It's All in the Rhetoric: Using Affective Design to Change Users' Perceptions of Online Help

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IT'S ALL IN THE RHETORIC: USING AFFECTIVE DESIGN TO CHANGE USERS' PERCEPTIONS OF ONLINE HELP

by

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B.A. University of Central Florida, 2000

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Department of English in the College of Arts and Sciences at the University of Central Florida Orlando, Florida

Fall Term
2003
ABSTRACT

This thesis investigates the role of affective design in online help systems. The thesis begins with a discussion of the current research related to online help systems and the rhetorical nature of technical communication. The thesis then provides a heuristic evaluation of two versions of procedural discourse for Microsoft Word 2000. Based on an analysis of the heuristic evaluation, five recommendations are given for improving the affective design of online help systems. The thesis concludes with a proposed usability test and consideration of a related area of study.
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CHAPTER ONE: CHANGING PERCEPTIONS

I first became aware of some users' aversion to online help systems while working for a local publishing company. One day a co-worker asked me how to complete a task in Microsoft Word. I did not know how to perform the task, so I asked my co-worker if she had tried using the online help system. She told me she never used the online help system because she felt online help systems were written above her level, containing technical language that she would not understand. Having used Microsoft's online help system before, I knew that the system was quite usable, and I found the instructions to my co-worker's desired task with relative ease.

I recognized that my co-worker's dislike of Microsoft's online help was probably the result of a bad experience, undoubtedly with the help system for a completely different software program. But the experience was enough to keep her away from other online help systems. Even if my co-worker's experience was with an earlier version of Microsoft's online help, the experience led her to label future versions unusable.

My co-worker's attitude toward online help exemplifies an important principle in technical communication: the specifics of a technical document can be easy to change, but users' perceptions can be quite difficult to change. A technical communicator can add screen captures, correct spelling and grammar mistakes, re-write a procedure, or even delete several screens. However, once users label a particular document, or an entire medium, unusable, it is very difficult for developers to convince users of the document's usability.

Researchers have not conducted extensive studies concerning user perception of online help systems. The available research demonstrates, though, that many users avoid
using online help, suggesting users believe online help is an inefficient and unhelpful means for learning about a software program. I discuss this research in more detail in Chapter 2. Poor user perception is best understood within the context of technological evolution.

**Technological Evolution and Online Help Systems**

The history of technology is a history of evolution. Technologies that were once cumbersome and complicated have evolved into technologies that are now ubiquitous and easy to use. Technologies that were once intended for a small segment of the population have evolved into technologies that are now used by the general population. Technologies that were once unreliable have evolved into technologies that are now unquestionably reliable.

Theorists describe technological evolution in terms of a lifecycle (Norman 24-31). Like humans, according to these theorists, technologies experience a life cycle that includes birth, adolescence, and adulthood. The lifecycle presumably includes, at least for some technologies, death. When technologies are first created, and throughout their adolescence, they are less usable, their development often driven by a rush to add features more for marketing purposes than for concern about user needs. By the time a technology reaches adulthood, it is “mature, stable, reliable” (Norman 28). For mature technologies, the rush to add features simply to have more features is over.

Once a technology reaches maturity, factors other than usability issues enter the picture when a consumer decides to buy the technology. Donald Norman offers the wristwatch as an example (29-30). When consumers purchase a wristwatch, they do not
base their decision on which wristwatch keeps time more accurately. Fashion plays a much larger role. The accuracy of wristwatches is assumed, because wristwatches are a mature technology, having reached “adulthood” in their technological lifecycle.

Unlike wristwatches, online help systems are not a mature technology. Not all online help systems function as well as others. They provide users, at best, with uneven experiences with the medium. Unfortunately, users’ perceptions are established long before technologies fully mature. Today’s online help users have perceptions about online help that stem from experiences of past online help systems, which are not the best communication products that technical communicators have produced.

