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EMERGENT ONLINE COMMUNITIES: THE STRUCTURING OF COMMUNICATIVE PRACTICES OVER THE INTERNET

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Abstract

Commercial enterprises are increasingly using online communities to allow customers to interact with each other before and after a purchase, and television shows are using them to get a closer grip on the audience. Although they have been around since the foundation of the Internet, little research has been done to understand the communicative interactions that arise within such online communities. In this paper, we use the notion of genres to study the communicative practices of three emergent online Internet communities at a university in the United States. Genres are organizing structures shaped by the communicative actions of individuals, and they provide an analytical lens to investigate those actions (Orlikowski and Yates 1994a, 1994b). We find that a parsimonious set of only six genres is needed to adequately classify almost 1,250 communications between the members of our three communities. Evidence also suggests that three of these genres are essential foundation blocks for communication in online communities. We also witness unmediated, explicit structuring of a genre, and the increase in participation this generates, which provides insight for those building and managing online communities. This study shows that genre analysis is a powerful tool to assist in understanding emergent online communities and we provide insight into how its use may facilitate growth and participation in the community.

1 BASIC CONCEPTS

Online communities are "social aggregations that emerge from the Internet when enough people carry on...public discussions long enough, with sufficient human feeling to form webs of personal relationships in cyberspace" (Reingold 1993). The notion of online community has been at the heart of the Internet since its inception (Armstrong and Hagel 1996), yet only recently have Websites encouraged the development of community between visitors.

Interactions in any community, be it off or online, involve communication as a fundamental activity. Indeed, interpersonal communication is the essence of the community because it creates structures which then affect what else gets said and done and by whom (Weick 1979). Interpersonal communication in the workplace, facilitated by the introduction of technologies such as voicemail, e-mail, and collaboration software, has changed significantly over the last 20 years. Such changes make the understanding of technology-supported communication ever more important; without it "there would be no organizing or organization" (Orlikowski and Yates 1994b).

To understand communication as a central aspect of a community's organizing process, Orlikowski and Yates (1994b) use the analytic lens of communicative genres and genre repertoires. Genres of communication are "socially recognized types of communicative actions—such as memos, meetings, expense forms, training seminars—that are habitually enacted by members of the community to realize particular social purposes" (Yates and Orlikowski 1992). A genre repertoire is a set of genres that is routinely used by the community.

A *genre* within a community serves as an organizing structure that shapes the ongoing communicative actions of community members through their use of it (Orlikowski and Yates 1994b). It is this ability to shape interaction among individuals that gives management as well as the users of a community the ability to use genres "both as instruments and outcomes of organizational power and politics" (Yates and Orlikowski 1992).

Genre repertoires represent a cluster of genres that typically get used. They are useful in revealing the shared knowledge and norms that members of a community have about how to communicate (Yates et al. 1995). For example, in performing a consulting project, a team of consultants and the client with which they interact may use genres such as a proposal, a work program, progress reports, invoices, and a final report, which together form a genre repertoire for the consulting team. This genre repertoire is then one of the consulting firm's critical resources for work and interaction, enabling the firm to produce organized action.

The idea of using genres to study communication is not new. It has a rich tradition within the field of literary analysis (Bakhtin 1986), and is emerging as a useful way to explain social action in cultural studies (Bazerman 1998). It is only recently, however, that the idea has been applied to the notion of organizational communications (Yates and Orlikowski 1992) and specifically to online communications (Bergquist and Ljungberg 1999; Erickson 2000; Orlikowski and Yates 1994b; Toms and Campbell 1999).

2 THEORY

Prior studies into the communicative practices of online communities have found (1) that genres tell us about the "communicative practices that accomplished the work," the genres that get employed to accomplish that work, and that the absence of certain genres "provides information about the group's relationship to outside constituencies" (Orlikowski and Yates 1994a), (2) the genres used in a community are "initially and implicitly imported...[from] the communicative practices used in other contexts" (Orlikowski and Yates 1994b), and (3) changes over time in genres are a result of community members adopting genres *explicitly* shaped by the action of a few mediators, and genres *implicitly* shaped by the community members themselves (Yates et al. 1999).

