

Rhyme and Punishment: The Creation and Enforcement of Conventions in an On-Line Participatory Limerick Genre*

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Abstract

Computers don't support conversation well, particularly asynchronous conversations among groups. Such conversations often lack coherence, tending towards drift, dissolution, or chaos. The object of this study—a conversation that repeatedly succeeds in producing coherent results—is a counterexample. Two features seem important: it is structured by the conventions of a well-known genre, and as it proceeds it develops new conventions. This paper analyzes the emergence and enforcement of the conversation's conventions over the course of a year, and examines the interplay between the conventions and the interface, concluding with suggestions on how to design systems which support more coherent conversation.

1. Introduction

My ultimate goal is to design systems that support smooth, focused collaborations through asynchronous, computer-mediated communication (CMC). I am particularly interested in conversation that occurs via text, and in conversation among groups ranging in size from a few members to several dozen members—that is, the size of face-to-face working groups found in many corporate, educational, and governmental organizations. One of the challenges here—especially for larger groups—is maintaining the conversation's coherence, that is, keeping the conversation well structured and directed towards a particular end.

The principle goal of this paper is to examine an instance of a computer-mediated conversation that repeatedly produces well-formed, successful results over a long period of time. The intent is to arrive at a deeper understanding of how coherence is maintained in on-line discourse, which in turn may suggest ways of designing more effective CMC systems. A second goal is to look at CMC through the lens of genre theory, and to understand how genre theory—typically applied to speech and written communication—works as a way of understanding CMC.

One of the intuitions underlying the application of genre theory is that an important component of coherent conversations is a shared understanding of "the rules," common expectations of and preferences for behavior, both in regard to the *content* and the *conduct* of the conversation. I will refer to such shared understandings—whether explicitly acknowledged or simply repeatedly expressed through group activity—as conventions [9]. Genre theory is useful because it embodies this intuition and ties it in into a larger

conceptual framework. Genre theory also supposes that communicative conventions are not arbitrary, but rather arise in response to various technical and social forces which are implicit in the communicative situation. This perspective is particularly valuable for system design, in that the designer has considerable control over the technical underpinnings of on-line communication, and thus has *partial* control over the nature of the genre and its conventions.

1.1. A Preview of the Example

Now we'll take a brief look at the example. The aim is to provide a better sense of the conversation, and second, and more importantly, to establish that it is not as trivial as it might seem. We will defer discussion of the interface, system, and situation in which the example is embedded. For the moment, all the reader need know is that the example is being produced asynchronously through a web-based bulletin board system called "Cafe Utne."

Figure 1 shows the first fifteen contributions to the conversation (headers and formatting omitted). Here we see twelve people working together, asynchronously, to achieve a coherent end. The interaction goes smoothly, contributions appearing every few hours, with only the most minimal of setups. Everyone knows what to do, everyone participates appropriately, and the results are as intended: collectively composed limericks.

BH Here's a fun game. We write limericks,
 each person contributing a line at a time.
 You'll recall from this example that
 limericks rhyme and scan (iambic
 pentameter, and all that) a certain way:
 There once was an online Cafe
 Whose readers delighted in play.
 They posted in Fun
 These lines one-by-one
 Avoiding their work all the day.
 Limit your contribution to one line at a
 time, at whichever point the limerick is
 at when you happen by.

BH I'll start:
 An Internet surfer named Joe

AB Enjoying the World Wide Web flow,
BT Got hooked on a site
DK stayed there day and night
CM 'til his mother said, "Time to go, Joe."
... <Two well-formed limericks omitted.>

KF A fellow who's hair was bright orange,
AB [Spoilsport!]
KF Sorry, couldn't resist! :-)
AB Okay, Kevin, start us again. For real.
KF There once was a "spoilsport" poster,
LB Who played games with a rogue and a boaster
DK he sent him a flame,
LB for wrecking the game,
KF And then died sticking forks in a toaster!

Figure 1. The start of the limerick topic.

While some may object that making limericks is trivial, I suggest that though the activity may be unimportant, the process through which it occurs as rich and complex as weightier endeavors. Consider the disruption of the game, and the response to it. I refer to the line "A fellow who's hair was bright orange." (*Nota bene*: It is important to know that the word "orange" has no rhyme in English, *and* that this fact is well known amongst those drawn to such activities.) KF has cunningly disrupted the game, without actually breaking the rules, making it impossible to compose a valid next line. AB chastises KF (using brackets to signal that she has stepped outside the limerick form), KF apologizes, admitting the intentionality of his act, and AB tells him to "start us again. For real."

Now the game starts up again, but with a difference: it has become self-referential. While previous limericks referred to presumably shared experiences (e.g. spending too much time on the web), the new limerick takes as its subject matter the disruption that has just occurred. The participants in the new limerick (all prior participants) are drawing on their own experience, building a symbolic analog of it in which the "spoilsport" is flamed for wrecking the game and then comes to a bad-if absurd-end (penitently invoked by the miscreant himself). Not only did the disruption provide content for the limerick, it also energized the conversation, with the median time between lines dropping to 6 minutes from well over half an hour.

