

Mode, Medium, and Genre

A Case Study of Decisions in New-Media Design

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Recently, scholars of new media have been exploring the relationships between genre theory and new media. While these scholars have provided a great deal of insight into the nature of e-genres and how they function in professional contexts, few address the relationship between genre and new-media theories from a designer's perspective. This article presents the results of an ethnographic-style case study exploring the practice of a professional new-media designer. These results (a) confirm the role of dynamic rhetorical situations and hybridity during the new-media design process; (b) suggest that current genre and new-media theories underestimate the complexity of the relationships between mode, medium, genre, and rhetorical exigencies; and (c) indicate that a previously unrecognized form of hybridity exists in contemporary e-genres.

Keywords: mode; medium; genre; new media; Web design; case study

Ryzex [a UPC scanner manufacturer] is one of the few clients I have that gives me almost total creative freedom. Like any artist, I feel that these conditions allow me to produce my best work. When Ryzex said, "We want a game we can send out to our clients and employees," I said, "Okay." It's my job, after all. Working with the copywriter who flourishes most under a similar lack of constraint, we went to work. We came up with some very odd box-and-scanner-themed game concepts: a cowboy riding a box like a bronco, a man riding a box like a spaceship shooting down UPC symbols, a game called Dance Dance Ryzex—based on Dance Dance Revolution (my personal favorite concept)—and so on, so forth. The concepting stage works a lot like making plans on a Friday night:

Designer: What should we do?

Copywriter: I don't know.

Designer: Me either.

Copywriter: We could make a Pac Man game.

Designer: That's the dumbest idea ever.

Copywriter: *You 're* the dumbest idea ever.

Designer: That doesn't even make sense.

Copywriter: You don't even make sense. What if we made a game where you are stuck in a box on its way to China, and you have 2 minutes to escape?

Designer: That could be cool. What would the graphics be?

Copywriter: Total darkness.

Designer: I like your concept, but I think it would be cooler if it was something different altogether.

And so on.

Eventually, we land on a couple of sound concepts, at which point we send them to a copywriter to translate them into good English. (Or is it well English? You see the problem.) A concept is born! Now it's up to the client to pick one. If the client likes one, perfect. Usually there are tweaks. Sometimes the client wants to merge two ideas, which makes the game strange. "We like concept A, The Beauty Parlor, but can we add these aliens from concept C, Destroy Earth?" Since they are the client, the answer is almost always a resounding "Yes!" After all, creativity is our job.

This vignette is a professional Web designer's description of how he began to develop a Flash e-card for the Ryzex Corporation. At first glance, the behavior he describes shows little resemblance to the sophisticated design processes outlined in much of new-media theory. It hardly seems to fit what we would call *professional* communication in action. But the description accurately represents the concepting stage of an award-winning design team. As this vignette suggests, designing and developing new-media communication can be a dynamic, creative, intuitive, nonlinear (and sometimes childlike) process, which might explain why so much of new-media communication is dynamic, creative, intuitive, nonlinear (and sometimes childlike). Of course, this vignette describes the concepting stage, an exciting activity often punctuated by hours of tedious drawing, coding, and scripting. Nevertheless, the entire design process from concepting stage to distribution is integral to creating new-media artifacts—artifacts that force us to question more than just the extent of the *professional* in *professional communication*. Indeed, this study explores a wide range of issues in genre theory and how those issues coordinate with the new-media design process. Specifically, we hope to make visible the confusing and highly tacit skills and knowledge bases manifest in these types of interactions.

The possibility of plurality in descriptions of digital communication media and genres has helped to generate a broad host of heteroglossie and hybrid

theories, as well as an assortment of *multi-* prefixed neologisms (multimedia and multimodality being the most prominent). Today these theories are often referred to as *new-media theory*. With this work as our guide, we seek to answer one primary question in this study: What can an exploration of situated design practice show us about how the affordances of new media coordinate with current understandings of genre theory? This article, we hope, adds to the relatively small body of qualitative research on the practices of professional Web designers by exploring the intersection of genre and new media. After contextualizing current research and describing our research methods, we explore the results of the observational period and discuss how these results coordinate with and extend current work in new-media theory. Finally we offer some suggestions, based on the case study results, for future research in new-media design and composition.

New Media and Genre Theory

JBTC readers are familiar with the history of genre theory in general and the specific trend in contemporary rhetorical communication studies building on Miller's (1984) now-canonical "Genre as Social Action." What we are particularly interested in is how new-media theorists have taken Miller's redefinition of genre as "typified rhetorical actions based in recurring situations" (p. 159) and applied it to new media. The Itext Working Group (Geisler et al., 2001) was founded to explore the scope of research on electronic texts and to suggest what areas need to be further addressed. One of the Itext Working Group's primary calls was for more research into electronic genres within the field of professional communication (p. 277). Prior to 2001, many new-media theorists tended to focus on carving out and illustrating their theories on their own or within contexts other than genre theory (e.g., Bolter & Grusin, 1999; Manovich, 2001; McLuhan, 1984). No doubt in part due to the calls from Itext, researchers and theorists have more recently begun to explore the relationships between genre theory and new-media from a variety of perspectives.

With rhetorically based, Milleresque genre theory in mind, the oft-cited linguist and semiotician Kress (2003) explored how genre theory articulates with new-media literacies and his theories of multimodality. While rhetoricians making the semiotic turn typically come from either a Saussurean or a Vygotskian perspective (and only occasionally from a Peircean one fWitte, 1992), Kress's theories of multimodality are explicitly grounded in a hybridization of Saussurean and Peircean semiotics (pp. 41-42). For the

purposes of this study, it is sufficient to understand *mode* as defined in Kress and Van Leeuwen's *Multimodal Discourse* (1996), as the "semiotic resources which allow the simultaneous realisation of discourses and types of (inter)action" (p. 21). That is, modes are categories of representational tools (signs) that allow communicators to label, indicate, and symbolize things, ideas, and other signs (Kress, 2003, p. 42).

From this perspective of semiotics and multimodality, Kress (2003) began his discussion of genre and multimodality by identifying one predominant underlying problem in adapting genre theory to new media and multimodality: Much of genre theory has been developed for alphabetic practice (p. 86). Kress first analyzed several linguistic monomodal texts (old media) and then applied the same approach to several multimodal artifacts (new media) to demonstrate that much of the vocabulary of genre analysis is ill-equipped to address nonlinguistic signs, arguing that "there are no genre-terms for describing what [a] drawing is or does" (p. 110). In responding to this issue, Kress situated his approach within the Australian genre school—a conception that explicitly began with Miller's (1984) genre as social action but rejects the notion of genre at the textual level (Kress, 2003, pp. 92-93). Kress argued that different segments of texts that perform different social actions should be seen as being generically distinct. He described all multimodal documents as "mixed genre" texts containing multiple genres simultaneously. One document he described exhibits the "genres" of body text, diagram, and caption—each unit performing different sociorhetorical functions (p. 113). Although Kress consented to allow readers to use generic terminology for entire texts, he seemed to be making a concession, and not one with which he was entirely comfortable (p. 119).