In this paper, we look to expand this present theory of communicative practices in online communities, using the analytic tool of genres and genre repertoires. We structure this research by looking at three aspects of genres and genre repertoires: use, origin, and change.

2.1 The Use of Genres

The particular genre template of a community is an important resource in facilitating efficient communication. For instance, Devitt (1991) showed that tax auditors from several firms use genres such as memoranda to the file and opinion letters to efficiently complete their work. Understanding the different templates that are used by different communities is an important first step in understanding how to organize an effective community: just as a well-defined genre template facilitates efficient work, having an incorrect genre template can cause problems. Indeed, Orlikowski and Yates (1998) showed that where a community uses a genre that might be understood differently by different community members, interaction between community members can be difficult or even impossible, stifling both growth of the community and participation in it.

Comparison of prior studies (Orlikowski and Yates 1994b; Yates et al. 1999) shows that online communities have different templates for interaction, evidenced by different genre repertoires. What is not clear from these studies is how much of the variation in genre repertoire is a result of task and current community profile, and how much is not; certain genre might form the "foundation blocks" for communication in a community, and others may be specific to the circumstances present. If certain genres are the foundation of the genre templates for communicative interaction of a broad cross-section of communities, then it is important that these be facilitated when building a new community. If other genres are important in a certain context only, having an understanding of the context becomes particularly relevant to the manager or user of the community. We therefore ask:

Research Question 1: Does context matter? Are there foundation block genres that would be expected in any genre repertoire? Are there other genres that are more context specific?

2.2 Origin of Genres

In communities where someone (a mediator) is responsible for growth and levels of participation, these mediators can determine and direct the genres used (Erickson 2000; Yates et al. 1999). But can the explicit introduction of genres occur when there is no mediator? Erickson may report such unmediated genre introduction, but the fact that the study was "centered around the software development group that designed and implemented the system" gives pause for thought on whether any new genres introduced were unmediated. Looking at Web pages, Crowston and Williams (2000) identify novel genres that "serve communicative purposes unique to the Web." This, however, is weak evidence for unmediated genre introduction, particularly as they note that "references to [these new genres] exist in Web design guides and introductions to the Web." We therefore ask:

Research Question 2: Is unmediated genre introduction possible in an online community?

2.3 Changes in Use of Genres

Giddens (1984) observed that communication is an essential element in the *ongoing* organizing process through which social structures are produced, reproduced and changed. This ongoing process means that we do not expect a community to invariantly use the same mix of genres. By focusing on communicative practices over time, genre and genre repertoire concepts allow the recognition and tracking of change within a community (Orlikowski and Yates 1994b).

Changes over time in genres are a result of community members adopting genres *explicitly* shaped, typically by the action of a few mediators, and genres *implicitly* shaped over time by the community members themselves (Yates et al. 1999). With prior studies focusing largely on how mediators explicitly change the use of genres in a community (e.g., Orlikowski and Yates 1994b; Yates et al. 1999), we seek here to understand factors affecting change in unmediated communities.

Meta-analyses of computer-mediated communication (Walther 1995) indicate that online users progress from initially asocial information gathering as suggested by Dozier and Rice (1984) to increasingly affiliative social activities as suggested by Stephenson (1967). As an online community matures, we might expect that the profile of communication genre will reflect this change in activities. What factors impact these changes? Work on the effects of computer-mediated technology and group size on the productivity of brainstorming groups (e.g., Gallupe et al. 1992) suggests that evaluation apprehension (the phenomenon whereby individuals withhold their questions for fear that others may not approve) is a significant factor. However, in this research, a group task is performed. We therefore ask:

Research Question 3: To what extent does evaluation apprehension play a role in an online community focused on individual tasks, and how does this evidence itself in changes in the genres used?