Although this group is engaged in playful entertainment rather than serious discourse about weighty matters, a lot is going on here: cooperation and conflict, challenge and apology, breakdown and repair. The conversation is productive, creative, and even fun.

It seems evident that at least some of this is due to the generic nature of the conversation. It has been clearly defined from the start: conventions for the form and content of the conversation are inherited from the limerick genre, and they, combined with a simple turn taking convention, create a new, 'blended genre' for the collective composition of limericks. It is the presence of the conventions of this new genre which are partly responsible for the smoothness of the interaction, and which make it easy to recognize when the interaction has been disrupted.

The limerick game has other interesting features which will emerge as we analyze it more closely. Although it began with a well-defined set of conventions for limerick-making, they do not handle all communicative situations, as the disruption aptly indicates. Thus, new conventions for conducting the conversation appear, evolve, and become reified, even though the composition of the group changes entirely during the year studied.

These features of the limerick conversation-in particular, its smoothness, the ability for participants to detect and repair disruptions, and the ability to evolve new conventions as they are needed-could all be valuable in other computer mediated conversations as well. Perhaps the relative simplicity of the participatory limerick genre will enable us to unpack what is happening here, and even yield some insight on how to design CMC systems which support more coherent and productive conversation.

With this in mind we will now examine genre theory a bit more deeply, and in particular look at research having to do with how genres evolve over time. In sections three and four we return to the example, characterizing the general situation, and then doing a close analysis of the limerick conversation with particular attention to the evolution of its conventions. We conclude by reflecting on lessons for the design of systems for supporting conversation.

2. Genre Theory and Digital Media

The concept of genre has changed considerably over the last several decades. Traditionally genres have been used taxonomically, using regularities of form and content to categorize spoken and written discourse. Examples of genres include business letters, novels, after dinner speeches, and political debates. In the last two decades, however, scholars from a number of disciplines have arrived at a more situated view of genre, which I will refer to as genre theory. (See Bazerman [3], Berkenkotter & Huckin [5], Miller [8], Swales [12] for general discussions of genre theory; and see Bazerman [4] and Bahtia [1] for discussions of the disciplinary contributions to genre theory).

While there is no universally accepted definition of genre, the following is a reasonable synthesis: *A genre is a patterning of communication created by a combination of the individual (cognitive), social, and technical forces implicit in a recurring communicative situation. A genre structures communication by creating shared expectations about the form and content of the interaction, thus easing the burden of production and interpretation.*

Analyzing an instance of a communicative practice as a genre means understanding:

- the communicative goals it supports
- its conventions (of both form and content)
- the underlying situation (in both its technical and social guises) in which the genre is employed
- the relationship between the underlying situation and the genre's conventions
- the discourse community of those who enact the genre

To make this less abstract, let's consider the résumé as an example of a genre. First, the communicative goal of a résumé is to present information that will enable its author to get a job. Résumés follow many conventions of form and content: they tend to be short, highly structured, and they contain job-related and contact information. Many of the résumé's conventions emerge from situations in which it is used. For example, its highly structured form enables it to be scanned quickly by managers reading through stacks of résumés. Its form is also influenced by technical factors—for example, the use of desktop publishing to produce printed résumés has probably increased the use of structural features such as bold and italic text. It is also conceivable that, as résumés are increasingly circulated via email, they will revert to simpler textual formats that can survive the lowest common denominator of email transmission. Thus, technical and social forces combine in shaping the conventions of the résumé genre. Finally, the discourse community consists of those who produce and consume résumés, as well as the business segment devoted to assisting in the creation of effective résumés.

So, what we see here is that genre theory is a way of looking at communicative practices that stretches from the individual to the community, and from the technical to the social. This is a useful framework for making sense of the communicative practices occurring through digital media.

2.1. The Dynamism of Genre

It would be a mistake to think of genres as static. Genres are dynamic: they evolve in response to the communicative situation. A variety of studies make this point. Berkenkotter and Huckin [5] look at a decade of evolution of *The Reader*, a scholarly forum for members of the Modern Language Association interested in reader-oriented criticism. Over the course of a decade, *The Reader* changed from an

informal newsletter to a more formal periodical with articles and citations. This evolution is driven by changes in the underlying situation, such as the increasing need of the relatively junior members who were members of the original discourse community to produce citable articles for the tenure process. In response, the publication gradually became more formal, shifting from first person to third person discourse, and moving from epistolary conventions to a format in which a variety of imported intertextual conventions-footnotes, citations, bibliographies-were used to connect with "the literature" of which *The Reader* now became a part. Eventually, by virtue of its adoption of intertextual conventions, *The Reader* developed a canonical body of theory to which its authors regularly referred.