The Road To Recovery: Working Toward Changing Perceptions

Because perceptions form before technologies fully mature, technical communicators face a difficult problem: how to make communication products that meet user needs and combat pre-existing perceptions. Technical communicators have made great strides in tackling the first part of the problem. Degree programs in technical communication, national and international technical communication societies, and quality publications, from journals to textbooks, have resulted in improved technical documents that meet user needs.

Now technical communicators need to focus more closely on how to address the second part of the problem, user perceptions. Some may claim that the way to change user perceptions is to continue to improve technical documents, and eventually user perceptions will change. While this may be true, the process is slow, and technical communicators, and the companies that employ them, cannot afford to wait until
perceptions change in this manner. Technical communicators must take a more proactive position.

One of the many possibilities for taking a more proactive approach is to study the rhetorical dynamics— the interplay of ethos, logos, and pathos— of online help systems, to identify any weaknesses in the rhetorical dynamics, and to devise a strategy that will rectify the weaknesses. A weakness in many online help systems is the ineffective use of pathos. Technical communicators who doubt the appropriateness of pathos in technical communication need only to look at the success of third-party books, such as the *For Dummies* series, to see that pathos is a key element to an effective rhetorical strategy. I believe that a critical look at the role of pathos in a third-party manual can reveal ways to incorporate pathos into online help systems, and as a result improve users’ perceptions of online help systems.

In this thesis, I examine the role of pathos in *Word 2000 for Windows for Dummies*’ rhetorical dynamics and make recommendations for incorporating pathos into online help systems. I base my recommendations on my analysis of a heuristic evaluation I conducted of *Word 2000 for Windows for Dummies* and Microsoft Word Help. I used Saul Carliner’s three-part framework for information design as the basis for the heuristic evaluation, which allowed me to look holistically at the rhetorical strategies for both documents.

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1 Rhetorical dynamics refers to the interplay of ethos, logos, and pathos in a technical document. The word “dynamics” emphasizes that the relationship between ethos, logos, and pathos is not static. Most studies involving online help systems ignore this interplay. Even when studies do acknowledge the rhetoric of technical documents, including online help, they rarely discuss the pathos of the documents. This is unfortunate because technical documents often present a strong ethos and logos to users, but fall short in using pathos effectively.
In Chapter Two, I discuss the literature related to online help systems, and contextualize it within rhetoric and technical communication. In Chapter Three, I provide the heuristic evaluation of *Word 2000 for Windows for Dummies* and Microsoft Word Help. In Chapter Four, I offer an analysis of the heuristic evaluation and recommend ways to incorporate pathos into online help systems. And in Chapter Five, I suggest a possible usability test, using Microsoft Word Help, to evaluate the effectiveness of my recommendations.
CHAPTER TWO: TOWARD AN UNDERSTANDING OF THE
RHETORIC OF ONLINE HELP: A REVIEW OF THE LITERATURE

When Users Don’t Want Help

The previous chapter began with a story about a co-worker who refused to use online help to solve a software application problem. Her aversion to online help has echoes in technical communication research. Jean Pratt observes that “[o]ne of the ironic things about online help systems is that they are very often not helpful and even increase the users’ frustration and stress level” (33). Some of the most frequently listed online help user complaints include: the language is too technical; the information is too superficial; and the information is inaccurate, incomplete, or out-of-date (Fisher 364). But more often than not, users do not find out if, or never learn whether, online help systems contain overly technical language or superficial information, because, as Trevor Grayling found out while testing his company’s online help system, users will go to “extreme lengths…to avoid using the Help menu” (170).

Pratt’s and Grayling’s comments, as well as my own experience, illustrate a problem with current online help systems: sometimes they are not usable, and even when they may be usable, users tend to perceive them to be something to avoid. If technical communicators want to write and design effective online help systems, they will have to overcome some users’ aversion to online help by working to change the negative perceptions users have of online help systems.