3 RESEARCH STUDY

This study analyzes the introduction of Internet accessed online communities to a major university in the United States for use by incoming MBA students and by fully-employed MBA part-time students (FEMBAs). The administration of the university's business school established these communities as a useful way for students to serve themselves when it comes to resolving the many, mainly repetitive (for the administration) issues that arise as part of returning to school, as well as a way to foster a sense of "school spirit" among the new students, even before they arrive on campus.

This field study is of an *emergent* online community. Such a community is one that starts with nothing except the technology in place to enable communications and to provide a memory of the communication that will occur. Studying such a community provides us with the ability to examine the establishment of genres, something that would not be possible in an already established online community. The communities studied here are of a particular class; members of the community are *admitted* to it as part of a marshaling-in process, and they will meet at a future date. This class of community is seen in organizations: new hires at a large firm are part of an admitted group; the formation of groups for a new project at a company begins with the admittance of team members.

The primary data for the study consisted of 1,233 messages posted by the newly admitted students; 582 messages in the MBA, 296 messages in the FEMBA, and 355 messages in a separate online community established by the community members themselves to support a geographically proximate subgroup of MBAs, which we call the BAEG (Bay Area eGroup).

Table 1. Profile of the Communities

	MBA	FEMBA	BAEG
Commencement date for community	March 18, 2000	May 25, 2000	May 1, 2000
Demographics	24% non-U.S. 93% non-Los Angeles	4% non-Los Angeles 96% within 2 hours of Los Angeles	98% within the Bay Area of San Francisco
People posting messages	191 out of 327	65 out of 190	58 out of 58
Messages posted	582	296	355
Primary topic(s)	Moving to and living in Los Angeles (31% of messages)	Getting to know each other online (31% of messages)	Moving to and living in Los Angeles (36% of messages)
			Getting together in the Bay Area (35% of messages)
Average business experience	4.7 years	7 years	4.6 years

On a daily basis over the life of each community, we collected the text of each message posted, when the message was posted, and who posted the message. Close reading of the message text provided the grounding for an iteratively developed coding scheme (Yates et al. 1999), allowing us to code the message based upon the two identifiable dimensions of genre: *purpose* and *form* (Orlikowski and Yates 1994b; Yates and Orlikowski 1992; Yates et al. 1999).

Purpose categories: Topic area (e.g., school-related, non-school-related), and communicative purpose (e.g., asking a question, responding to a question).

Form categories: A message's formatting (e.g., presence or absence of a greeting, lists included in the message body, e-mail addresses included in the message body).

Appendices 1 and 2 show a summary of the coding categories developed, and how purpose and form categories are used to define genres. Appendix 3 shows how a particular message was coded into the memo genre.

4 FINDINGS

4.1 The Use of Genres

Using the tool of genre analysis, we found that the participants of these three emergent online communities used six different genres in their genre repertoires: memo, dialogue, solicitation, resume, informal note, and banter. Three of these have been identified in prior studies (Orlikowski and Yates 1994b; Yates et al. 1999), and three are new to the communities studied here. In each community, almost 90 percent of messages are classified. Genres are defined by purpose and form. Appendix 1 gives the genre definitions and distributions showing how purpose plays its role in defining the genres, and Appendix 2 gives the definition and distribution of coding categories for messages.

Memo genre. The memo genre has been identified in previous studies of computer-based communicative practices (Orlikowski and Yates 1994b; Yates et al. 1999). It is not surprising that we find it in our communities as the members all have some business background, and so will likely have already been exposed to the memo as a mode for more formal communication among unknown or lesser-known individuals.

The memo may have any topic, but its purpose is one of a comment made by an individual to another individual or group, and its form is free of casual opening salutations, shorthand, and non-standard grammar and punctuation elements. A total of 14

Article No. 26:[Branch from no. 25] posted by PS on Mon, June 5, 2000, 22:19 Subject: re: Anderson Approved Laptops

Hi J,

I am always amazed when someone actually knows what Harmonia Mundi does! As for the nuclear scientist, I am not really sure that I understand what you mean, the opposite of working for HM? If so, you are right, Harmonia Mundi employees are sure they are saving the world with Classical Music!

