L. and Chafe, W. (1987). *Research in writing: past, present, and future*. Technical

Report No. 1. Berkeley: Center for the Study of Writing at University of California, Berkeley and Carnegie Mellon University.

Fulkerson, R. (1990). Composition theory in the eighties: Axiological consensus and paradigmatic diversity. *College Composition and Communication, 41*(4), 409-429.

Geertz, C. (1973). Thick description: Toward an interpretive theory of culture. In C. Geertz, *Interpretation of cultures* (pp. 3-30). New York: Basic Books.

Geertz, C. (1983). *Local knowledge: Further essays in interpretive anthropology*. New York: Basic Books.

Geertz, C. (1988). *Works and lives: The anthropologist as author*. Stanford, California: Stanford University Press.

Gieselman, R. D. (1982). Reading, writing, and research: pedagogical implications. *Journal of Business Communication, 19*(4), 23-38.

Goldman, A. (1993). Implications of Japanese total quality control for western organizations: dimensions of an intercultural hybrid. *The Journal of Business Communication, 30*(1), 29-47.

Goldman-Segall, R. (1989). Thick descriptions: a language for articulating ethnographic media technology. Unpublished manuscript. Massachusetts Institute of Technology, Boston.

Goldman-Segall, R. (1991). A multimedia research tool for ethnographic investigation. In I. Harel *(Ed.) Constructionism* (pp. 467-496). Norwood, NJ: Ablex Publisher.

Grant-Davie, K. (1992). Coding data: Issues of validity, reliability, and interpretation. In G. Kirsch and P. A. Sullivan (Eds.), *Methods and methodology in composition research* (pp. 153-171). Carbondale and Edwardsville: Southern Illinois University Press.

Haas, C. (1989). How the writing medium shapes the writing process: Effects of word processing on planning. *Research in the Teaching of English, 23*(2), 181-207.

Halliday, M. A. K. (1969). Relevant models of language. In A. M. Wilkinson (Ed.), *The state of language* (pp. 26-37). Birmingham: The University of Birmingham School of Education.

Hammersley, M. and Atkinson, P. (1990). What is ethnography? In H. Hammersley and P. Atkinson, *Ethnography: Principles in practice* (pp. 3-30). London and New York: Routledge.

Hampton, R. E. (1990). The rhetorical and metaphorical nature of graphics and visual schemata. *Rhetoric Society Quarterly, 20*, 347-356.

Harcourt, J. (1990). How to write winning proposals. *Training and Development Journal*, September, 29-33.

Harris, J. (1989). The idea of community in the study of writing. *College Composition and Communication, 40*(1), 11-22.

Herndl, C. G. (1991). Writing ethnography: Representation, rhetoric, and institutional practices. *College English, 53*(3), 320-332.

Herrington, A. J. (1989). The first twenty years of *Research in the Teaching of English* and the growth of a research community in composition studies. *Research in the Teaching of English, 23*(2), 117-137.

Howe, K. and Eisenhart, M. (1990). Standards for qualitative (and quantitative) research: A prolegomenon. *Educational Researcher, 19*(4), 2-9.

Jacob, E. (1987). Qualitative research traditions: A review. *Review of Educational Research, 57*(1), 1-50.

Jacobi, M. J. (1990). Using the enthymeme to emphasize ethics in professional writing courses. *The Journal of Business Communication, 27*(3), 273-292.

Jones, D. (1973). Cultural fatigue. *Anthropological Quarterly, 46*(1), 30-37.

Kirsch, G. (1991). Writing up and down the social ladder: A study of experienced writers composing for contrasting audiences. *Research in the Teaching of English, 25*(1), 33-53.

Kleine, M. (1990). Beyond triangulation: Ethnography, writing and rhetoric. *Journal of Advanced Composition, 10*(1), 117-125.

Kroll, B. M. (1984). Writing for readers: Three perspectives on audience. *College Composition and Communication, 35*(2), 172-185.

Kuhn, T. (1970). *The structure of scientific revolutions (second edition)*. Chicago: University of Chicago Press.

