A two-phase ethnographic study conducted over the course of two semesters examined a project to create a web site on the Internet. Subjects were enrolled in either a "Features Writing for Business and Industry" course or an "Advanced Technical Writing" course at an open-admissions university offering a major in Professional Writing. Both classes consisted predominantly of professional writing majors with strong rhetorical training, but only one student had previous web page building experience. Data included field notes, student log books, regular interviews, copies of email communications, and copies of all handouts. Five major findings of the first phase were presented to students in the second semester and "what we've learned about web page building." Data gathering processes were identical to those of phase one. The major finding was that the students encountered a new rhetorical situation, one that their previous rhetorical training had not prepared them for. From the outset, phase one students' familiarity with World Wide Web media did not seem to penetrate any stage of the creative process. Students in phase two from the beginning had their attention called to the different rhetorical strategies needed for developing a World Wide Web site. Findings suggest that J. Kinneavy's model (involving audience, subject, and the writer's purpose) alone is no longer sufficient. Adding a fourth point, media, to the model takes into account the dramatic change in communication brought on by the World Wide Web. (Contains 11 references and a table of data.) (RS)
Revisioning Kinneavy: Rhetorical Situation in the Cyber Age

by Michael W. Gos

Over the centuries, rhetorical training in America's colleges and universities has changed significantly. What began exclusively as a speech art later became a written art and the scope and influence of rhetoric changed to mirror the existing social, religious and political climates [1]. But through it all, one thing has been consistent—our concept of the rhetorical situation. Whether delivered as spoken word or written text, the act of communicating has been a function of writer (or speaker), reader (or hearer) and subject matter. Together these form the situation in which a communicative text is created and used. This view of discourse first was articulated by the sophists, and later by Plato. Aristotle systematized the three parts into a triad but it wasn't until much later that it was modeled in what is commonly known as the communications triangle [2]. More recently, James Kinneavy used the triangle in his seminal work in rhetoric, A Theory of Discourse [3], and since then, it has served us effectively as the basis for rhetorical training in colleges and universities.

The advent of the personal computer with word processing capabilities, and later, desktop publishing software, may have changed the writing process dramatically [4-10], but there is no evidence that a shift in our concept of rhetorical situation as a result of this new writing medium was necessary. Writers still prepared printed documents for readers. While the level of revision may have gone up with the advent of personal computers [6, 11] and the appearance of the pages improved substantially, the communications act itself remained essentially the same, and so did our concept of the rhetorical situation.

But more recent changes in media are not so easily adapted to. This article will examine a situation that may call for the first major revision in our view of the rhetorical situation—specifically, the new paradigm of writing for the World Wide Web.
The Study

The recent move toward web presence by business and industry around the world has created a demand for technical writers who can build web pages. To reflect this phenomenon, professional writing programs across the country are adding web page building to their curricular offerings. The site of this research project was a southern, open admissions university offering a major in Professional Writing. A two-phase ethnographic study was conducted over the course of two semesters. The first semester's study looked at a two-class project to create a web site on the internet. One class, Features Writing for Business and Industry, did the research and prepared articles and other text to be used in the pages. The other class, Advanced Technical Writing, formulated an overall design of the site, assigned writing tasks to the features class students (part of management training), edited copy, designed and built the web pages. Both classes consisted predominantly of professional writing majors with strong rhetorical training but only one student (in the Advanced Technical Writing class) had previous web page building experience.

The assignment was to build a web site for the Southwest/Texas Popular Culture Association and American Culture Association. The Advanced Technical Writing class was divided into a small management team and several production groups that answered to the management team. Students from both classes were in contact with Association officers and members from around the country, both by e-mail, and occasionally, telephone.

The classes met in a Macintosh computer classroom containing 18 student computers and one server. The server had Netscape and an internet hookup that allowed access to the World Wide Web. Netscape programs were also on seven other machines for use as viewers (not connected to the internet), and those same machines each had a hypertext markup language (HTML) editor. In addition, all machines in the room had Word Perfect with an HTML option.