Other examples of the dynamism of genres come from the work of Chuck Bazerman [3]. Bazerman traced changes in the genre of the scientific experimental article from 1665 through 1800. He described how scientific articles changed from being uncontested reports of observations and events, to arguments over results, to accounts of claims and experimental proofs. Similarly, he described the evolution of *The Publication Manual of the APA* (American Psychological Association), essentially a manual describing how to instantiate the genre conventions of the social science article. Over the course of five decades, the APA manual changed from a text which viewed authors as problem solvers trying to gain understanding of mental processes to a text which depicted authors as doers of experiments who were incrementally building upon the work of the field. Thus, the format for references changed from traditional footnotes in 1927, to a numbered bibliography, to the inclusion of author and date embedded in the text and amplified in a final reference list [3]. These changes brought the references, and thus the contributions of others, into the flow of the discussion, and highlighted their status as socially agreed upon facts.

Two points emerge from the work of Berkenkotter and Huckin, and Bazerman. First, that the conventions of the genres provide communicative resources for easily making particular types of conversational moves (and not others), and that the moves a genre facilitates change over time. (This is not to say that a genre *necessarily* keeps pace with the changes in a field: Bazerman, in his study of *The Publication Manual of the APA*, noted that it was still a bulwark of behaviorist rhetoric, in spite of more than two decades of cognitive psychology. Genres may support stasis as well as change.) Second, in the cases described, the changes in the conventions of genres are mediated by powerful individuals situated in institutional contexts, such as journal editors and senior researchers. This may be one reason that genres do not necessarily keep pace with the changes of a field.

This raises an interesting issue: suppose changes in communicative conventions-and thus genres-could bypass institutional mediation. After all, one of the affordances of digital media is that they vastly reduce the costs of producing, reproducing and distributing information-institutional power is no longer a prerequisite for producing a journal or other forum.

2.2. Evolution and Digital Genre

Genre theory has only just begun to be applied to the digital domain. One of the earliest studies of this sort is Yates and Orlikowski's study of the evolution of business memos [14]. They note the emergence of its conventions as a result of the interplay of various social and technical forces, and examine changes in the memo genre brought about by the shift from typewritten paper memos to email memos. One consequence of the transition to email is that memos have become less formal as managers type memos into the computer (rather than composing and dictating them) and as they rely more on quoting from previous email (facilitated by cut-and-paste functionality), to again note the influence of both the social and the technical.

As genre theory is applied to digital media rather than speech or writing, a couple of differences in

emphasis have emerged. One of the chief differences is that those studying the digital medium are paying more attention to the role of technical features in shaping the evolution of digital genres. For example both Crowston and Williams [6] and Shepherd and Watters [11] have looked at the evolution of traditional paper-based genre when transplanted to digital media, and both have remarked on how their evolution is driven by new types of technical functionality. Similarly, Erickson [7] has looked at the ways in which relatively minor details of user interface design shape the sort of communicative moves that can be carried out within a genre, and Yates and Sumner [15] note the importance of tools in the evolution of design genre. And, yet again, Baym shows how the use of subject headers in a newsgroup of soap opera fans allows its participants to define genres of interaction [2].

Entwined with this emphasis on the role of technical forces in shaping a genre's conventions is a concern with the issue of evolution. Digital media are considerably more plastic than traditional media. One of the new possibilities afforded by the digital media is that digital genres might evolve with considerable rapidity. Yates and Sumner [15], for example, note this possibility, although they argue that the plasticity of digital media may be counteracted by a social desire for stability, and that genres may serve as social mechanisms for stabilizing digital media. On the other hand, in the presence of social desires for change, it is interesting to consider what may result when the plasticity of digital media and the decreased role of institutional stabilization coincide. Might it be possible for a genre to become a flexible entity, changing its conventions not in response to the promptings of a few powerful figures, but rather as an emergent effect of the activity of the discourse community?

3. Cafe Utne and the Limerick Topic

In the next two sections we consider an example of an on-line conversation at an internet site known as Cafe Utne [13]. In this section the cafe, its aims, its interface, and other relevant aspects of the communicative situation are described, as well as the approach to analyzing the data. In the subsequent section, we discuss some of the features of the limerick topic that emerged from the analysis, in particular those having to do with the creation, evolution and enforcement of communicative conventions.

3.1. About Cafe Utne

Cafe Utne is an on-line, asynchronous, conversational salon run by the *Utne Reader* magazine. The Cafe is described as a "safe, intelligent, harassment-free environment", where people "gather to discuss ideas and issues in a thoughtful and respectful manner." [13] The Cafe lives up to its description, with conversation there being remarkable for its polite, friendly, and thoughtful nature.