Extending genre as social action to the blogosphere, Miller and Shepherd (2004) noted the same problem of the traditional linguistic focus in appropriating genre theory for new media, but in a much more specific context. They suggested that the traditional genre as social action focuses on linguistic variation in social contexts and neglects the significance of visual format to the blog. The blogosphere is so broad and varied that the primary " 'common ground all bloggers share [is] the format' " (Hourihan cited in Miller & Shepherd, 2004, p. 9). For Miller and Shepherd, the fact that the form is the strongest link in the blog "genre" caused some theoretical concern. Namely, format aside, if these blogs fill different sociorhetorical spaces and respond to different exigencies, then are they not different genres? Miller and Shepherd tentatively suggested that different genres are at work: "Perhaps the blog is already evolving into multiple genres, meeting different exigencies for different rhetors—journalists, teenagers, the high-tech community,

etc." (p. 9). Given the additional insight into the blogosphere gleaned in the 3 years since this article was published, any genre theorists studying blogs would undoubtedly see the blogosphere as a wide variety of genres that Miller's (1984) work on genre theory can explicate.

Miller and Shepherd (2004) analyzed the social exigencies that brought about and were brought about by the blogging enterprise. Despite this new blog-genre proliferation, Miller and Shepherd were firm in highlighting the role of remediation in new genre formation:

Ancestral genres should be considered part of the rhetorical decorum for both the rhetor and the audience. And, within limits, by their incorporation into a response to a novel situation, ancestral genres help define the potentialities of the new genre: the subject-positions of the rhetor and audience(s), the nature of the recurrent exigencies, the decorum (or "fittingness" in Bzher's term) of response. (P. 12)

From the outset of their article, Miller and Shepherd described the blog as "a new rhetorical opportunity made possible by technology that is becoming more available and easier to use, but it was *adopted so quickly and widely* [italics added] that it must be serving well established rhetorical needs" (p. 1). As Miller and Shepherd argued, the extremely rapid speed of genre establishment and change constitutes a major phenomenon at play in new-media genres; subsequently, this phenomenon must be incorporated into genre theory.

These related concerns—that genre theory needs to be adapted to address the role of ancestral genres and to consider the rapid genre emergence—are echoed by several genre studies from information sciences. Crowston and Williams (2000) explored the range of Web genres from this information sciences perspective. They employed quantitative coding methods to provide, in effect, empirical evidence of repurposing or of what Bolter and Grusin (1999) called "remediation." Although Crowston and Williams (2000) did not use the term *remediation*, one of their principal findings is that the Web does not really feature many new genres (pp. 210-211), and they pointed to the importance of acknowledging the impact that ancestral genres have had in developing reproduced and adapted genres on the Web (pp. 207, 210-211).

Dillon and Gushrowski (2000) employed similar quantitative methods from information sciences to determine that the personal home page functions as a new and discrete genre. Furthermore, they noted the uniquely digital nature of home pages, arguing that although home pages remediate some preexisting nondigital genres, they "have no obvious paper equivalent" (p. 203).

So if the home page is actually one of the first digital genres, "then genre emergence can be seen as more rapid than previously thought from studies in the paper and verbal discourse domain" (p. 205).

Rhetoricians and information scientists have also used studies to apply genre theory from the perspective of organizational adaptations. Two relatively recent studies explore how organizational entities adapt to the remediation of traditional work genres for new-media environments. Yates, Orlikowski, and Okamura (1999) explored how a Japanese research and development firm transitioned into a new computer-conferencing system. Not surprisingly, they found that even while working in the new medium, "the community of users share well-established norms . . . transfer[ring] existing norms and established habits from familiar media to a new medium, without much active deliberation of what kind of genre or usage norms they hope to enact within it" (p. 100). And from the perspective of rhetorical studies, Spinuzzi (1999) explored the effects of work-practice computerization on genre ecologies in the Iowa Department of Transportation (pp. 159-199). Spinuzzi studied what can happen when multiple related genres are remediated into a single new medium. He reported on how these "hybrid genres" can cause significant problems in work flow. Ultimately, he suggested that rhetors need to employ significant caution when hybridizing genres from a functioning genre ecology into a single interface (p. 197).

Despite all this work in extending genre theory to adapt to the affordances of new media (multimodality, remediation, and speed in generic change), new-media genre theory seems to employ primarily two methodologies: (a) the postmortem and (b) the situational. Postmortem studies focus primarily on artifact collection. Through examining finished genre exemplars, and their surrounding contexts and commentaries, these studies (Dillon & Gushrowski, 2000; Miller & Shepherd, 2004) often seek to establish a "state-of-the-genre report" describing the genre's most prominent purposes, contexts, form requirements, and trajectories (i.e., musings on how future exigencies will shape the genre in terms of situation and form). Other post-mortem studies focus on a medium or, in some cases, the entire scope of new media in order to explore how current genre theory articulates with new-media theory (Crowston & Williams, 2000; Kress, 2003). In contrast, *situational studies* explore, often through ethnographic research, how a change in the medium affects the ways finished genre exemplars are used in specific cultural contexts (Spinuzzi, 1999; Yates & Orlikowski, 2002; Yates et al., 1999).

As with any dichotomy, some slippage is bound to occur between categories, and some of the studies we describe do not fit perfectly into one category or the other. For example, Yates et al. (1999) explored the role of

genre in a particular corporate setting (situational) through collecting completed artifacts and conducting postmortems. Nevertheless, we feel the postmortem-situational dichotomy provides a valuable lens for examining the state of new-media genre research because it illustrates a significant methodological gap. Whether postmortem or situational, research and theory into new-media genres tend to focus on artifact and audience or user analysis. The issues surrounding how authors and audiences use typified and emergent representational forms in typified and emergent contexts constitute an important and logical starting place for exploring the role of genre theory in new media. But, as theorists ranging from Bakhtin to Ong have told us, the impact, demands, and exigencies of audiences, contexts, cultures, and genres bear on the author from the beginning of the design process and extend well past distribution. We, therefore, contend that a detailed exploration of the design and development processes can offer both new-media and genre theorists valuable insights into how one process articulates with the other.

Research Methods

With many questions about the role of genre in new media, I (the first author) initiated this study by asking to observe Brandon (the second author) during his work for Middle States Graphic Design Services (MSGDS), an advertising, print, and Web design firm in the Midwest.¹ Each of us brings different perspectives to this study. My primary expertise is in rhetoric and professional communication studies, but I have done some work in Web design as a freelance consultant. Brandon, however, has been a full-time professional graphic and Web designer since receiving his BFA in graphic design in 2003. He has been working at MSGDS since May 2004. Despite his relatively short time with MSGDS, Brandon often functions as a project director, working with clients to negotiate a shared vision and to produce an agreed-upon product. In 2005, Brandon was awarded a prestigious graphic design award (a silver Addy) in the multimedia category for his work on an electronic greeting-card game for Midwest Child Care Center (MCCC).² Although Brandon identifies himself as a Web designer and a graphic designer rather than a professional communicator, he describes his job responsibilities in a way that resonates highly with professional communication. One of the primary genres Brandon produces is the corporate Web page—a clear example of business communication. Furthermore, he defines *graphic design* as "the art of organized information" and elaborates that "if graphic designers did nothing else, it would be to present information clearly and concisely."