In this chapter, I examine the literature related to online help studies, as well as literature related to the rhetoric of technical communication. Through my examination of
these two areas of technical communication, I demonstrate that online help systems are an important method of conveying information to users, and since they are technical communication products, online help systems are fundamentally rhetorical. However, because of past neglect of this rhetorical nature, especially in regards to pathos, many help systems are not as effective as they can be, helping to create and maintain negative perceptions of online help systems.

Online Documentation and Online Help Systems

Online help systems are just one form of online documentation. In Designing and Writing Online Documentation, William Horton describes seven types of online documentation: help facilities, online books, computer-based training programs, read-me files, online catalogs, guided tours, and messages. Online help facilities “provide quick access to specific information needed while operating the product” (Horton 18). Online books and online manuals “provide detailed reference information” (Horton 19). Online books are organized and accessed much like traditional print books and manuals, and users can use online books without running the program (Horton 19). Computer-based training programs teach concepts and procedures through a series of lessons in which the users participate (Horton 19). Read-me files are simple memos “to the user, typically to point out exceptions and present last-minute information,” such as undocumented commands and uncorrected bugs (Horton 21). Online catalogs are simple databases, which “make accessible information about a large number of similar items” (Horton 22). Guided tours introduce novices to the product by leading them through the product’s
displays and menus (Horton 23). And messages “are small pieces of information automatically displayed to guide users of a computer program” (Horton 23).

Making Online Help Usable

Many researchers have provided practitioners with practical advice on how to create usable online help systems. In *Standards for Online Communication*, JoAnn Hackos and Dawn Stevens discuss how to analyze users’ needs, how to design an online system, and how to implement the design of an online system. To analyze the users’ needs, Hackos and Stevens recommend conducting research about user needs, creating user profiles and use scenarios, determining the stages of use (for example, novice, advanced beginner, competent performer, proficient performer, and expert performer), and categorizing information needs (for example, procedural information, conceptual information, reference information, and instructional information) (Hackos 20-54).

In discussing how to design an online help system, Hackos and Stevens suggest providing context sensitivity, partitioning the subject matter, organizing the system’s topics (for example, alphabetical, sequential, or logical), and adding hypertext links. They also recommend ways to structure the system’s topics (for example, how to plan information flow, how to choose the building blocks of the topics, and how to construct an information topic from the building blocks) (Hackos 109-174). To implement the design of an online help system, Hackos and Stevens advise

- Designing the information interface by carefully choosing the appearance of the text (for example, use large font sizes and avoid too many font changes), providing an effective layout (for example, be consistent in the format and design
of display screens and avoid horizontal scrolling), incorporating color, and choosing an effective metaphor for the online help system (Hackos 209-223)

- Ensuring accessibility by providing context sensitive help, a table of contents, indexes, and multiple search methods, such as full-text search, Boolean search, and natural-language search (Hackos 225-256)

- Providing navigation aids, writing for readability, and adding graphics (Hackos 257-324).

Recent usability studies have also provided valuable insight into how to design usable online help systems. Grayling, in “Fear and Loathing of the Help Menu,” describes the findings of usability tests conducted on the help systems for database searching software produced by MDL Information Systems, Inc. He notes that users rarely used the help, and when they did they read help information hastily, made poor and inaccurate hyperlink choices, quit early, and did not look at “general information” (Grayling 171). Grayling concludes that in order for online help to be effective, it must meet five criteria: be context specific, easily available, obvious to invoke, useful, and non-intrusive (Grayling 175). In a later study, Grayling tested two browser-based embedded help systems, using the five criteria as a guide. Grayling found that “the testers did use this form of embedded help,” and “they found it useful” (Grayling 208).