Begun in October of 1995, the Cafe's membership is in the thousands, with a high degree of participation, and approximately equal numbers of both genders. Cafe Utne advertises itself as: "the most active on-line community in North America..." Membership in Cafe Utne is free, although people must register to join. Members can connect to the web site and, by entering a name and password, can then navigate web pages which contain conversations (or indices to conversations). The Cafe is supported by sponsorships, advertising, and has an on-line store.

3.2. The Cafe Utne Interface

The interface to Cafe Utne is a web-based bulletin board whose pages are generated by a software application called Motet [10]. The interface consists of text and graphical buttons arrayed on a web page

(e.g. Figures 2 and 3).

The content of Cafe Utne is structured in terms of a simple hierarchy. The main page provides access to the conference pages; each conference page contains a list of its topics (i.e. conversations); and each topic is displayed on a single scrolling page. For our purposes, it will suffice to look at the user interface for a topic.

Figure 2 shows a segment of the limerick topic, consisting of contributions by two participants (we will sometimes refer to contributions as "posts" or "postings," and participants as "posters"). Each post is separated by a horizontal line. At the top of each post are two buttons: "Dog-ear" and "Bookmark." These are for marking places to return to, and will not concern us further. Next is the post's header, which consists of the conference name (Fun), topic number (64), post number (2 and 3), and the nickname and account name of the author. The header ends with a date-time stamp and the number of lines in the message; the underlined items in the header are links, one for each post and one to a biography of the poster. After the header the post's text begins. In this topic the typical post is one line long, as in the second post in figure 2.



Figure 2: A portion of the limerick topic as it appears in the web browser.

At the end of the topic window, after the most recent post, is an area where the participant can respond (figure 3). Two features of this user interface element concern us. In the upper region of the entry area is the topic name and number, and post number, followed by a field that contains the poster's "nickname" in this topic (which defaults to the user's name). Next is a check box followed by the phrase "Hidden Posting." If this is checked, the post's text will not be displayed in the topic window: instead, after its header, the underlined word "{hidden}" (a link) is displayed. Clicking on the "hidden" link displays the post's text in a separate window. This feature is intended for hiding long posts that others might not wish to read. However, both the "nickname" and "hidden" features take on importance in our analysis because participants used them in other ways.

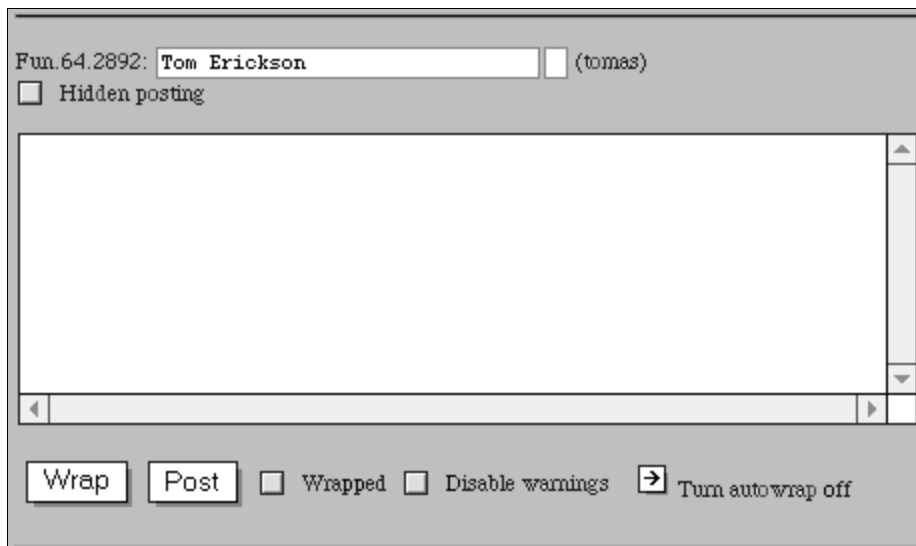


Figure 3. The entry area for the topic.

This description of the Cafe Utne user interface is sufficient for our purposes. Readers interested in more details should see [7], which shows how features of the interface (e.g. the sequential presentation of the posts within a single window) support indexicality, and through that, various conversational moves.

3.3. Method: Segmentation and Coding

The analysis looks at the first year (about 2200 posts) of the limerick topic: it focuses on the first six months of the conversation (to capture the emergence of conventions), and the final two months (to establish whether or not the conventions persisted). The issues that the analysis addresses are the degree to which limericks were successfully created, the amount and nature of side talk interspersed among the limericks, and the development and enforcement of conventions over the year long period.

3.3.1. Segmentation. First, sequences of posts were segmented into three entities: limericks, abandoned limericks, and interstitial areas.

A limerick was defined as anything from an opening line of the limerick through its closing line, with the appropriate lines in between. This did not require that it be composed of only limerick lines: the process of limerick composition was sometimes interspersed with side talk, but as long as all the lines required to make up a limerick were present, it was coded as one.