When I approached Brandon to begin this study, the original plan was to do a traditional case study in which I would report, as objectively as possible, on his design work. But we soon understood that we could generate a much more thorough and ethical account of Brandon's design process through a more fully collaborative project. Brandon's internal insight and knowledge of his design process outside the observational period would contribute significantly to a fuller description of his work. Additionally, we both explicitly accept the current suggestion in ethnographic and case-study research methodology that suggests that both researcher and subject positions are invariably situated within particular contexts and practices. In this study we explicitly adopt Williams's (1996) suggestion that collaborative research is the ideal and ethical form of qualitative research. Specifically, she argued that when researchers "co-author the research questions, co-collect, co-analyze, and co-interpret the data, and they co-construct the final product[, then they] develop an interactive, dialogic, reciprocal relationship that mitigates the strictures of traditional, imperialist hegemony" (p. 51).

Therefore, our goal in this article is to maintain, as Rosaldo (1989) described it, a " 'double-vision' that oscillates between the viewpoint of the social analyst and that of his or her subjects of study" (pp. 127-128). In so doing, we hope to provide a more robust account of the design process than we could if we maintained a strict researcher-subject dichotomy. Consequently, we coresearched and coauthored this article. But, because we hold different positions in this study—one of us as rhetorician and observer and the other as practitioner—at times differing perspectives will be identified.

Our primary research methods for developing a model of Brandon's design process included field observations, interview-discussions, and artifact collection. (We received human-subjects research permission from Iowa State University for this project.) The field observations consisted of four visits to MSGDS for 6 to 8 hours at a time, during which I observed Brandon's work on five distinct Web projects. These field observations constituted the primary locus of the etic data. I collected these data primarily by watching Brandon in a detached manner, seldom interacting with him except to ask to clarify what he was doing. For these clarifications, Brandon would engage in a short read-aloud protocol, narrating what he was doing and occasionally why. During this observational period we collected various design-process artifacts, including design drafts, concept notes, and client and colleague communication transcripts. Also during this period, we met for seven midday and end-of-day interview-discussions designed to elicit the emic perspective. Each of these interview-discussion periods lasted 40 to 60 minutes, except for the observational period follow-up discussion, which lasted approximately 90 minutes. These interview-discussions, which

began with a series of open-ended questions that I prepared, helped to clarify Brandon's design decisions and underlying rationale. For example, here are some of these questions:

- My interview notes tell me that you first wanted a more free-form—less rectilinear—design for the MSGDS corporate site but that your bosses decided it would be better to go with a more traditional look. Can you tell me a little more about the differences between what you wanted and what they wanted and why each party wanted what?
- The first proof for Las Palmas was for a one-page HTML site that provided basic information at a glance, yet the final implementation was a multipage site with more detailed information and lots of pictures. Can you tell me a bit more about the change from one to the next?
- In authoring the Ryzex holiday card, did you worry at all about making sure you were sending inoffensive (politically correct) holiday greetings to all the different types of Ryzex employees? If you did think about that, what were your major concerns? What did you do about it?
- What are your primary concerns when it comes to balancing rich content and file size for an e-card?

After completing the final interview-discussion, our collaborative authoring began. This phase of the project primarily involved sharing and responding to article drafts. Each of us would work on separate sections of the text, and then we would review, respond to, and revise each other's text. Although we had remarkably well-aligned understandings of Brandon's work and practices, our explicit goal in writing this article was to preserve rather than elide any disagreements about the nature of Brandon's design process in order to provide both emic and etic perspectives. Thus, the sections of this article that provide Brandon's perspective maintain his language and modes of expression. Brandon does not use rhetorical terms such as *ethos* or *medium* but rather discusses issues of professionalism and credibility or identifies a particular medium by its name (e.g., Flash or HTML). Although we include examples of Web pages that Brandon designed, we focus our analysis on the decisions Brandon made rather than on the final form of the artifact he created. Therefore, the following sections describe a series of specific design decisions that Brandon made during the development of various new-media artifacts.

New-Media Design and Development

Brandon worked on five different design projects during the course of the observational period. Table 1 summarizes the four primary projects by

Table 1
Design Projects

Project Type	Client	End User	Description
E-card game	MCCC (day care establishment)	Day care children and their parents	Child must select appropriate prop for each day care activity.
Corporate Web site	MSGDS (advertising and graphic design firm)	MSGDS clients—anyone who needs advertising	Professional Web site with list of services, company officers, contact information, an online portfolio, etc.
Sales Web site	Las Palmas (polo field retainer)	Potential polo field buyers	Textual and visual descriptions of polo field for sale.
Holiday E-card game	Ryzex (UPC scanner manufacturer)	Ryzex employees and clients	Shooting gallery featuring Ryzex's UPC scanners as guns

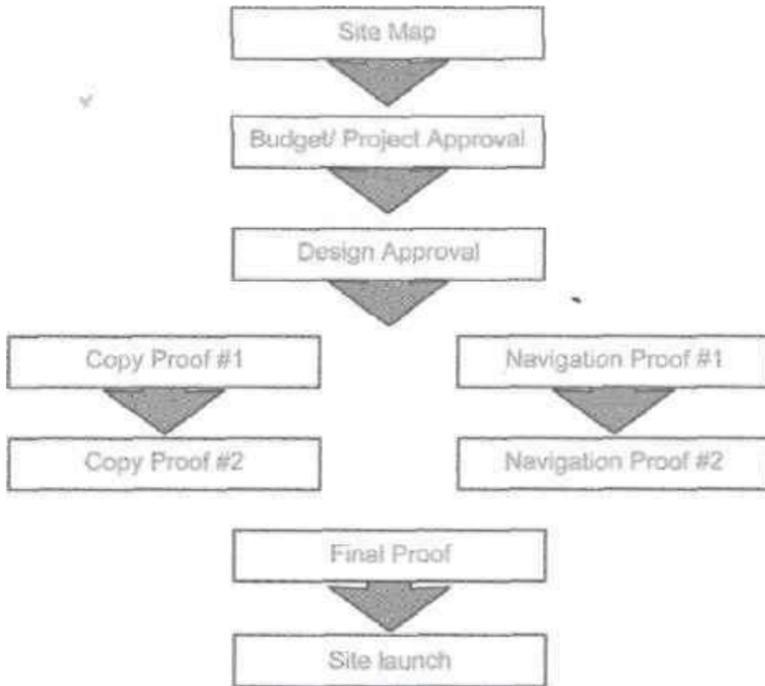
Note: MCCC = Midwest Child Care Center; MSGDS = Middle States Graphic Design Services.

identifying the project type (as requested by the client), the client, and the end user and providing a description of the final artifact. We provide screen shots of portions of these projects as we discuss each of them.

After exploring the processes and exigencies involved in each of these design projects, we would like to echo the argument of Rentz (1999), who studied the utility of narrative research, that such research is important for its ability both to support developing theory in a field and to refute it (p. 45; see also Stake, 1995). We believe that the results of this study can help genre and new-media theory to accomplish both of those goals. Although we recognize the limitations of constructing theory around the work of one Web designer, the -eases we describe seem to confirm some previously untested aspects of new-media theory and, at the same time, suggest some theoretical gaps. Specifically, we offer the following conclusions based on Brandon's work:

1. The impacts of dynamic rhetorical situations and multimodal-multimedia hybridity on communication genres are central considerations during the new-media design process.
2. Current genre and new-media theory underestimates the complexity of the dynamic and nuanced articulations between mode, medium, genre, and rhetorical exigencies.
3. A heretofore underdiscussed type of hybridity is made more prevalent by the affordances of new media.