Figure 1. Example of Banter

percent of messages posted in the MBA, 8 percent in the BAEG, and 2 percent in the FEMBA community are of the memo genre. Although a message may be classified into the memo genre, it is still quite an informal variant of the type. Typically the memo has the purpose of initiating communication.

Dialogue genre. The dialogue genre is modeled on oral interaction among individuals, where one individual responds to another. Previous studies of e-mail define the dialogue genre by requiring messages to be explicitly dependent upon each other (Orlikowski and Yates 1994b). We define a message as belonging to the dialogue genre only if its response is consistent in topic to the prior message, thereby capturing this notion of explicit dependency on a prior message. A total of 37 percent of messages in the MBA, 45 percent in the BAEG, and 27 percent in the FEMBA community are of the dialogue genre.

Solicitation genre. The solicitation genre is identified primarily by its purpose of requesting information (Yates et al. 1999), either from an individual, or the group. A total of 20 percent of messages in the MBA, 15 percent in the BAEG, and 9 percent in the FEMBA community are from the solicitation genre.

Resume genre. To our knowledge, the resume genre has not been identified in previous genre studies. It is primarily identified by its topic, which is to introduce oneself, but it must additionally have the features of form of having lists and subheadings in the body of the text. A total of 8 percent of the FEMBA messages are from the resume genre, the only community to use it.

Informal note genre. The very informal nature of much of the communications evidenced in our communities led us to define a genre that captured that informality. The informal note may be about any topic, is a comment made to another individual or the group, and starts with an opening greeting. A total of 14 percent of messages in the MBA, 9 percent in the BAEG, and 28 percent in the FEMBA community are of the informal note genre.

Banter genre. The banter genre captures a concept of communication that is frequently heard, but personal experience indicates that it is seen less frequently in textual communication. It captures those communications that are off-topic and represents the banter and repartee arising as asides to the main topic during the normal course of informal communications. A total of 3 percent of messages in the MBA, 8 percent in the BAEG, and 19 percent in the FEMBA community are of the banter genre. Figure 1 gives an example, note how the body of the message does not relate at all to the subject of the message.

It should be noted that our method of identifying genre differs from that of Bhatia (1993) and of Swales (1990), who view *communicative purpose* as the main criteria for categorizing genres. Bergquist and Ljungberg (1999) notes that this approach means that a major change in communicative purpose will give us a different genre, but that "using communicative purpose as the main criteria for genre classification may however lead to very broad classes." For instance, Bhatia regards sales promotional letters and job application letters as belonging to the same genre, the promotional genre, due to the similar purpose of these letters, i.e., persuasion.

The definition of a genre used in this paper employs both purpose *and* form. Thus the resume is a distinct genre largely because of its form. This is important, because, as Toms and Campbell (1999) report, "the form attributes of a genre play a significant role in the identification of corresponding documents," and "a user's effective use of the digital documents depends on an ability to recognize the formal cues which distinguish among document types."

Using the tool of genre analysis, we have been able to analyze the communicative practices of these three communities into six genres. That we have exhausted the possible list of genres that may be appropriately used to analyze these communicative practices is difficult to determine. By examining the frequency of coding categories, and ensuring that a genre was clearly defined

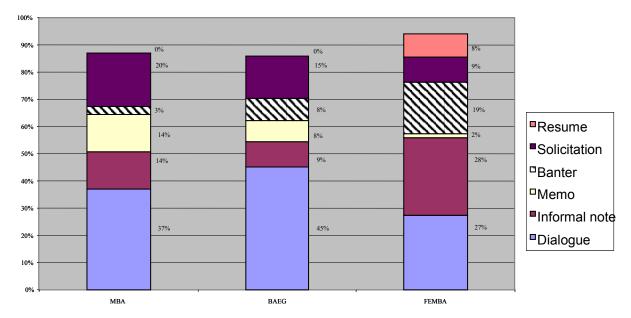


Figure 2. Genre Repertoire Profiles of the MBA, BAEG, and FEMBA Communities

by its form and purpose, it appears that we have a parsimonious list of possible genres within the community. We tested our coding using the objective competing method of cluster analysis (Firth 2002) and found substantial agreement between the classification of messages presented here, and the cluster analysis method.