An abandoned limerick was defined as the sequence from an opening line up to the opening line of a new limerick. This might also include side talk.

An interstitial region was defined as the space between the closing line of a limerick, and the opening line of a new limerick. This could be empty, or composed of blank lines, explicit separators like dashes, or side talk.

There are two things to note about this segmentation method. First, a participant's post was sometimes divided into multiple segments (e.g. a post that consisted of the last line of a limerick followed by a comment would be divided between a limerick segment and an interstitial segment). Second, this approach to segmentation was quite comprehensive: the categories accommodated everything except the posts prior to the first limerick, where the game was defined (the first 14 lines in figure 1).

This approach to segmenting the data was used for a number of reasons. First, it seemed desirable to be able to identify the number of limericks attempted and successfully completed. Second, two of the conventions that appeared to be present in the data involved the transition from one limerick to the next. Third, based on a preliminary scan of the data, it seemed that there might be differences in how participants conducted their talk based on whether they were talking *within* a limerick or in the interstitial region *between* limericks.

3.3.2. Coding of side talk. In addition to segmentation, each segment was coded according to whether it contained side talk (i.e. non-limerick content), and if so, the side talk's content and form. Content was coded as either being about limerick rules (e.g. proper rhyme and meter), turn taking rules, or other talk (e.g. limerick quality, banter, or unrelated social talk). Form had to do with how the side talk was separated from limerick content; it was coded as unmarked (set off only by white space), marked (set off using parentheses or other punctuation, or (rarely) via directly addressing a participant), or segregated (placed in the nickname field or behind a "hidden" link). (Figure 7 shows marked and segregated side talk.)

Now let's turn to the results of the analysis.

4. A Close Analysis

First of all, this is, by any measure, a successful conversation. Begun on December 4, 1996, the limerick topic continues up to the day of this writing (September 21, 1998). During the year long period analyzed, it attracted 69 participants, 28 of whom posted 10 or more contributions, and 10 of whom made 50 or more contributions. On the average, participants posted about 190 contributions per month, with contributions being made almost every weekday, and frequently on weekends, for a total of 2109 contributions. The number of posts remained remarkably constant over time as shown in figure 4.

For the eight months analyzed in depth, 327 limericks were completed (about 40 a month); in contrast, only 5 limericks were abandoned. Overall, the construction of limericks went very smoothly: over 80 percent of the limericks were composed without any side talk embedded in them (and when such talk occurred only about a third of it had to do with conventions).

In addition to its success on its own terms-that is, in repeatedly succeeding at its goal of producing limericks-the limerick topic is also successful *vis a vis* Cafe Utne: the topic is popular, long-running, and requires no intervention by the Cafe's administrators. Since the Cafe supports itself mainly through sponsorship and advertisement, such self-maintaining topics are valuable.



Figure 4. Posts per month.

Having established that the limerick topic was successful, let's examine its conventions and their enforcement. First we will consider the basic conventions-those with which the topic began-and then we

will turn to the conventions which evolved during the course of the topic.

4.1 Enforcing the Basic Conventions

The first post in the limerick conversation (see figure 1) established the basic conventions of the genre: it stated the purpose of the conversation as making limericks, defined the rhyme and rhythmic scheme of a limerick, and gave an example. It also defined a turn taking mechanism: "limit your contribution to one line at a time."

In general, little enforcement of these conventions was needed, as may be seen by the fact that over 80% of the limericks were completed without any side talk. During the course of the year only two participants made serious attempts to violate the basic genre conventions. One case was a participant who ignored the conventions of rhythm and rhyme in each of his four posts-these posts were either rewritten to fit the conventions by subsequent participants (as in the first 2 posts of figure 5), or ignored. In the other, a participant who is corrected for not following the rhyming scheme writes: "AHHHH!!!! JEEZZZZZ!!!! Rules for limericks. Please no please..." However, after a few more rhyme violations (which are ignored), he begins to conform.

Person 1 The Limo driver remarked
Person 2 (That rhythm isn't right, Let's)
use... "The limosine driver remarked"
... ..
Person 3 The number of syllables is somewhat
less important than the number of
stressed syllables, which should follow
the pattern:
--+---++
--+---++
--+---+
--+---+
--+---++

Figure 5. Two examples of convention maintenance: rewriting and explanation.

The bulk of the discussion of limerick conventions had more to do with explaining *how to* follow the rules than with convincing people that they *ought to* follow the rules. In particular, some participants had difficulty with the anapestic meter required by limericks. On the authorial side, remedies included apologies and side talk on how to (idiosyncratically) pronounce the words so that the rhythm worked. Participants would also rewrite troublesome lines produced by others (e.g. figure 5, second post), write limericks describing how to compose limericks, and use other pedagogical approaches, sometimes displaying considerable typographic ingenuity (e.g. figure 5, last post). The other basic convention was the "one person, one line at a time" turn taking rule. As actually stated, this convention would seem to allow a person to contribute two lines in sequence, provided that significant time had elapsed between the two posts. However, most participants interpreted it more strictly as 'one shouldn't post two lines in a row, regardless of how much time has elapsed between them.' This convention was never explicitly invoked as a censure against other participants; instead, participants maintained it implicitly: they would occasionally violate it and then apologize for their violation, usually pointing to extenuating circumstances.