Figure 1
Middle States Graphic Design Services Proof Cycle



To help contextualize the following discussions of how Brandon's design decisions support these conclusions, we provide a general layout of MSGDS's general and Brandon's specific approach to a new-media design project. Both Brandon and MSGDS clearly describe a design process that is thoroughly pragmatic. As Brandon notes, "Design approach to any project relies on two general factors—budget and timeline." Within the constraints of these factors, MSGDS's design and development process is built on a foundation of dialogue with the client. It is geared toward making sure the client is involved frequently throughout the process. MSGDS has developed an elaborate "proof cycle, during which clients are shown a series of partial and eventually complete mock-ups of the proposed new-media design (see Figure 1). This proof cycle is a process that Brandon wholeheartedly endorses: "It serves to regularly make sure that we're all on the same page—saves

everybody time and money." Of course, the ideal proofing process that is represented in Figure 1 often gets abbreviated by the two pragmatic constraints of budget and timeline.

Confirming Dynamism and Hybrid!ty in New-Media Design

The cases of the MCCC and MSGDS designs demonstrate how new-media design can involve a dynamic and evolving appreciation of rhetorical elements. In each of these cases, negotiation and renegotiation caused Brandon to redefine his conception of audience and often had a direct impact on the hybridity of the design. While these results may not seem, particularly new to new-media theory, we feel that highlighting them in this context is important for two reasons: (a) Our study provides new empirical evidence demonstrating the relevance of these issues, and (b) a brief review of these results provides a necessary foundation for our further argument.

Client revisions after the first functional proof cycle of the e-card game design for MCCC, a company that provides day care services for preschool-aged children, clearly illustrate the dynamic nature of the designer's conception of the rhetorical situation. Among other revisions, according to Brandon, the MCCC representative requested several changes made to the text of the game. In each of the activity-based rooms of the game, there are brief sections of text providing further clues about what students are to do in these rooms and what they need. In the "sharing-circle" room, the original design displayed the image of a child-care worker asking a circle of students, "What did you do in school today?" The MCCC representative requested that the question be rephrased as a statement: "Share something positive with the group." Brandon said that this design request "threw [him] for a bit of a loop." Based on his previous discussion with the clients, Brandon had identified the end users as day care children whose ages ranged from 4 to 10 years. Brandon felt that the revised sharing-circle invitation would be a bit verbose for many children in that age group. Upon further discussion with the client, Brandon came to understand that MCCC had reenvisioned the end user for the younger portion of the target demographic. MCCC now assumed that many of the younger children would be playing this game with their parents: a conception of audience that, for Brandon, more appropriately matched the decision to change the question in the sharing-circle room.

A content revision by the client necessitated a modest redefinition of the primary audience for the MCCC design. Brandon explained that this kind of redefinition often occurs during the design and revision process for any composition. He said that a more significant change in the definition of the

audience could have been the catalyst for a significant change in how the entire text articulated with various modal, media, and generic conventions. In this particular case, however, the redefinition of audience was slight enough that it did not require further adjustment of the document as a whole.

In the case of the MSGDS corporate Web site, the design company that Brandon works for, the multiple purposes of the site required not only significant Content negotiations but also significant change in the medium for portions of the site. Brandon described the original design conception for this site as being much more "dynamic" than the final implementation.³ That is, Brandon's original design involved different types of dynamic interfaces for different types of content sections of the site. For example, his original design involved dynamically generated content appearing in nonlinear "content bubbles" used to focus users and create a sense of energy onscreen. But Brandon's employers decided they wanted a more traditional look, and subsequently, Brandon had to revise the design. After this design negotiation, the site took on its current look of side-by-side, rectilinear alignment.

The discussion over whether to go with a traditional linear design or a more dynamic and free-form approach came down to a question of what message the company wanted to send most clearly to the customer and what message would be most effective for the potential client. During follow-up interviews, Brandon explained that

the MSGDS Web site was supposed to be a visual icon of what we do at MSGDS, which is make something out of nothing. I wanted the site to mimic the design process, which is not linear. I wanted everything to be amorphous with a loose structure while at the same time having some hard-edged shapes to show that there is a method to our mayhem. Unfortunately, our client majority has a more corporate mind-set and wouldn't do well navigating an out-and-out design free-for-all.

The more free-form design, Brandon and his MSGDS superiors agreed, would present a strong message about the flexibility and creativity of MSGDS designers. On the other hand, the rectilinear arrangement might present a clearer impression of MSGDS's professionalism and ethos to more traditional firms. In the end, Brandon and his MSGDS superiors decided that both perspectives were right and that the multiplicity of audiences and purposes needed to be realized in the design. As Brandon explained, "The site we ended up with was a compromise between the two schools of thought, which really means that we ended up with a hybrid site." As such the final implementation is mostly rectilinear but does contain examples of MSGDS's creativity and flexibility. For example, the MSGDS portfolio uses a slide-show style interface rather than the traditional horizontal top navigation that the rest of the site uses.

The dynamic rhetorical situation resulted in changes to the medium in terms of media hybridization. That is, the final design integrates conventions from multiple media into a multimedia hybrid that functions as a single communicative artifact. Brandon created the original MSGDS design in Flash to capitalize on that medium's ability to efficiently create dynamic, nonlinear content. Thus, the final version remains in Flash. But the decision to refocus the site on professionalism and ethos and to appeal to the more conservative audiences caused a change in how Brandon's use of the Flash medium responded to various Web conventions. Now the bulk of the site aligns more closely with HTML conventions for navigation and layout. The integration of the multiple purposes and audiences in this case spawned a significant change in how the design had to respond to traditional Web conventions. The conventions of the older, more established Web medium HTML had to be integrated into the final design even though the site was still in the Flash medium. Although the consequences of the design decisions in this case propagated further along the network of new-media articulations than they did in the MCCC case, the complexity of these interactions does not yet match the broad range of interactions that sometimes come into play.

The audience for the MCCC design evolved from an audience of just children to a mixed audience of children and parents; the audience for the MSGDS design evolved from an audience of clients who were interested in either creativity or traditional professionalism to a hybrid audience comprising some members who wanted one, the other, or both. In each of these cases, the audience functioned as more of a moving target than as a static construct that the designer developed from the outset. Similar instances in which a dialogue during the composition process resulted in an evolving concept of audience and communication content have been explored in a number of modes and media. For instance, Blakeslee's (1993) ethnographic research of several physicists demonstrates how scientific communicators' concepts of audience are not static and evolve during the course of composition. And countless studies and theoretical articles explore the importance of anticipating and addressing multiple audiences in communication. But what is particularly interesting about the MSGDS case—and the Las Palmas case, which we discuss next—is how these dynamic and hybrid conceptions of audience articulate with critical issues in new-media design: how the multiple audiences sought by MSGDS generated a change in both content and medium form.