Figure 2 shows the genre repertoire profiles of the MBA, BAEG, and FEMBA communities. The predominant forms of genre used are the dialogue and informal note, together accounting for 51 percent of communications in the MBA community, 54 percent in the BAEG community and 55 percent in the FEMBA community.

Research question 1 asks: Does context matter? Are there foundation block genres that would be expected in any genre repertoire? Are there other genres that are more context specific? We find three foundation block genres that appear consistently in online community studies spanning 20 years (memo, dialogue, and solicitation), and three new genres (resume, informal note, and banter), which are context specific.

4.2 Origin of Genres

Research question 2 asks whether *unmediated* genre introduction is possible in an online community. We find evidence for unmediated genre introduction in the more business-seasoned FEMBA community. Introduction of the resume genre by an individual, and subsequent recognition of the genre by the community is evidenced by both use (32 percent of the communications that week were in the resume genre), and reference to the genre in other messages, such as "I like your format for the self introduction, so I will follow suit."

4.3 Changes in Use of Genres

Research question 3 asked the extent to which evaluation apprehension plays a role in an online community focused on individual tasks, and how this evidences itself in changes in the genres used. To deter ourselves from being arbitrary in the period over which we examine such change, we first classified the time at which each participant adopted a community by posting their first message. Then, using Rogers' (1983) classical categories, we determined the time period across which the early and late majority (68 percent of total adopters) adopts the community. We use this limited period to examine genre change (although data was collected over the entire lifetime of the community). In the MBA community, the early and late majorities adopt the community between May 15 and July 31. In the FEMBA community this period is June 5 to July 31, and in the BAEG community it is the period May 1 to July 3.

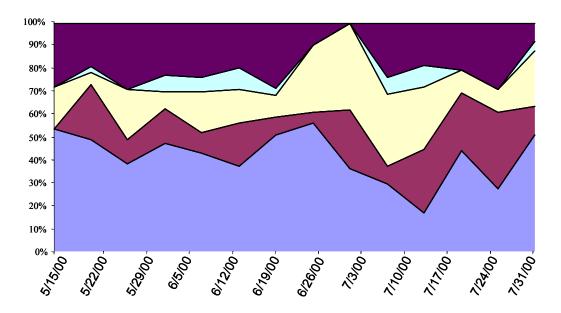


Figure 8. Changes in the Relative¹ Use of Genre Over Time in the MBA Community

Figure 3 plots the relative² use of the five genres in the MBA community. The figure shows that use of the solicitation genre has no trend over time, and use of the dialogue genre appears to decrease over time.

Table 2 shows the least squares regression for the solicitation genre for each community.³ Only the BAEG shows a statistically significant change: an increase in solicitation genre use ($\alpha = 0.05$). That this increase is as a result of differences in evaluation apprehension between the communities is supported by interviews with individuals who participated in both the MBA and BAEG communities: "The Bay Area group was smaller and therefore less risky to participate in," and "it was easier to communicate in the smaller [BAEG] community."

Table 2. Changes in Solicitation Genre Over Time for MBA, FEMBA, and BAEG Communities

Genre	Adjusted R ²	F	Significance	Gradient	
Solicitation					
MBA	.00	0.54	0.48	-0.0055	
FEMBA	.40	4.05	0.10	0.0136	
BAEG	.45	8.32	0.20	0.0176	

¹Relative to the total number of posts in the week. Posts per week vary between 8 and 72 messages.