Elements of instructional design have also contributed to the field of online help studies. Pratt offers five suggestions, adapted from instructional design, for creating effective help systems. First, Pratt suggests using imperative, task-oriented procedures. Imperative, task-oriented procedures fulfill the typical user’s need for specific instruction on how to complete a task. Second, Pratt suggests providing the users with feedback,
which will answer questions users may have about their progress. Third, Pratt suggests offering access to additional instruction. This could be used to incrementally increase a user’s interaction with the software, while reducing the need for assistance. Fourth, she suggests allowing the users to practice what they learn. While practice is a common element in instruction, it usually is not included in help systems. Fifth, she suggests including philosophical/conceptual explanations for completing a specific task. Helping users to understand why they are completing a procedure will help them master the procedures more quickly and be more creative in their use of the software (Pratt 34-36).

Some researchers have challenged the traditional practices of online help design. Tomasi and Mehlenbacher, for example, question the minimalist approach to online help documentation, claiming that “this focus may limit designers to providing skills-based training rather than imagining how to support long-term user performance” (56). Tomasi and Mehlenbacher also question the use of the book metaphor in many online help systems. Metaphors are powerful tools for shaping how a user conceptualizes an online program, and the book metaphor may be too restrictive (Tomasi and Mehlenbacher 63). According to Tomasi and Mehlenbacher, by using different metaphors in online help systems, “we might begin to design, organize, and present information in ways that we have not imagined previously” (63). Ultimately, Tomasi and Mehlenbacher argue that online help systems are in need of re-engineering (56). The problems that many users have with online help systems are evidence for the need for change.
Embedded Help: A Solution?

The need for change has led some developers to propose embedded help as a solution to many of online help’s problems. Embedded help is “user assistance that is part of the behavior and real estate of the user interface of a software application, rather than a separate window that floats (often to our dismay) above, or sometimes behind, a software application” (Mobley and Deloach 11). Barker describes several types of embedded help (79). “Flyout help” appears on the screen at a user’s request, for example, when a user presses “F1.” “Do it for me help” contains links within a help system’s procedures that connect users to the part of the software described in the procedures. “Popup definitions” are small screens, activated by a mouse click, containing definitions. And “roll-overs” are pop-up definitions that appear when a user rolls over an item on an interface.

Embedded help, like other “solutions” to the problems of online help, may in fact make online help more usable. Users may be able to find needed information more efficiently, continue to work while they receive help, and avoid getting lost in the help file, which are common problems with standard help systems, according to Paul Mueller (24). However, if a fundamental problem with online help is a gap between the online help system and users’ emotional response to the help system, then solutions such as embedded help may be insufficient to change users’ perceptions and future usage patterns. I discuss embedded help further in Chapter Four in the section titled “Embedded Help Revisited.”
Information Design and Online Help Systems

The design and user perception of online help systems can be greatly benefited from the field of information design. Information design, according to Janice Redish, "is what [technical communicators] do to develop a document (or communication) that works for its users" (163). Information design can refer to two aspects of document development: the overall process of developing a document, and the way information is presented on the page or screen (Redish 163). Redish claims that it is important for technical communicators to understand both meanings of information design and how they relate to each other, especially with the need for communication on the Web and the development of single-sourcing (165-166).

Saul Carliner, in “Physical, Cognitive, and Affective: A Three-part Framework for Information Design,” expands Redish’s definition of information design: For him it is a process of “preparing communication products so that they achieve the performance objectives established for them.” This involves

1. Analyzing communication problems
2. Establishing performance objectives that, when achieved, address those problems
3. Developing a blueprint for a communication effort to achieve those objectives
4. Developing the components of the planned communication effort solution
5. Evaluating the ultimate effectiveness of the effort (564).

For Carliner, information design is essentially problem solving. His three-part framework is a model of information design that can guide technical communicators in producing
rhetorically effective information products. In Chapter Three, I develop Carliner’s framework into a heuristic for evaluating the rhetorical strategies of online help systems and third-party manuals.

The first part of Carliner’s framework is the physical level. According to Carliner, “From the users’ perspective, good physical design lets them find information of interest easily” (564). The central question for the physical level of information design is “Can users find the information?” The second part of Carliner’s framework is the cognitive level. The central question for the cognitive level of information design is “Once users find the information, can they understand it?” The third part of Carliner’s framework is the affective level. Carliner explains the affective level as “designing the communication product for its optimum emotional impact” (568). The central question for the affective level is “If users can find the information they need and understand it, is it written in such a way that users will want to use it and perform the intended tasks” (Carliner 568)?