Extending Articulation Theory

In the previous subsection, we described cases in which the required design decisions involved some interaction between dynamic rhetorical situations,

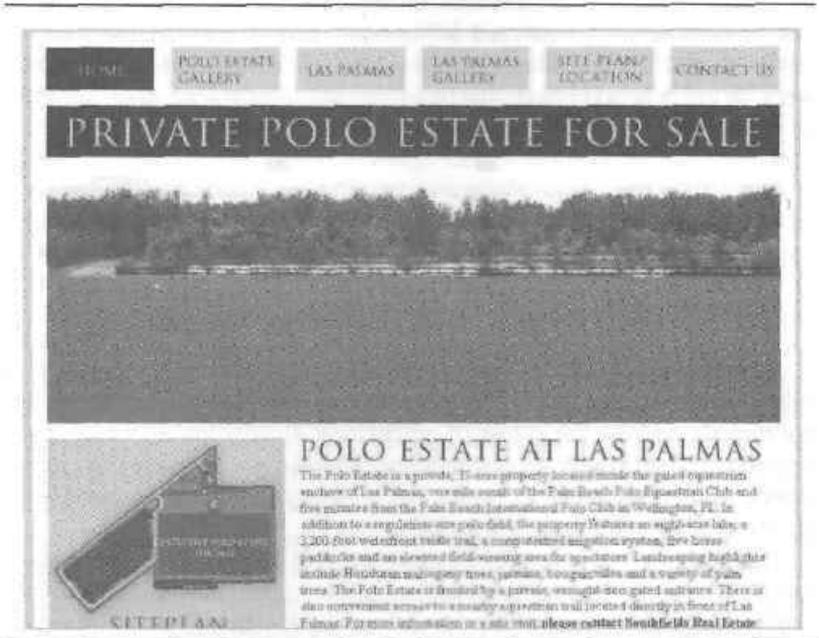
generic conventions, and media choices; in this subsection, we describe cases that illustrate nuanced articulations throughout the network of mode, medium, genre, and rhetorical interactions—cases in which a change in one design consideration catalyzed adjustments across a broad spectrum of design issues. These findings correlate well with Johnson-Eilola's (2004) work, in which he addressed what he termed *localized articulations*', however, he did so from a primarily hermeneutic perspective:

Articulation theory provides a way for thinking about how meaning is constructed contingently, from pieces of other meanings and social forces that tend to prioritize one meaning over another . . . [and] can be useful in helping us understand writing as a process of arrangement and connection rather than simply one of isolated creative utterance, (p. 202)

Johnson-Eilola described the importance of articulations between social spheres and texts and of articulations between textual elements. But he did not directly address the extent of articulation distribution as we do here. Specifically, our results suggest that unarticulated genre theory (i.e., genre theory without reference to media and modality) is not an encompassing lens for understanding new-media design.

The design process for the Las Palmas Web site constitutes one such case in which the issues and decisions involved significantly affect a wide variety of design elements. There are a number of different project-specific reasons why some design decisions involve more nuanced and extended articulations of the design network than others do. As Brandon explained, in many cases, "what clients initially request and what they actually want seem to diverge quite a bit as a project evolves." In other words, as a design evolves and changes, sometimes a client's conception of important design issues evolves as well. Brandon explained that Las Palmas contracted MSGDS to develop a Web site to help sell its Florida-based polo fields. Initially, Las Palmas requested a single static HTML site that would contain all of the important information about the grounds and for pursuing their purchase. Brandon said he and Las Palmas had originally envisioned potential buyers who would want all of the pertinent information immediately available and who might be simultaneously viewing multiple sites with various properties for sale—comparing them at a glance. But the audiences Las Palmas envisioned evolved to include end users who would want a copious site that included a variety of detailed information and many photographs. The user who Las Palmas anticipated would diligently investigate all the available information before seeking contact. Ultimately, the discussion between Brandon and Las Palmas led to the development of what Brandon believed was a superior site catering to both user groups.

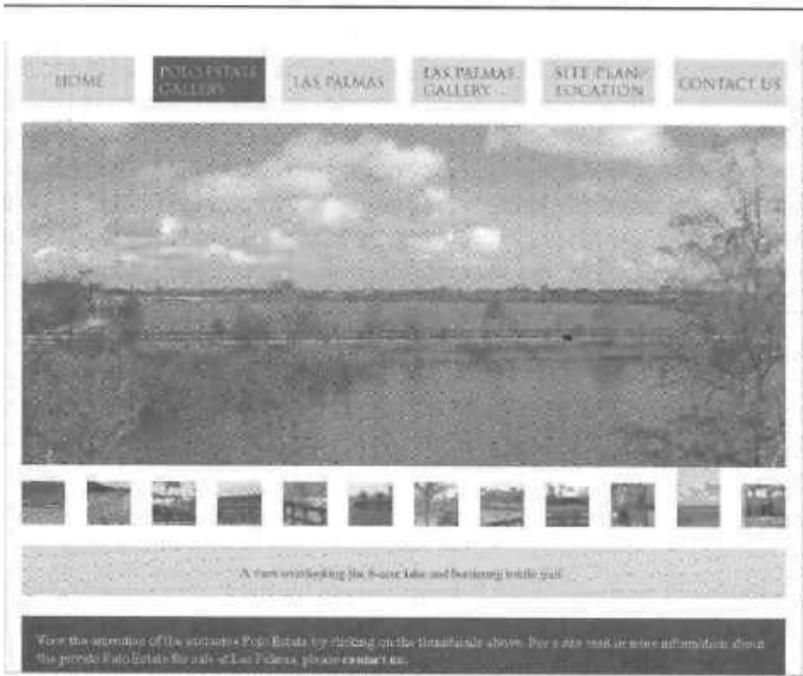
Figure 2
Las Palmas Home Page with an Active Navigational Interface



The home page contains all the basic information, and additional pages provide detailed information for investigative consumers.

The decision to cater to multiple potential user behaviors prompted not only content and format changes but also significant changes in the design's response to medium conventions and the implementation of multiple media. First, within the single medium of HTML, these different potential user behaviors required a different response to medium conventions. The first proof—the static HTML design—had a different set of conventions to respond to than does a dynamic multipage site. Most obvious is the integration of navigational elements into the design or interface. A single static HTML page does not require any navigational elements whereas a multipage site requires a clear and intuitive navigational interface. The implementation of a navigational interface into any Web page obviously requires the designer to operationalize HTML navigational interface conventions (see Figure 2)

Figure 3
Las Palmas Photo Slide Show



in order for the document to be usable. In this case, the rhetorical situation was directly linked to how the design responded to medium conventions. The reconception of user behavior catalyzed a change in content—more information—which caused a change in medium and form.

Similarly, the new conception of user behavior caused a change in the modal balance of the information. Between the first and second proofs, Brandon and Las Palmas decided that a greater portion of the content needed to be "carried" visually—the site needed to include more pictures of the polo fields. Brandon implemented this change with a Rash slide show (see Figure 3). He considered the integration of a slide show in this instance to be an effective choice because the signs representing film and slide shows (e.g., sequenced thumbnail images, play and fast-forward buttons) are highly common in Western culture and are highly common in this remediated form. He observed that many Web sites use the conventions of films and slide

shows to support their image galleries. In this case, Brandon had to consult his knowledge of the conventions of slide shows, of the Web, and of slide shows remediated via the Web in order to effectively implement his design.