4.2. The Evolution of the Last-First Rule

One of the most interesting features of the limerick topic is the emergence and codification of what I came to call the Last-First move: *If you do the last line of a limerick, you should to start the first line of the next one.* This was not one of the original conventions of the conversation, and in fact explicitly contradicts the "one person, one line at a time" convention.

4.2.1. The Last-First move. The Last-First move had humble beginnings. One participant wrote the last line of a limerick, and without starting a new post, drew a dashed line and wrote the first line of the next limerick (about a week and a half into the topic). No one objected. A week later a different participant tried the same move. His first line was not recognized as a limerick line and his limerick was abandoned. Four days later, in the interstitial region after a completed limerick, a third participant, Lynn, (who, however, had never made this move), wrote:

Susan:

You have to do a first line now!! It's an obligation of the person who does the last line!

Susan obligingly started the next limerick, becoming the fourth 'Last-Firstster'. She also happened to end it, and so she again began the first line of the next limerick, thus creating the second instance of what had been asserted to be an actual rule. In the remaining week of the first month six new limericks were created, and the Last-First move occurred in two of the between-limerick transitions (both executed by Lynn, proclaimer of the rule). The next week a fifth participant implicitly invoked the rule after she finished one limerick by asking others not to post anything while she did something (away from the computer) for a minute, and then returned and began a new post with: "Now, my turn to start." (Given the pace of the topic-one post every few hours-it was unnecessary to reserve one's place for a minute; but what matters is the invocation of the Last-First move as a convention.)

4.2.2. From move to rule. The Last-First move occurred with more frequency over the next two weeks, but was far from being solidly established until the third week, when Lynn again asserted it as rule:

Bill:

You're supposed to start the next one if you finish the last line. Guess I'll just have to do it for you *sigh* *men!!*

Bill thanked Lynn for "bailing him out", thus acknowledging the rule again. However, a few posts later, another participant wrote (in a 'hidden' post):

"You're supposed to start the next one if you finish the last line." Is not a rule in this topic.

The original rule (I started the topic) was that each player would post no more than one line.

If you prefer to have some players post both an ending and a beginning, it's okay with me, but it was never really a rule, just something somebody decide on at some point.

Ironically, after this post, the Last-First move was used more often than not for the rest of the second month. By the third month it was the dominant form of transition, and by the fifth and six months it was used almost exclusively. The Last-First move was still the almost exclusive form of transition in the eleventh and twelfth months and enjoyed undisputed status as a rule, being cited as obligatory (its violation usually signaled the arrival of new participants, who were subsequently corrected). See table 1.

Month	1	2	3	4	5	6	...	11	12
Last-First moves	6	29	17	44	62	48		20	31
non Last-First moves	31	22	9	4	0	0		2	2

Table 1. Last-First moves over time.

There are several things of interest here. First is the gradual growth of the popularity of the Last-First move. It caught on slowly and required a bit of work on the part of its advocates before it caught on. Second, the side talk played a crucial role in establishing the Last-First move as rule. Finally, the Last-First rule required effort to maintain: new arrivals in the limerick topic often didn't follow the rule and needed to have it explicitly described.

4.3. The Typographic Separator Convention

The next convention we'll look at is closely connected with the Last-First move. First, note that the convention that the person who finishes the current limerick must start the next one can be fulfilled in two ways: the person who is typing the last line can start the first line as part of the same post (as in the first post of figure 7), or the two lines can be entered as separate posts, one immediately after the other. (In fact, over 95 percent of all Last-First moves were made within a single post.)

In either case, the Last-First move has changed the nature of the interstitial region. The interstitial region was initially open to anyone who came along during the (typically) couple hour period between the posting of the last line of a limerick and the first line of the next. In the first month of the limerick topic, before the Last-First move had caught on, the interstitial region was where the bulk of side talk occurred. But once the Last-First move came to dominate the limerick transitions, the interstitial region was either not accessible to others at all (when the move was within a single post), or accessible only for the short (seconds) gap between the two consecutive posts. In a sense, the interstitial region had been transformed from a sort of 'public space'-which anyone who came along had potential access to-into a 'private space' that only the one doing the Last-First move could write in.