Carliner’s three-part framework for information design can be used to evaluate the rhetorical effectiveness of online help systems. However, such a use of Carliner’s framework presupposes an acceptance of the rhetorical nature of technical communication.

**Technical Communication and Rhetoric**

Rhetoric is defined as “the art of persuasive writing or speaking” (Jones 278). Aristotle described three modes of rhetoric: ethos, logos, and pathos. Ethos refers to “the speaker or writer’s character, integrity, competence, and objectivity” (273). Logos refers
to “the nature of the message or the quality of the data” (275). And pathos refers to “convincing the audience through appeals to emotion” (277). Aristotle’s three modes of rhetoric provide a means for technical communicators to create effective technical documents.

Technical communication is fundamentally rhetorical. That is, technical communication is a fundamentally persuasive undertaking. Technical communicators—whether writing computers manuals, feasibility reports, or online documentation—aim at persuading their audience to take a particular action, to understand a concept or product, or to accept the findings of a report.

Some researchers, however, have dismissed the rhetorical nature of technical communication. They reveal their attitudes about the rhetorical nature of technical communication in their descriptions of the language used in technical documents. For example, in his 1965 article titled “What is Technical Writing? A Redefinition,” W. Earl Britton declared that technical writers should strive to convey “one meaning and only one meaning” (24). Britton’s view of language is best described by what Carolyn Miller calls the “window pane theory of language,” which states that “language provides a view out into the real world, a view which may be clear or obfuscated” (114). Following the window pane theory of language, technical communicators have the responsibility to make sure the view out into the real world is clear and not distorted. Thus the role of the technical communicator is less of a rhetor and more of a faithful observer and transcriber of nature and technological advancement. If a reader interprets a document “incorrectly,” the fault lies with the writer for writing in a way that allowed more than one interpretation.
In recent decades, researchers have questioned the window pane theory of language, and in doing so they have argued for the rhetorical nature of technical communication. For example, Daniel Marder refutes the window pane theory of language when he writes, “messages are carried in the human mind, in a subjective web of words and interpretations” (84). Rather than offering a clear window out to the world, language offers a subjective view of the world that can be interpreted in many different ways. Writers must convince the reader to accept an interpretation of reality. A technical communicator who is writing a feasibility study must persuade the reader to accept the feasibility of a project. A technical communicator who is documenting a software application must persuade the reader to accept a description of the software application.

The view that technical communication is fundamentally rhetorical is closely tied with the New Rhetoric. According to Halloran, “this ‘new rhetoric’ begins from the assumption that all discourse is somehow addressed to an audience, either real or imagined, and takes as its responsibility the elucidation of how speakers or writers adapt to and shape their audiences” (70). New rhetoricians view written discourse within the context of a writer/reader interaction, where meaning is not objectively conveyed by the writer but is socially constructed as writers adapt to and shape, or persuade, an audience. Essentially, knowledge is a social construction arrived at by “communal assent” (Miller 116).

The new rhetoric replaces the positivist view of scientific and technical communication with a rhetorical view. New rhetoricians view technical communicators as co-creators in the social construction of knowledge and meaning. Technical
communicators collect, shape, and present information in a way that persuades an audience to agree on one version of reality over another.

The Rhetoric of Online Help Systems

In 1994, as online documentation was emerging as a prominent new medium, Horton wrote, "We must move quickly to develop a new rhetoric based not on literary tradition, but on human factors—how people see, understand, and remember. It must embody principles that apply to documents people use as part of their work, not just documents read for pleasure or amusement" (398). However, the rhetorical nature of online help systems has been widely ignored, and, in some cases, rejected: "In online documents, writers often cannot predict exactly when and for what purpose the user will read a topic...Because of this unpredictability, writers are often advised to make online topics 'rhetorically neutral'" (Horton 105). In Hackos and Stevens’ book, Standards for Online Communication, the rhetorical nature of online documents is never mentioned.