The case of the Las Palmas Web site not only serves as an example of the dynamic interactions between remediation and multimedia conventions but also demonstrates how a change in mode catalyzed a change in medium and the integration of multiple media. Furthermore, this change spawned changes even further along the network of design decisions. The change in mode—the addition of more pictures—caused this change in medium—the integration of Flash. These changes in mode and medium were instantiated within the subgenre of the Web slide show, and as Brandon notes, these changes also affect the budget and timeline:

The addition of this extra dynamic content also significantly increases the time and cost of the project. Many times clients are not prepared for one or both of these outcomes; either they expect the project to cost the same despite the additional work or they expect the same delivery date despite the extra work. This piece actually ended up having *two* dynamic photo galleries, one for the polo field itself and one for the Las Palmas area.

A thorough analysis of the design process for the Ryzex e-card provides an even clearer demonstration of the integrated network of design considerations. As we described at the start of this article, Brandon and MSGDS were contracted to develop a holiday e-card for the Ryzex corporation, a manufacturer of UPC scanners, to distribute to its employees. As has become typical for Brandon and other MSGDS designers during the development of corporate e-cards, the first question they ask any e-card client is whether they want the product to be interactive. Although the term *interactive* has a variety of connotations in Web design, information sciences, and rhetorical studies, for Brandon, MSGDS, and their e-card clients, Brandon stated, "interactive simply means that it's a game." Brandon said Ryzex opted for the interactive version of the e-card—a decision with far-reaching implications for design.

With this agreement that the e-card would be interactive, Brandon proceeded to design a shooting gallery Flash game that used Ryzex UPC scanners as weapons and bar-coded boxes as targets. Rather than killing wildlife or shooting down targets, as is often the case in shooting galleries, the goal with this game is to scan as many boxes as possible before the gun runs out of charge. Brandon's representation of the pricing gun had to be designed in such a way as to show the conventions of both pricing gun

representations and shooting galleries. Brandon decided to rely primarily on the targets of the gun to indicate that the user was operating a pricing gun. That is, since the users target UPC-coded boxes rather than clay pigeons or some other conventional target, the users' appreciation of the primary game tool should be different. Furthermore, because an element of most shooting gallery games is to have an indicator of the number of bullets left, Brandon chose to reencode this game element as a pricing-gun battery charge. Each "firing" of the UPC gun, rather than taking away a bullet, removes some "charge" from the gun's battery. Despite these representative changes to the shooting gallery environment, the game still functions clearly within the defined genre conventions of shooting a target. Although the imagery includes boxes, pricing guns, and battery charge, the game play is highly conventional. The pricing gun behaves in much the same way as any traditional weapon does in a shooting gallery game. There are traditional game obstacles, such as false targets and limited "ammunition"—in this case, battery charge. In this instance, Brandon had to tailor the conventions for representing UPC scanners and the conventions for shooting games to match one another—so that the two could be integrated seamlessly.

As with any set of design decisions, some were easier than others, and some decisions resulted in other decisions being made. The choice to go with a game automatically sealed a number of media-related decisions—due to the realities of technology. For example, no known media mix employs Flash yet does not employ a computer. Internet distribution, while not strictly required, is another example of a part of the media mix that was essentially ensured once it was decided to use Flash. On the surface, these may seem like minor technological issues that hardly warrant consideration here, but the cascading effects of these decisions can—and did—cause significant issues to arise during the course of designing this game. Although Brandon addressed a range of technological issues when he was designing the Ryzex e-card, the issue of file size is a clear example of how technological issues articulate with rhetorical ones. As Brandon noted in follow-up interviews, Internet mediation requires constant attention to file size and delivery method. The composition and design of the Ryzex game required Brandon to find a balance between engaging graphical content and the amount of time a user would be willing to wait for a download. The better the graphics, the more intense the interface, the longer it takes for users to access the artifact: something that might cause user attrition. But if the sole focus is on file size and nearly instantaneous delivery, then the final artifact may be insufficient to accomplish its purposes.

The decision of whether to make the e-card interactive represented a significant distribution of design decisions. Perhaps most obvious, from the

perspective of rhetorical studies, the decision to make the e-card interactive involved a tacit decision about the nature of the audiences. To begin with, Brandon was told that the audience had sufficient access and familiarity with computers and the Internet to use the e-card successfully. But this decision involved a more sophisticated appreciation of the nature of the audiences than just knowing that they had computer skills and Internet access. The primary audience for the e-card, as Brandon knew, was Ryzex employees. Obviously a company's employees encompass a broad range of individuals—assembly-line workers, sales people, clerical staff, managers, and so forth—likely with a broad range of backgrounds. Furthermore, Brandon had to send the same holiday greeting to a range of people who likely had different religious backgrounds and observed different holidays, or no holidays at all. Designing a holiday greeting in the form of an interactive game (one with secular content) shifted the focus of the final design from holiday greetings to user enjoyment—a shift that might offend some recipients.

This decision to implement the Ryzex design as more of a Flash game than a holiday card helped the design to more effectively conform to the exigencies of two competing rhetorical contexts. On the one hand, the cultural and contextual exigencies of the American majority included a strong social imperative for extending holiday greetings during the holiday season. On the other hand, the contexts of American corporate culture also included a sociocultural imperative for American corporate entities to avoid the appearance of political incorrectness. Simply wishing all Ryzex employees a merry Christmas might respond appropriately to the contextual imperatives of the American majority, but doing so would be inappropriate in the context of corporate culture. In the case of the Ryzex design, one contextual imperative must not trump the other; therefore, the hybridization of the e-card and the Flash game genres must help Ryzex effectively respond to each imperative. That is, making the e-card more game than card (altering the genre) allows Ryzex to extend holiday greetings, but in a way that avoids (or downplays) the appearance of political incorrectness.⁴ Brandon had to incorporate content that would extend the appropriate holiday greetings within the plural contexts of Ryzex's corporate culture and the holiday season. Brandon explained, "The original game design actually didn't include references to the holidays—they were added later at the request of Ryzex." The original game was neutral in content and only later incorporated candy canes, Santa hats, and the like. Adapting the design to include such holiday emblems involved significant decisions about the mode of content deployment. Oneway of adapting the design to the holiday greetings exigency involved integrating corporately acceptable holiday images into the game

Figure 4
Ryzex E-Card Game Featuring a Tiger Wearing Reindeer Antlers



design. Brandon integrated into the game a number of distracting false targets—such as referees and 1950s-era convicts (figures with stripes like bar codes). These false targets carried the bulk of the holiday greetings content—referees wearing Santa hats, convicts holding candy canes, and Siberian tigers sporting reindeer antlers (see Figure 4). Representing the holiday content visually—and as a potential target—might have mitigated the appearance of political incorrectness. Certainly, implementing these design choices seemed safer than adding an explicit greeting such as "Merry Christmas."

Although Brandon seemed to respond effectively to these conflicting cultural and contextual elements, he did so entirely tacitly. During follow-up interview-discussions, Brandon reported that he never consciously considered the political correctness of the holiday messages:

I really didn't worry about that at all. Some clients' workplaces seem to have a very corporate, politically correct environment: Ryzex is not one those places Were Ryzex a more conservative client, the game would have been tailored to that type of environment from the concept stage; that type of client probably wouldn't have gone with a shooting-gallery concept at all.