Student work was not limited to the room, however, and the bulk of the production work was done outside of class on their own machines or ones they had access to at work.

Overall the project ran 12 weeks with each class devoting five weeks of actual class time to the project, spread throughout the semester, and an
additional two weeks of schedule overruns by the Advanced Technical Writing class.

Students in the Advanced Technical Writing class began the project by looking at web sites, playing with Netscape and doing all the prerequisite things necessary to become familiar with web pages. This process was done outside of class, either in the university library, at the university's academic computing center or at home or work. Once students were comfortable on the web, the designing/writing/building process began.

Field notes were kept during the entire process by the instructor/researcher, and students in the Advanced Technical Writing class kept log books throughout the project. These notes were supplemented by regular interviews with the management team, copies of e-mail communications between students and the instructor, students and sources, or among students, who were asked to forward pertinent messages for the purposes of the study. In addition, copies of all handouts created by the management team for use by the production teams were collected. Data were collected and processed as they came in and after the project was complete.

Over the course of this first phase of the study, five major findings emerged. In the second semester (phase II) of the study, those findings were presented as "what we've learned about web page building" to another Advanced Technical Writing class. This group built a web page for the university's Professional Writing program. The data gathering processes were identical to that of phase one.

This article will examine one of the findings of this study—the students' encounter with a new rhetorical situation, one their previous rhetorical training had not prepared them for, and their attempts to deal with the problems presented by this new factor.

Media and the Rhetorical Situation

Phase I Results

From the outset, phase one students treated the web page assignment like any other writing task. While they had plenty of experience looking at web pages, their familiarity with the media did not seem to penetrate any stage of the creative process. Assumptions were made that writing for the web was no
different than writing for print media. When *Advanced Technical Writing* students made assignments to the Features Writing class, there was no indication that the information was to be used for web purposes other than the fact that the unit was initially presented to both classes as such by the instructor. The written assignment sheets showed no media awareness at all. The following are examples of those assignments.

"This is the first time Tech Writing has been included as a major topic at the Popular Culture Association Annual Convention. The information in this article should tell readers why Tech Writing is being included in this year's convention. The article should be approximately 500 words."

"World Cultures in the Southwest approx 400 words (sic.) The announcement might cover past and future meetings of this ACAN subgroup. Readers might be interested in a historical overview of which cultures dominate specific periods and the who, what, when of the group. Break up the era (periods) as defined by the dominant group or an emerging culture. For example, from this date to that date this culture dominated the Southwest; and between these dates this was the most advanced group culturally (and why it was the case.)"

Only one production group went beyond this type of assignment. They asked for a registration form that looked like one from a brochure, but that could be filled in and submitted electronically. This group contained the one class member with previous web page experience.

Features class students took the assignments literally and wrote articles as they would for a newsletter or magazine. When the articles were finally submitted, five weeks later, the *Advanced Technical Writing* students still had no clue anything was wrong. But as soon as the articles came in, the web building project began in earnest and it wasn't long before more serious
problems began to arise. The first of those had to do with visuals. Realizing that not one group had requested visuals in their article assignments, the management team urged the production groups to secure visuals that might be used in their pages. The various production groups acted in different ways. Most looked for visuals to scan. One group, the one with the student with prior web experience, spread the word that downloading from the web was the way to go.

It is hard to determine exactly when students first became aware that the new media was going to be a factor, but both the management and production groups started to show signs of increasing problems very early in the project. The management group found a graphic on the web that they decided to use both as a cover visual for the home page and as a motif for smaller headers on subsequent pages. They spent a good deal of time trying to download it, and even more trying to overlay text on it.

At about the same time, the production groups started to recognize that long blocks of text were not attractive on the web and perhaps, beyond that, were difficult to read. At first, they began to look for ways to break long articles up into smaller chunks. As this failed in most cases, groups chose one of two options. Some kept the long article format, in spite of the liabilities, and others choose to use the information in the articles and rewrite blocks of copy that were smaller and more conducive to web page design.