This brings us to the next convention: how the private space established by the Last-First move came to be used. Participants began to create typographic separators between the limerick they were ending and the one they were beginning. Limerick transitions were coded as one of four types:

- unmarked transition: only white space
- plain separator: one or more dashes, ampersands or any single typographic symbol (-----)
- ornate separator: a row of mixed typographic symbols (e.g. -==--), sometimes creating a symbolic commentary (e.g. ~~(:=====> after a limerick about a python)
- paralinguistic: the use of expressions such as "ummm," "OK," and "and"

In the first month little attention was paid to separating limericks. Typically, the transitions were either completely unmarked, or a bit of white space was added after the final limerick line. Of the seven explicit (i.e. plain, ornate, and paralinguistic) separators created during the first month, six were created by participants attempting to make integral Last-First moves. Note that in the absence of the Last-First move, nothing prevented the person ending a limerick from creating a separator after the final line, or the person starting the next limerick from creating a separator before writing the first line-but only one person did this. So there does seem to be a connection between the creation of a private space and the desire to create an typographic separator

The use of explicit separators grew along with Last-First moves, although unmarked transitions never entirely died out. Figure 6 shows the prevalence of different types of separators versus unmarked transitions. Initially participants favored plain separators; however, as time went on, ornate separators became more common. But, in spite of its increasing popularity, the ornate separator convention proved

to be a fad: by the eleventh and twelfth months (not shown above) its use had declined from 40% to 7%, whereas the use of plain separators occurred in more than 80% of all transitions between limericks.

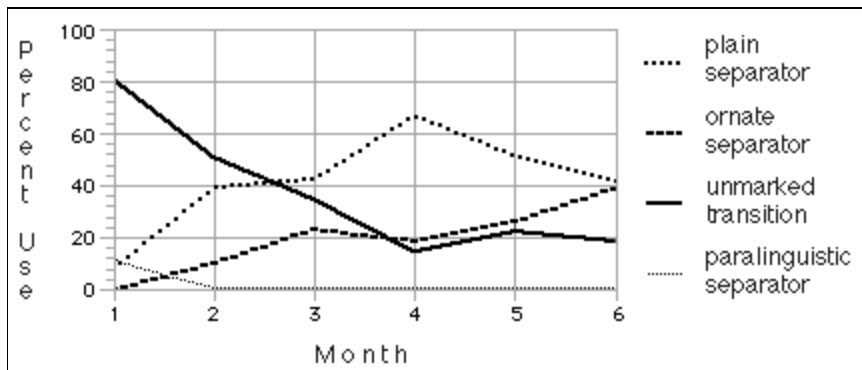


Figure 6. The evolution of the limerick separator convention.

Unlike the Last-First convention, the convention of creating typographic separators between limericks was implicit: it was never enforced or referred to; it was simply manifested through behavior.

4.4. Marking Side Talk

The last convention has to do with how to conduct side talk, that is, posts that were not constituents of limericks. There were many occasions for side talk, including resolving dilemmas (e.g. the "orange problem, shown in figure 1), chastising and educating rule-breakers, repairing ill-formed limericks, and banter. While not all of this was essential to making limericks or enforcing conventions, it did make the topic a more engaging place.

The issue here was how (or whether) the side talk should be separated from the limericks (note that the issue was never explicitly discussed). During the first month of the conversation the participants tended to concentrate the side talk in the interstitial regions between limericks: 11 of the 17 episodes of side talk occurred there. However, as noted, the dominance of the Last-First move closed off that channel, and most side talk was forced to occur within the limericks themselves (see figure 7).

```

Fun.64.534: Kate Allford (kAllford) Tue, 25 Feb 1997 13:32:53 C
and to leave all those hard water stains.
*****
The photograph on my desk

Fun.64.535: Kate how could you? (bnathan) Tue, 25 Feb 1997 13:
{hidden}

Fun.64.536: Sara Sanfatmon (sss) Tue, 25 Feb 1997 15:49:41 C
(This scans better: The photo that sits on my desk)
-----
Of a dancer in full arabesque

```

Figure 7. Segregated (second post) and marked (third post) side talk. The hidden text is: "You expect us to come up with two more words that rhyme with 'desk'?"

In the analysis, side talk was coded as having one of three forms:

- unmarked: i.e. separated only by white space
- marked: typographically set apart, usually with parentheses or brackets, occasionally by invoking a participant's name followed by a colon.
- segregated: features of the interface were used so that side talk would be spatially separate from the limerick area, either in the nickname field, or behind the "hidden" link.

Table 2 shows two trends. First, unmarked side talk entirely vanished. Second, as time went on, more side talk was carried out in the segregated areas. The sense in looking through the limerick topic is that relatively long instances of side talk were carried out in the hidden fields, with shorter comments either being typographically marked within the bodies of the limericks, or posted in the nickname fields.

Month	Unmarked	Marked	Segregated
1	1	5	0
2	3	14	2
3	1	5	2
4	0	2	5
5	0	0	4
6	0	2	1
...			
11	0	0	4
12	0	2	3

Table 2. Shifts in ways of marking side talk.