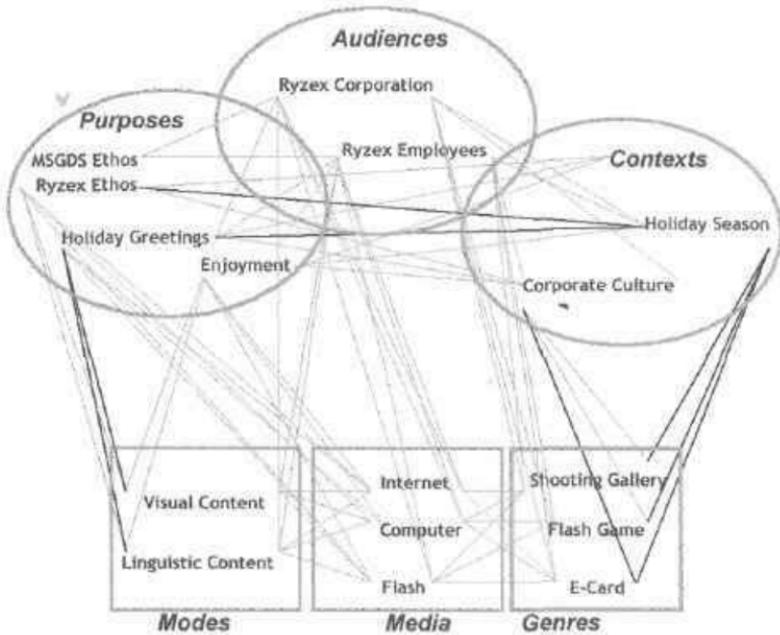
But Brandon did acknowledge his explicit engagement with other issues similar to political correctness. He knew the importance of designing an e-card game that did not offend any of Ryzex's constituencies. He described how, at one point, it nearly did:

One concern came up that was totally unexpected, though. Originally, the main bad guy in the game was a zebra because they are black and white striped and look like UPC. The client came back to us and said we couldn't use a zebra because one of their partner companies was called Zebra, and we couldn't make them the enemy in the game. So we ended up with mimes, while tigers, babies, etc.¹

Addressing these hybrid, and sometimes conflicting, audiences and contexts in the Ryzex design was further complicated by the multiplicity of purposes for the Ryzex e-card game. The primary, and more obvious, purposes for the game were to express holiday greetings and to entertain Ryzex employees. But on multiple levels, a major purpose in the design was to create and preserve ethos for Ryzex. In many ways this game, which behaves as a holiday card, was the corporation's way of extending empathy and gratitude to its clients or employees. This design needed to be implemented in such a way as to exude expense and care (i.e., the trappings of ethos) so that the target audiences would perceive the greeting in the spirit in which Ryzex intended it. Consumers today are so inundated with holiday greetings from various firms that they have likely become cynical to the process. If this e-card would have been poorly or ineffectively designed, its recipients might have perceived it as solely a token to increase productivity or sales rather than also as a sincere expression of gratitude. This ethos generation also extended ethos to MSGDS and to Brandon himself. In follow-up interviews, Brandon described ethos as a major design consideration for all his projects: "In my designs, I want to create a sense of professionalism for my clients, for MSGDS, and for myself—all at the same time. Fortunately, they all overlap, so it works out really well." The development and deployment of a clean, effective design engendered ethos for each of these constituencies. Ethos for one was ethos for another. If the design helped Ryzex develop credibility for its employees, then Ryzex credited MSGDS, who in turn credited Brandon.

The case of the Ryzex e-card game most clearly suggests a theoretical gap in terms of the importance of nuanced articulations between design issues. In developing this artifact, Brandon had to incorporate a vast conglomeration of dynamically interacting rhetorical elements: audiences (Ryzex

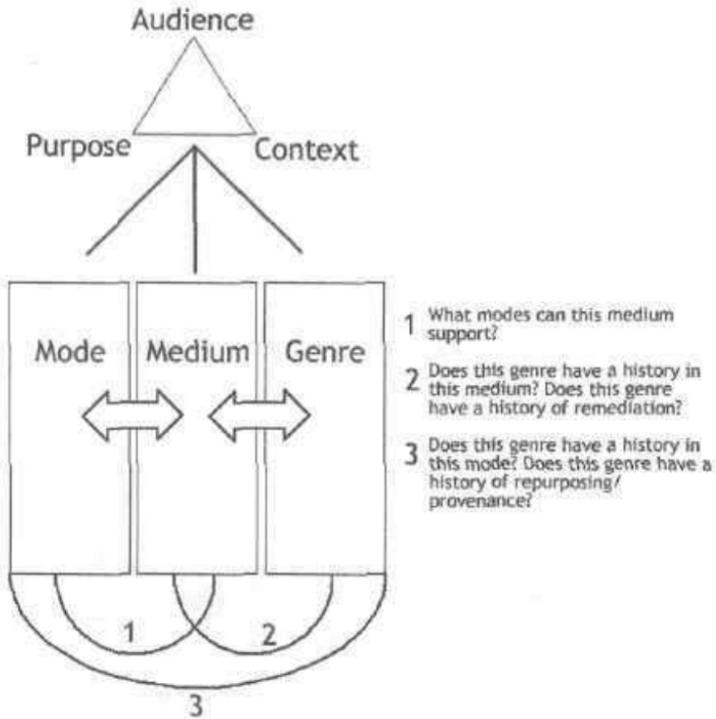
Figure 5
Network of Ryzex Design Issues



Note: MSGDS - Middle States Graphic Design Services

Corporation, Ryzex employees), purposes (holiday greetings, entertainment, ethos), and contexts (American holiday culture, secular corporate culture). The Ryzex artifact is mediated by a combination of the Internet, computers, and Flash and belongs to the hybrid genre of a holiday e-card shooting gallery presented in a Flash game. To further elucidate the dynamic hybridity of the situation, we have developed a graphical representation (see Figure 5) of the design decisions and issues Brandon faced in developing the Ryzex e-card. Figure 5 shows how, in the case of the Ryzex design, overlapping rhetorical, modal, media, and generic elements interacted during the design process. The connecting lines represent specific articulations between design issues; the darker connecting lines represent the specific articulations in play for one design decision—determining how to encode the holiday content. The diagram illustrates the cascading nature and complexity of new-media design decisions and how particular articulations need to be understood and anticipated in making particular design decisions. Figure 5, despite its di/xying complexity, does not completely represent

Figure 6
Mode, Medium, Genre Interaction Heuristic



Brandon's design process in general; it is a representation of one instantiation of his design process.

Extrapolating from each of the cases described here, we present the Mode, Medium, Genre Interaction (MMGI) heuristic (see Figure 6) as a usable model of the observed design processes. As a theorized model representing the design practice of one Web designer, the MMGI heuristic traces the considerations of hybridity, dynamism, and articulation that Brandon addressed in new-media design and composition. Although we can claim this only as an accurate model of Brandon's design process, we suggest that other new-media designers and composers should appreciate and anticipate how modes, media, genres, and rhetorical elements will interact with and codetermine one another during the design and composition process.