²In examining change in use of genre we use relative rather than absolute figures for the number of messages within a genre. Changes in the absolute number of messages obscure the trend in the use of the genre: consider in period 1 that there are 100 messages, 50 percent of which are dialogue and 50 percent memo, and in period 2 there are 50 messages, 50 percent dialogue and 50 percent memo. In each period the genre repertoire is the same, with 50 percent dialogue and 50 percent memo. Looking at the absolute number of messages would show a decrease in both the use of dialogue and memo, even though the genre repertoire has remained unchanged.

³As this is a time series, we searched for evidence of serial correlation in our results that would invalidate the assumptions required for the regression results to be valid. In addition to the Durbin-Watson statistic showing a lack of serial correlation we reviewed the autocorrelations and partial autocorrelations of the residuals of each regression and concluded that they were indistinguishable from those of white noise, giving further evidence of a lack of serial correlation in our results.

5 DISCUSSION

Genres of organizational communication are a resource for work and interaction, providing a template for the interactions that take place (Barley 1988). In any organization, understanding the set of resources at a manager's disposal is a critical first step in understanding how those resources can be most effectively applied and managed. The present research looks at community members from a wide array of organizations who, while focused on the similar goal of preparing to attend business school, have different informational needs. Yet we find that the social interaction between such a diverse group of individuals is quite structured. Two of the groups use only five genres to organize their communications, while the third group uses only six. This is a rather parsimonious set given the diversity of the individuals and the breadth of the topics addressed (our detailed coding identified almost 120 topics).

We find that the template for interaction in online communities, evidenced by the community's genre repertoire, is composed of foundation block genres, and other genres that are context specific. The foundation block genres of memo, dialogue, and solicitation are common across three studies spanning over 20 years.

Why do these genres appear consistently across many communities? We find that the memo genre has a rich history in the business environment, and is characterized by a relatively general purpose: initiating communication (Yates et al. 1999). That community members would use this more formal mode of interaction where at least initially they are unfamiliar with other community members is perhaps not surprising. Similarly, the dialogue and solicitation genres are requisite genres in providing ongoing communication and interaction between individuals. Their broadly characterized purpose means that we should expect to find them in a very wide variety of online communities.

These foundation block genres are critical for participation in the community, shaping up to 71 percent of all communications. This has important implications for those designing and running online communities. Just as a new edifice requires solid foundations to build upon, a solid foundation for an online community's communications might be facilitated by introducing the memo, solicitation, and dialogue genres early in an online community's life, or by designing a community that can access these genres as templates.

To what extent are these context specific genres actually dependent upon context? Erickson (2000) suggests that *purpose* and *form* "conventions are not arbitrary, but rather are responses to the situation in which [the genre] is used...the content is shaped by what is seen as appropriate...the structured form enables it to be quickly scanned." The choice of the resume genre in our FEMBA community does not seem to be an arbitrary choice. It was likely made to resemble the paper-based resume format that is prevalent among the intended business-background audience as a quick and easy way to get up to speed on someone's background.

The *informal note* and *banter* genres here appear to be a subset of the *conversational* genres identified by Erickson in a system utilized by a small group of people that interacted often, and knew each other well. In contrast, the system looked at by Orlikowski and Yates (1994b), which was occupied by a large number of people, many of whom did not know each other, did not exhibit such conversational genres. This might be because the context of the Orlikowski and Yates system (1) might have heightened the level of "evaluation anxiety" of people within the community thereby suppressing informal communication, and (2) other norms in the discourse community which limit conversation (for instance, the only other interaction this community had as a whole might have been at conferences and, since conversation did not occur at the podium, this norm gets transferred to the online community).

In contrast, the context for the MBAs using the system studied here was such that conversation was permitted, and indeed expected. As such, we would expect context-specific genres such as the informal note and banter to occur. This notion of foundation block genres and context-specific genres may be a way to identify and enhance communities of practice. For instance, a manager trying to support a new community may recognize that certain genres of that community are similar to ones in an existing community of practice. The manager could then leverage off these existing genres to enhance communication in the new community.