Note that, as with the separator convention, nothing was done to explicitly enforce this convention. Participants never complained about those who used unmarked side talk or suggested that they mark or segregate their side talk. Furthermore, potential confusion was not an issue: it was almost always the case that even unmarked side talk, which was separated by white space from limerick lines, was obviously side talk, since the usual contribution to the conversation was a single limerick line. What appears to be happening is that participants are, collectively, taking pains to foreground the object of the talk—the limericks—as the most salient visual aspect of the display. This is also true of the typographic separator convention: it is not *needed* to distinguish between limericks, it simply foregrounds the object of the activity. In a very real sense, these last two conventions are aesthetic.

5. Concluding Remarks

In this paper we've examined a highly successful, long-running, asynchronous conversation and asked why and how does it work? For we can examine many on-line conversations on the internet—in mailing lists, bulletin boards, and virtual communities—but we will find few cases in which strangers work together so smoothly, with so little preparation, to produce such a coherent result.

One reason for the success of the conversation is its generic nature. That is, the participants understand the conventions: they know (mostly) the patterns of rhyme and meter that make a limerick, and they have a simple, understandable turn taking convention. As a consequence, at any point in the process of limerick-making, it is possible to say where the conversation is with respect to its goal, and to understand what needs to be done next to move it toward the shared goal.

But the participants aren't simply *following* static conventions. One of the intriguing features of this conversation is that even though it has a very clear and simple set of conventions, participants have to do

quite a lot of 'work' to support those conventions. Even the basic set of conventions that make up the *raison d'être* of the limerick topic need some enforcement. And, even more so, some participants need to be shown *how to* follow the conventions. Notice that an important function of the shared conventions is that they make clear what it means to disrupt the conversation, and thus provide openings for the discussion, explanation, and enforcement of conventions.

Nor is it the case that the participatory limerick genre is fixed. Rather, it exhibits the dynamism that researchers have noted in more traditional genre, although in the participatory limerick genre the evolution of conventions commences quickly and proceeds rapidly. At the risk of making too much of a single example, we might speculate that this rapid evolution is due both to the malleability of the digital medium and the fact that changes in conventions were not mediated by institutional power brokers. It is also important to recognize that by virtue of its role as a playful, leisure activity, it seems likely that the participants have considerably less invested in the maintenance of conventions than, for example, members of a discipline whose identities are partially constructed and maintained through disciplinary genres.

5.1. Implications for CMC Design

Whether it exemplifies a general characteristic of digital genre or not, the malleability of the participatory limerick genre seems an attractive and useful feature. The ability of a discourse community to consciously control the conventions that structure its discourse, and negotiate and reshape its conventions on the fly, seems remarkably powerful. How might this malleability be supported in other digital media? While this awaits the attention of future research, a couple of possibilities come to mind.

The limerick topic's conventions were shaped by two types of influences: participants saw and responded to what other's had done before them, and, in the case of conventions that were codified as rules, they discussed, explained, and negotiated the conventions through side talk. Both of these forms of influence can be supported (or inhibited) by the user interfaces of CMC systems.

It seems clear that convention formation and maintenance was driven, in part, by how other participants had previously behaved: participants noticed certain moves made by their predecessors and imitated them. The typographic separator convention is a clear example of this: it was never discussed at all; it was just a move initially made by a few, and gradually picked up by the discourse community. Notice that the Cafe Utne user interface, by displaying the entire limerick topic within a single window, maximizes the possibility for such modeling of conversational moves (see [7]): as a participant scrolls down through dozens of posts, the typographic separators are very visible. Similarly the other conventions of the limerick topic that we've discussed—the segregation or typographic marking of side talk, the Last-First rule, and, to a lesser extent, the basic conventions of rhyme, rhythm, and turn taking with which the topic started out—are all visible when the different posts are displayed sequentially. Many user interfaces, even for systems that are functionally very similar to Cafe Utne, do not readily reveal the conversation's history and thus may inhibit this sort of modeling of conversational moves that can lead to convention formation. (For example, some asynchronous CMC systems display lists of the headers of a topic's posts; while individual posts may be opened in separate windows, this neither requires nor facilitates viewing a sequence of posts simultaneously. This makes conventions instantiated within and across posts considerably more difficult to detect.)

The second influence on the creation and formation of conventions was clearly side talk. Many conventions—most notably the Last-First rule and the basic limerick conventions—were explained and enforced through side talk. It is intriguing to note that the well-structured nature of text produced in

accordance with the basic limerick conventions served to raise the visibility of side talk, and to mark it as something separate (and this separateness was underscored as the discourse community developed conventionalized ways of typographically marking it and segregating it). That is, perhaps the visibility and separateness of side talk made it a more effective mechanism for talking about the talk. If so, this would suggest that CMC systems that provided explicit, separate channels for side talk might better support the creation and enforcement of conventions.

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