LaDuc, L. (1991). Infusing practical wisdom into persuasive performance: Hermeneutics and the teaching of sales proposal writing. *Technical Writing and Communication, 21*(2), 155-164.

Langer, J. A. (1985). Musings...a sociocognitive view of language learning. *Research in the Teaching of English, 19*(4), 325-326.

Lather, P. (1986). Issues of validity in openly ideological research: Between a rock and a soft place. *Interchange, 17*(4), 63-84.

Lather, P. (1991). Feminist perspectives on empowering research methodologies. In *Getting smart: Feminist research and pedagogy with/in the postmodern*. New York/London: Routledge.

Lay, M. M. (1982). The androgynous collaborator: The impact of gender studies on collaboration. In J. Forman (Ed.), *New visions of collaborative writing*, (pp. 82-104). Portsmouth, NH: Boynton/Cook.

LeFevre, K. B. (1987). *Invention as a social act*. Carbondale and Edwardsville: Southern Illinois Press.

Lincoln, Y. S. and Guba, E. G. (1988). Criteria for assessing naturalistic inquiries as reports. A paper prepared for presentation at the Annual Meeting of the American Educational Research Association, New Orleans, LA.

Lunsford, A. and Ede, L. (1990). Rhetoric in a new key: Women and collaboration. *Rhetoric Review, 8*(2), 234-241.

Lunsford, A. (1992). Intellectual property, concepts of selfhood, and the teaching of writing. *Journal of Basic Writing, 11*(2), 61-73.

Lyon, A. (1992). Re-presenting communities: Teaching turbulence. *Rhetoric Review, 10*(2), 279-290.

MacDougall, D. (1975). Beyond observational cinema. In D. MacDougall, *Principles of visual anthropology* (pp. 109-124). Hawthorne, NY: Aldine de Gruyter.

Malone, E. L. (1991). Facilitating groups through selective participation: An example of collaboration from NASA, (pp. 109-120). In M.M. Lay and W.M. Karis (Eds.), *Collaborative writing in industry: Investigations in theory and practice*. Amityville, New York: Baywood Publishing.

Mao, L. (1989). Persuasion, cooperation and diversity of rhetorics. *Rhetorical Society Quarterly, 19*(4), 131-142.

McIsaac, C. M. and Aschauer, M. A. (1990). Proposal writing at Atherton Jordan, Inc.: An ethnographic study. *Management Communication Quarterly, 3*(4), 527-560.

Mead, M. (1975). Visual anthropology in a discipline of words. In *Principles of Visual Anthropology* by M. Mead, pp. 3-10. Hawthorne, NY: Aldine Publishers.

Miller, C. R. and Selzer, J. (1985). Special topics of argument in engineering reports. In L. Odell and D. Goswami (Eds.), *Writing in nonacademic settings* (pp. 309-341). New York: The Guilford Press.

Moss, B. J. (1992). Ethnography and composition: Studying language at home. In G. Kirsch and P.A. Sullivan (Eds.), *Methods and methodology in composition research* (pp. 153-171). Carbondale and Edwardsville: Southern Illinois University Press.

Neilsen, L. and Willinsky, J. (1990). The Learning Connections Project: A School/Workplace Partnership. Unpublished manuscript. Halifax: Mount St. Vincent University.

Newman, R. G. (1988). Collaborative writing with purpose and style. *Personnel Journal*, April, 37-38.

Nystrand, M. (1982). Rhetoric's "audience" and linguistics "speech community": Implications for understanding writing, reading, and text. In M. Nystrand (Ed.), *What writers know* (pp. 1-25). New York: The Academic Press.

Nystrand, M. (1989). A social-interactive model of writing. *Written Communication, 6*(1), 66-85.

Odell, L. (1985). Beyond the text: Relations between writing and social context. In L. Odell and D. Goswami (Eds.), *Writing in nonacademic settings*, (pp. 249-280). New York: The Guilford Press.