Increasing participation in an online community is clearly an important goal. In the most business-seasoned community we find increased participation occurring as a result of the explicit introduction, or structuring, of a genre by a member rather than mediator of the community. This is a process not heretofore reported in the literature. Explicit structuring of genres occurs when an actor overtly introduces or changes a genre. Yates et al. (1999) examined the effects of *mediated* explicit structuring of genres, but called for "further research...to reveal how unmediated but explicit structuring might occur." We find that the resume genre is explicitly introduced without mediation to facilitate a particular task of the community: to get to know one another. But it took a more business-seasoned individual to recognize its power in this new setting. Our other communities would likely have

benefitted from this genre too. A community manager, then, would do well to understand the task that the community is seeking to accomplish, and consider introducing genres to facilitate this.

Although the absolute use of the solicitation genre is highest in the MBA community, change in use of the genre is greatest in the BAEG. Research into the effects of electronic brainstorming (Gallupe et al. 1992) suggests that "evaluation apprehension" impacts how many questions get asked over time. Of the three communities, the geographically collocated context of the BAEG meant that participants met with one another by far the most, giving the BAEG members alternative ways to form opinions about other members of the community, rather than just by the messages posted. Although computer-mediated communication allows social information to be exchanged that can help lower evaluation apprehension, such information is exchanged more quickly in face-to-face interactions (Walther 1995). Our results suggest that such interpersonal interaction impacted evaluation apprehension: as the BAEG met with each other, their evaluation apprehension was lowered, and so members of the community felt comfortable over time asking more questions online.

In a context where evaluation apprehension might be present, we speculate that managers of the community might do well to minimize its impact if they are to see the community move to being more affiliative. Left for future research is an understanding of other factors that affect this transition, and the speed of the change.

6 CONCLUSION

This research is motivated by the desire to understand the communicative practices of an emergent online community, using the technique of genre analysis (Yates and Orlikowski 1992). With genres forming the template for communicative interaction, understanding which genres shape that template, and how genres can emerge and change over time seems ever more relevant in a world that is shaped by its communication.

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Appendix 1
Genre Definitions and Distributions

		MBA	BAEG	FEMBA
		n	n	n
Genres	Genre Definition	%	%	%
	Topic = any			
	Purpose = Individual or group comment;			
Memo	Form =no sign-off, no opening salutation (Hello, Hey or Hi), no	80	28	5
Memo	aside to an individual, no iconics, no embedded message, no	14%	8%	2%
	shorthand (ellipsis, b/c, BTW, thanxs/tnks, w/), no non-standard			
	grammar, no non-standard punctuation.			
	Topic = any	215	160	81
Dialogue	Purpose = response to individual or group;	37%	45%	27%
	Form = Focus of message is on subject	37/0	43/0	27/0
	Topic = any	115	55	27
Solicitation	Purpose = question to individual or group;	20%	15%	9%
	Form = any	2070	13/0	9/0
	Topic = introduce oneself;	0	0	25
Resume	Purpose = personal comment to the group;	0%	0%	8%
	Form = Lists in the text body and subheadings in the text body	070	070	070
Informal note	Topic = any	81	33	84
	Purpose = Individual or group comment;	14%	9%	28%
note	Form = opening salutation (Hello, Hey or Hi)	14/0	970	2070
	Topic = any			
Banter	Purpose = comment, or response;	16	29	56
	Form = not a member of the memo, dialogue, solicitation, resume,	3%	8%	19%
	informal note genres, and the focus of the message is off the stated	3/0	0 / 0	19/0
	subject.			