And yet, even with these wake-up calls, students still did not look at the medium as a factor. Instead, they saw the problems at hand as immediate, isolated difficulties to be solved, rather than as symptoms of a larger issue that remained as yet unaddressed. As a result, production groups were again surprised when they discovered they needed to select backgrounds for their pages. The management committee by this time had begun to catch on to the difficulties of the medium. They had selected a texture that came in a dozen colors and downloaded them for use by all. The production groups were asked to pick the colors they wanted to use and copy them from a master disk. All groups were surprised by the request. In spite of having seen dozens of web page sites prior to beginning the project, some students were unaware of the existence of background color and textures on web pages. They simply hadn't noticed them. It turned out the production groups were much slower to realize the full magnitude of the situation than the management group, and it left them in a rather deep hole when deadline time came around.
Surprises were again the order of the day as students discovered that borders, and button bars were expected. The mass confusion as production groups set out to learn each others' filenames for hot links subsided only when the management group took control of the situation and created a paper model of the site showing the names of all pages and their links. As the project progressed, students found themselves struggling to modify texts, visuals and design plans in an attempt to adapt them to the new medium, something they had completely overlooked throughout the long planning and construction process. It was only at this time that students began to realize that writing and production of web pages was very different from writing and production for the various ink and paper media.

The table below identifies some of the major differences between print and web pages as indicated by the findings of phase I of this study.

Phase II Results

As mentioned earlier, phase two began with a different presentation by the instructor. Students were told that the rhetorical situation for the web is dramatically different than anything they had encountered before. There was a concentration on media changes. Prior to being sent out to look at web sites, students were asked to pay special attention to some of the media-specific issues that surface. Their attention was called to types of visuals, buttons, borders, textures, background colors, etc. While it can't be attributed directly to the discussion of media differences (causality), student experiences in phase two were dramatically different from those in phase I.

Students discussed early on the irritation they felt with the long waits for document loading and decided that loading time would be a major concern in their design plans. They decided to use only gif file visuals, for example, because they load faster. This concern with load time later led to the discarding of background textures in favor of just background colors which tend to load much more quickly.

The writing itself proved to be dramatically different as well. Not one piece of text was in article form. There were lists, brief paragraphs of explanation, even two to three paragraph descriptions, but nothing that approached even the shortest of articles created by students in phase one.
The site they designed required a substantially greater number of in-site connections than that of phase I. For example, there were descriptions of several courses that could be accessed from an advising guide, an explanation of the Professional Writing major, or an explanation of the Professional Writing minor. Links were made from each of these pages to individual courses, so the number was substantial. These links were discussed from the beginning and, while some were done last minute, none came as surprises to the students as they had been planned for in the original design.

Rethinking Rhetorical Training

The results of this study suggest that an understanding of audience, subject, and the writer's purpose alone is no longer sufficient to produce a document or publication in all cases. The advent of the World Wide Web has created a situation where, in order to be able to construct a communicative text that works, writer/producers must take into consideration another parameter—the medium. Subjects in phase I of the study failed to do this and fought an uphill battle as a result.

Why did they fail to take media into consideration? They had, after all, seen many web pages in the early stages of this project. Surely they knew that pages included visuals, backgrounds, button bars and hot links. Why did they fail to incorporate them into their planning? Perhaps the answer lies in the fact that nothing in their rhetorical training, be it from composition or professional writing classes, prepared them for such an eventuality. The rhetorical situation, as defined by Kinneavy, takes into account reader, writer and subject. The interaction of reader and writer leads to communicative purpose. Most professional writing textbooks derive communications from a combination of purpose and audience. But nowhere in the process do we give a thought to the effects of media. Certainly, we use different media to produce documents and may talk about how that media changes the process (computers and revision), but to actually include it as a parameter in the planning and production process is a new notion. Students were not prepared for the difficulties of making the rhetorical transition necessary for the media shift.
Phase II students, on the other hand, were presented with the importance of exploring the media as a "different animal." Before going out to "surf" the web, they were told about the uniqueness of this new media and were given clues as to the kinds of things to look for. The concentration on media seemed to make a major difference.