Odell, L. and Goswami, D. (1985). Preface. In L. Odell and D. Goswami (Eds.), *Writing in nonacademic settings*, (pp.vii-xi). New York: The Guilford Press.

Papert, S. (1980). *Mindstorms*. New York: Basic Books.

Paré, A. (1991). Ushering audience out: From oration to conversation. *Textual Studies in Canada I*. Kamloops, British Columbia: The University College of the Cariboo.

Pemberton, M. A. (1993). Modeling theory and composing process models. *College Composition and Communication, 44*(1), 40-58.

Perelman, C. (1982). *The Realm of Rhetoric*. Notre Dame: University of Notre Dame Press.

Peshkin, A. (1988). In search of subjectivity--one's own. *Educational Researcher, 17*(7), 17-22.

Purves, A. C. and Purves, W. C. (1986). Viewpoints: cultures, text models, and the activity of writing. *Research in the Teaching of English, 20*(2), 174-197.

Purves, A. C. (1992). Reflections on research and assessment in written composition. *Research in the Teaching of English, 26*, 108-122.

Reither, J. A. and Vipond, D. (1989). Writing as collaboration. *College English, 51*(8), 855-867.

Rorty, R. (1979). *Philosophy and the mirror of nature.* Princeton: Princeton UP.

Roth, R. G. (1987). The evolving audience: Alternatives to audience accommodation. *College Composition and Communication, 38*(1), 47-55.

Selzer, J. (1983). The composing processes of an engineer. *College Composition and Communication, 34*(2), 178-187.

Selzer, J. (1992). More meanings of *audience*. In S. P. Witte (Ed.), *A rhetoric of doing: Essays on written discourse in honor of James L. Kinneavy* (pp. 161-177). Illinois: Southern Illinois University.

Smart, G. (1993). Genre as community invention: A central bank's response to its executives' expectations as readers. In R. Spilka (ed.), *Writing in the workplace: New research perspectives* (pp. 124-140). Carbondale and Edwardsville: Southern Illinois University Press.

Smudde, P. (1991). A practical model of the document-development process. *Technical Communication, 38*(3), 316-323.

Spilka, R. (1993). Influencing workplace practice: A challenge for professional writing specialists in academia. In R. Spilka (Ed.), *Writing in the workplace: New research perspectives* (pp. 124-140). Carbondale and Edwardsville: Southern Illinois University Press.

Staw, B. M. and Ross, J. (1989). Understanding behaviour in escalation situations. *Science, 246*(Oct.13), 216-220.

Stohl, C. and Schell, S. E. (1991). A communication-based model of a small-group dysfunction. *Management Communication Quarterly, 5*(1), 90-110.

Tebeaux, E. (1990). Toward an understanding of gender differences in written business communications: A suggested perspective for future research. *Journal of Business and Technical Communication, 4*(1), 23-43.

Thralls, C. (1992). Bakhtin, collaborative partners, and published discourse: A collaborative view of composing. In J. Forman (Ed.), *New visions of collaborative writing* (pp. 63-81). Portsmouth, NH: Boynton/Cook.

Trimbur, J. (1989). Consensus and difference in collaborative learning. *College English, 51*(6), 602-616.

Varner, I. I. (1988). Writing in groups. *Journal of Education for Business, 63*(6), 274-276.

Veiga, J. F. (1991). The frequency of self-limiting behaviour in groups: A measure and an explanation. *Human Relations, 44*(8), 877-895.

Vygotsky, L. S. (1978). *Mind in society*. Cambridge, Massachusetts: Harvard University Press. (Original work circa 1933-35).

Wallace, D. L. (1994). Collaborative planning and transforming knowledge. *The Journal of Business Communication, 31*(1), 41-60.

Willinsky, J. (1990). The construction of a crisis: Literacy in Canada. *Canadian Journal of Education, 15*(1), 1-15.

Winsor, D. A. (1990). Engineering writing/writing engineers. *College Composition and Communication, 41*(2), 58-70.

Zaslow, R. (1991). Managers as writing coaches. *Training and Development*, July, 61-64.