A New Type of Genre Hybridity

Although the map of the rhetorical landscape of the Ryzex e-card game (see Figure 5) provides a thorough way of accounting for the detailed and complex articulation of design issues, it leaves us struggling still with questions about this artifact's genre(s) and media. Actor-network theorists (i.e., scholars interested in networks of articulation) sometimes disparage classification schemata as a process of cutting up reality at the joints (Latour, 1993). But genre and media classification can provide a helpful lens for determining how to conform to or defy communicative conventions. Therefore, while we support a networked approach to design decisions, we are not suggesting an end to categorization. Categorizing the media and genres of the Ryzex e-card, however, is a complicated proposition. What is a shooting gallery if not a genre of game? It is a particular type of game, with its own unique gaming conventions, that can be mediated in a variety of forms—not only with Flash. Its mediation also has a significant effect on its form and content. What, then, is a Flash game? Is it a medium or a genre? Flash games have their own conventions distinct from other games but also distinct from other nongame instantiations of Flash. These questions are not distinctly answerable in the framework of this article but serve to illustrate the complexity of the design decisions and the difficulty of categorization.

With these questions and issues in mind, we came to realize that the Ryzex artifact may be functioning as a heretofore untheorized type of genre hybridity: what we call (for lack of a better term) a gestalt-shift genre. As we discussed, issues of hybridity in genre theory have traditionally revolved around the hybrid interaction of different modes and media made possible by new communication technologies. Additionally, Spinuzzi (1999) explored how multiple documents of various genres function together within hybrid genre ecologies. In contrast to each of these types of genre hybridity, the Ryzex e-card fills two separate generic roles that remain separate. It fills the role of an e-card: The delivery of the artifact via e-mail completes the socio-contextual situation of extending goodwill during the holiday season. But upon receipt, the users must undergo something of a gestalt-switch so that they can begin playing the card. In other words, upon receipt, the card becomes a game. The goodwill transaction has been made, and the entertainment begins. The extent of the proliferation of gestalt-shift genres is a question that remains unaddressed. Equally unaddressed are questions of how gestalt-shift genres are used and understood by audience members. Each of these issues lies beyond the scope of this article, with its explicit emphasis on design practice. Nevertheless, we find that these questions

about the extent and possible ramifications of **gestalt-shift** genres warrant further research.

Notes

1. Middle States Graphic Design Services (MSGDS) is a pseudonym.
2. Midwest Child Care Center (MCCC) is also a pseudonym that we used throughout this article when referring to past and current projects for a regional provider of child day care. AH other named companies have given written permission for us to use their names and Web site images.
3. Brandon's use of *dynamic* to describe his new-media design differs from our use of *dynamic* in the phrase *dynamic rhetorical situation*. Dynamic new media refers to interactive nonlinear interface design whereas dynamic rhetorical situation refers to the unstable evolving definitions of audience, purpose, and context (luring the design process).
4. Since the focus of this study is on Brandon's design practices, we cannot address the myriad issues involving political correctness. We recognize that some companies genuinely wish to avoid offending various constituents, and some companies are only concerned with not appearing politically incorrect. We intentionally offer no judgment about the motivations of Ryzex or any of the other companies represented here. Although *political correctness* is often used as a pejorative term, we do not intend it in this manner. Rather, we use the term as a concise way of describing the avoidance of offense in highly diverse contexts.
5. As one reviewer of this article pointed out, a few issues of potential offense were not addressed during the design process: (a) the potentially antithetical relationship between a violence-themed shooting gallery and the holiday season and (b) the inclusion of babies as potential (though nonscoring) targets. The fact that these design elements were accepted by all involved as unproblematic may raise some concerns about the underlying ethics of this design. While that is a thought-provoking question, we are unable to address it due to a lack of data on the issue; that is, it simply never came up during the study.

References

- Blakeslee, A. M. (1993). Readers and authors: Fictionalized constructs or dynamic collaborations? *Technical Communication Quarterly*, 2, 23-25.
- Bolter, J. D., & Grusin, R. (1999). *Remediation: Understanding new-media*. Cambridge, MA: MIT Press.
- Crowston, K., & Williams, M. (2000). Reproduced and emergent genres of communication on the World Wide Web. *The Information Society*, 16, 201-215.
- Dillon, A., & Gushrowski, B. A. (2000). Genres and the Web: Is the personal home page the first uniquely digital genre? *Journal of the American Society for Information Science*, 51, 202-205.
- Geisler, C., Bazerman, C., Doheny-Farina, S., Gurak, L., Haas, C., Johnson-Eilola, J., et al. (2001). IText: Future directions for research on the relationship between information technology and writing. *Journal of Business and Technical Communication*, 15, 269-308.
- Johnson-Eilola, J. (2004). The database and the essay: Understanding composition as articulation. In A. F. Wysocki, J. Johnson-Hilola, C. L. Selfe, & G. Sire (Eds.), *Writing Theory and applications for expanding the teaching of composition* (pp. 100-236). Logan: Utah University Press.

- Kress, G. (2003). *Literacy in the new-media age*. London: Routledge.
- Kress, G., & Van Leeuwen, T. (1996). *Multimodal discourse*. London: Routledge.
- Latour, B. (1993). *We have never been modern*. Cambridge, MA: Harvard University Press.
- Manovich, L. (2001). *The language of new media*. Cambridge, MA: MIT Press.
- McLuhan, M. (1984). *Understanding media: The extensions of man*. Cambridge, MA: MIT Press.
- Miller, C. R. (1984). Genre as social action. *Quarterly Journal of Speech*, 70, 151-167.
- Miller, C. R., & Shepherd, D. (2004). Blogging as social action: A genre analysis of the Weblog. In L. Gurak, S. Antonijevic, L. Johnson, C. Rateliff, & J. Reyman (Eds.), *Into the Blogosphere: Rhetoric, community, and culture of Weblogs*. Retrieved January 4, 2006, from http://blog.lib.umn.edu/blogosphere/blogging_as_social_action.html
- Rentz, K. C. (1999). What can we learn from a sample of one? The role of narrative in case study research. In J. M. Perkins & N. Blyler (Eds.), *Narrative and professional communication* (pp. 37-63). Stanford, CT: Ablex.
- Rosaldo, R. (1989). *Culture and truth: The remaking of social analysis*. Boston: Beacon.
- Spinuzzi, C. (2003). *Tracing genres through organizations: A sociocultural approach to information design*. Cambridge, MA: MIT Press.
- Stake, R. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.
- Williams, C. L. (1996). Dealing with the data: Ethical issues in case study research. In P. Mortensen & G. E. Kirsch (Eds.), *Ethics and representation in qualitative studies of literacy* (pp. 40-57). Urbana, IL: National Council of Teachers of English.
- Witte, S. P. (1992). Context, text, intertext: Toward a constructivist semiotic of writing. *Written Communication*, 9, 237-308.
- Yates, J., & Orlikowski, W. (2002). Genre systems: Structuring interaction through communicative norms. *Journal of Business Communication*, 39, 13-35.
- Yates, J., Orlikowski, W. J., & Okamura, K. (1999). Explicit and implicit structuring of genres in electronic communication: Reinforcement and change of social interaction. *Organizational Science*, 70, 83-103.

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