Perhaps this should make us rethink the way we conceive of, and teach rhetorical situation. It would be easy to look at the results of this study and say that what we are seeing is uniquely a phenomenon of the World Wide Web. If that were the case, we could simply begin any teaching of web page building by dwelling heavily on the unique points of the medium, much as was done in phase II of the study. While this may solve the immediate problem, the fact is, we do not know what the future will bring for us in the way of other new media. I would further argue that the current model is not only inadequate for the cyber age, but actually has been failing us for some time.

As an example, consider the experience students have when producing their first brochure. The unique traits of the medium leave students at a loss and they are often surprised to find some panels upside down, or not in the right place when the brochure is folded. Writing issues such as type and length of text are also different from other print media. In many ways the brochure is more like the web page than a print media document. Because the current rhetorical model does not view medium as a part of the rhetorical situation, students are ill-prepared for brochure writing and production and the teacher is required to spend a good deal of time on the idiosyncrasies of the medium if they are to have success. It is important that students be able to negotiate new media on their own, in the same way they negotiate new audiences and purposes. If they are not equipped to do that, they are not ready for the work world.

If we have these two exceptions to the traditional rhetorical situation now, is it not possible, even probable, that others will follow? Perhaps hypertext will become the word processing medium of the future. Then what?

Yet even if that never happens, we do have to prepare students for writing in all media common today, including the World Wide Web. Such training
should equip them with the ability to write for all media without the level of difficulty students in phase I of this study experienced.

A New Model for the Rhetorical Situation

The Kinneavy model of the rhetorical situation accounts for reader and writer, and the interaction between them. That interaction gives rise to the purpose of the document, that is, the communicative intent of the writer. An examination of the reader tells us about the individual, about knowledge levels, about department politics and much more. Adding subject matter to the model accounts for jargon and other idiosyncrasies of disciplines.

Had the subjects in phase I of this study gone a step further and taken media into account as part of the rhetorical situation, they might have asked themselves, early in the planning process, questions that the phase II subjects addressed—questions such as "What browser is my audience using and what affect will that have on my package?" or "How will the audience find this page on the internet?" They also might have made significant changes in the processes they went through. They probably would have made different kinds of writing assignments, opting for smaller bundles of information as the phase II subjects did, instead of full-blown articles. Factors such as background color and texture, visuals, borders and button bars might have been a part of the earliest planning and would not have caused the massive delays late in the production process that they did. The students might also have decided to work much more collaboratively, as one big project team. They might have created a model of the page earlier in the process. Had they done so, identifying a common file nomenclature to be used throughout, much of the confusion about hot links would have disappeared. In short, considering the media as a part of the rhetorical situation would have made phase I subjects perform more like the phase II subjects did.

So how do we model this new rhetorical situation? Certainly every point of Kinneavy's rhetorical situation is valid with the new medium. As such, they need to be present in the new model. It is simply a matter of working in a consideration of media in such a way as to accurately represent the interactions of the principle points. By adding a fourth point to Kinneavy's
triangle to represent media, and by placing it between writer and reader, we
can cover not only the effects of media directly, but also the interactions
between the reader and the media. How do individual readers approach the
media? If they make hot links quickly, text must be shorter. Do they read all
parts of a site, or just pages that catch their eye?

We also, in this way, account for the interaction between writer and the
media. How does the writer apply HTML? (By editor? Word processing
package?) How does it change the writer's creative and planning processes?
What does the writer need to do to plan for medium-based issues, such as
borders, button bars and backgrounds.

Instead of the traditional triangle, today's rhetorical situation might better
be modeled as a diamond, with the new, lower point representing media.

This new model works equally well for web pages and ink and paper
media. Should linear word processing be replaced by hypertext in the future
(a likely occurrence, I contend), the model still works. For example, a writer
doing a recommendation report for an ink and paper medium might choose
to write an introduction that sets the context and then move immediately to a
summary that is written for the manager audience. From that point, the
remainder of the report, most often written for a technical audience, would
follow in "logical" order (e.g. Problem, Method, Data, Discussion,
Conclusions, etc.). Had that same report been created in an electronic
hypertext format, for example, the opening page might be a combination of
context and summary, but it must also contain hot links or buttons
connecting to other pages deeper in the report structure. And those deeper
pages might be organized by topic (conclusion), rather than in logical order. There might be a group of pages for design, another for cost, etc.