(Total N = 1,233; MBA = 582; BAEG = 355; FEMBA = 296)

Appendix 2
Definition and Distribution of Coding Categories

		MBA		BAEG		FEMA	
Coding Category	Definitions of Coding Category	n	%	n	%	n	%
Topic:	General content of message (more than one coded)						
School-related	Content concerns issues pertaining to attending school	116	(20%)	72	(20%)	196	(66%)
Non-school-related	Content concerns issues other than pertaining to attending school	482	(83%)	318	(90%)	242	(82%)
Buying/transaction	Content concerns purchasing an item or items	105	(18%)	17	(5%)	48	(16%)
Relationship	Content deals with certain life experiences	197	(34%)	166	(47%)	222	(75%)
Interest	Content involves interaction with one another on specific topics	251	(43%)	207	(58%)	114	(39%)
Moving and living	Content concerns moving to and living in the town where the university is located	181	(31%)	125	(35%)	4	(1%)
Introduce oneself	Content concerns details about the individual writing the message	27	(5%)	2	(1%)	82	(28%)
PURPOSE	Purpose of message (more than one coded)						
Automated reminder	Automated reminder of event	0	(0%)	12	(3%)	0	(0%)
Official notice	Official notice from the administrator of the board	1	(0%)	0	(0%)	0	(0%)
Individual comment	Personal comment to an individual	17	(3%)	6	(2%)	15	(5%)
Group comment	Personal comment to the group	205	(35%)	82	(23%)	133	(45%)
Individual solicitation	Personal question to an individual	30	(5%)	17	(5%)	11	(4%)
Group solicitation	Personal question to the group	86	(15%)	38	(11%)	15	(5%)
Individual response	Personal response to an individual	184	(32%)	132	(37%)	114	(39%)
Group response	Personal response to the group	83	(14%)	66	(19%)	27	(9%)
Report	Documentation of an event, trip, or meeting	0	(0%)	7	(2%)	0	(0%)
FORM							
Formatting Features:							
Greeting	Presence of a salutation, introduction, or greeting phrase	193	(33%)	61	(17%)	161	(54%)
Personal greeting	Presence of greeting to an individual or individuals	153	(25%)	95	(27%)	134	(45%)
Contact details	Includes personal contact details	271	(47%)	33	(9%)	109	(37%)
Web address	Presence of Web address	42	(7\$)	32	(9%)	13	(4%)
List	Presence of lists to indicate parallel items in text	18	(32%)	23	(6%)	28	(9%)
Shorthand	Presence of shorthand text	144	(25%)	29	(8%)	23	(8%)
Iconics	Presence of text items representing graphics	16	(3%)	23	(6%)	14	(5%)
Emphasis	Presence of emphasis on word or words	208	(36%)	147	(41%)	128	(43%)
Elipsis	Presence ofat the end of sentences to trail off	102	(18%)	69	(19%)	67	(23%)
Incorrect grammar	Presence of non-standard grammar	60	(10%)	33	(9%)	39	(13%)
Incorrect punctuation	Presence of non-standard punctuation	10	(2%)	22	(6%)	2	(1%)

		MBA		BAEG		FEMA	
Coding Category	Definitions of Coding Category	n	%	n	%	n	%
Embedded message	Presence of another e-mail message or other text	6	(1%)	9	(3%)	2	(1%)
Closing	Presence of closing message and/or name	377	(65%)	255	(69%)	231	(78%)
Lowercase	Message predominantly in lowercase throughout	36	(6%)	8	(2%)	3	(1%)
P.S.	Presence of additional comment at the end of message	13	(2%)	19	(5%)	2	(1%)
Linguistic Features:							
Informal language	Presence of any informal language or colloquialisms	13	(3%)	17	(5%)	16	(5%)
Sarcastic language	Presence of any sarcasm or irony	3	(1%)	5	(1%)	1	(0%)
Humorous language	Presence of any jokes or humor	41	(7%)	66	(19%)	22	(7%)
Focus	Message is on stated topic	545	(94%)	307	(86%)	204	(69%)
Focus	Message is off stated topic	37	(6%)	48	(14%)	92	(31%)

(Total N = 1,233; MBA = 582; BAEG = 355; FEMBA = 296)

Appendix 3 Coding a Message into the Memo Genre