The differences pervade the formatting of the document as well. Ink and paper reports of this type require subheads that serve as road maps for managers who want specific information, generally to answer questions they have about the information presented in the summary. The subheads eliminate the need to read the entire report to find the desired information. This is not an issue the writer need be concerned with in the hypertext media since the reader accesses what she needs simply by clicking on a hot link. There is no thought given to locating information in a massive report, so subheads may not even be necessary.

How might a consideration of media differentiate between writing tasks on the web and ink and paper media? Let's look at the task facing a conference organizer. Presenting information about an up-coming conference in another city on traditional ink and paper media probably means collecting several documents and putting them together in a mailer. Documents like conference programs, hotel information, registration information and brochures about the sightseeing prospects in the city would have to be collected and mailed to participants or used as sources for one large document to be written by the conference organizers. A writer doing the same task on the web might certainly put some information on the web, such as the conference program, but information about the city, for instance, requires only a hot link to that city's home page. So rather than collect brochures for remailing or collecting information for articles that must be written, the writer need only identify the URL for the city's home page, a very different kind of process.

One might ask, why not just think about the conventional triangle in a different way, a way that incorporates media at each of the three points. While that certainly would be adequate for our understanding of the rhetorical situation, we must remember that the triangle is more than a rhetorician's model. It also serves as a heuristic for writing students in their early planning stages. It is not practical to ask high school or college students just learning to write to look at the triangle more theoretically, with an eye toward media at each point. Instead, it is important that they see the media as an integral part of the equation for writing, today and in the future. We might be able to teach media differences as they come up in our classes, but
what about the new media students encounter after school, in the workplace. They must be able to negotiate these changes on their own.

**Suggestions for Further Study**

This study looked only at the writer/producer's perspective on the rhetorical situation. Have the new media also affected readers? It seems likely that the shorter blocks of text, hot links, increased visuals and other multimedia inserts might affect the way readers approach a document. How do readers negotiate a collection of hot links? How far down do they go before rising back to try a sister link? All of these issues, when studied, could give us more insight into a rhetoric for the World Wide Web. This study was merely a step in that direction.

While the Kinneavy model has served us well for two generations, and in principle, since before Plato, the advent of hypertext and the World Wide Web have created a situation where the old model falls short. By adding a fourth point, media, to the old triangle, we have a model that takes into account the dramatic change in communication we are experiencing today and can expect into the future.

By presenting this model to students early in their rhetorical training, we can prepare them for their inevitable introduction to writing on the web, brochure production, and any future advances that may come their way. For those already proficient in writing for industry, a thought given to the effects of media on the communicative situation during every phase, but especially the earliest planning phases of a document will become more and more necessary as hypertext evolves and other new media spring up.
Table 1: Comparative Media Traits as Experienced by Phase I Subjects

<table>
<thead>
<tr>
<th>Print Media</th>
<th>Hypertext Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longer text</td>
<td>Shorter chunks of text</td>
</tr>
<tr>
<td>Article/Report format</td>
<td>Lists often replace text</td>
</tr>
<tr>
<td>Linear organization</td>
<td>Hierarchical organization</td>
</tr>
<tr>
<td></td>
<td>Concern for filenames, hot links</td>
</tr>
<tr>
<td>Graphic elements limited to highlighting text and a few visuals</td>
<td>Graphic elements include:</td>
</tr>
<tr>
<td></td>
<td>Highlighting text, visuals, borders, backgrounds and some purely aesthetic visuals</td>
</tr>
<tr>
<td>No concern for audience hardware or software issues</td>
<td>Concern for visibility of all elements and speed of loading</td>
</tr>
</tbody>
</table>
REFERENCES


[9] M. Moore, "The effect of word processing technology in a developmental writing program on writing quality, attitudes towards composing, and revision strategies of fourth and fifth grade students,"

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