Despite this lack of attention, "The understanding of rhetorical principles and practice can bring as much needed insight into the computer documentation field as the most carefully executed empirical study" (Coney 23). As noted previously, technical communication is rhetorical in nature, persuading an audience to accept one version of reality over another. In writing about print documentation, Coney and Chatfield observe, "No how-to manual simply informs. It calls on the reader to perform a certain action or hold a certain conviction...the reader is moved towards the author’s perception of some particular aspects of the world" (Coney 25). Writers and designers of online help systems need a model that will help them evaluate the rhetoric of their help systems.
While Carliner does not propose his three-part framework for information design as a rhetorical model, it closely resembles Aristotle’s three modes of rhetoric, and Carliner’s framework can be used to evaluate the rhetoric of online help systems. The physical level of information design, which concerns the ability of the user to find information, most closely relates to ethos, or the credibility or character of the author and the text. One of the best ways to establish a credible and authoritative ethos with an audience of a technical document is to provide the audience with access to the information that they need.

The cognitive level of information design is similar to Aristotle’s logos, which involves “the nature of the message or the quality of the data.” The key question of the cognitive level is “Once users find the information, can they understand it?” A common complaint about online help systems is that they are not written in a way that users can understand. The cognitive level of design and logos are concerned with the nature and quality of the message.

Carliner describes the affective level of information design as “designing the communication product for its optimum emotional impact” (Carliner 568). This closely relates to pathos, which involves “convincing the audience through appeals to emotion.” The affective level of design focuses on the fact that technical documents, including online help systems, must do more than provide accessible and understandable information. As the incident with my former co-worker illustrates, if users do not want to use an online help system, they will not, regardless how well designed the system is. The affective level of design and pathos are concerned with motivating users by appealing to them on an emotional level.
Even though some researchers have argued for a need for change in online help systems, few have written about the rhetorical implications that proposed changes would have on online help systems. That is, they have not discussed how their practical advice affects the ethos, logos, or pathos of online help systems. For example, Pratt does not discuss the rhetorical implications of her five suggestions for online help design, even though they clearly have rhetorical implications. Pratt suggests using imperative, task-oriented procedures, which is directly related to Carliner’s cognitive level of design, answering the question “Once users find the information, can they understand it?” Yet, she does not discuss how imperative, task oriented procedures may affect the ethos of the system, or how the dry tone of imperative, task-oriented procedures may influence the emotional response of users. While such areas of inquiry may have been beyond the scope of Pratt’s study, few researchers have discussed such rhetorical implications.

Tomasi and Mehlenbacher have argued that the rhetorical differences between online and print documents “undermine deeply ingrained habits and rhetorical strategies, a fact that suggests we may need to explore alternative methodologies for developing online documentation” (56). One possible alternative method is to incorporate the human element and pathos into online documentation.

**Online Help Systems and Emotion**

In the 1960s, Britton argued that the purpose of technical communication is to use language objectively to convey a single meaning, a single truth. Britton’s view ignores not only the complexity of human language, but also the complexity of human emotion, which is conveyed, knowingly or unknowingly, in every document a technical
communicator produces. The likelihood of conveying or eliciting a single, unambiguous emotion to or from a person in any human interaction, including a written communication product, is virtually non-existent. And despite the complexity of conveying or eliciting human emotion in communication products, pathos is the least researched of the rhetorical appeals.

Joseph Weizenbaum, also working in the 1960s, flirted with the emotional impact of technology on humans when he created ELIZA, a program that was designed to interact and carry on a dialog with users. Later, though, Weizenbaum said that “substituting computer interaction for personal contact...is obscene and immoral” (Horton 252). In 1978, Harris argued that “technical writing is not concerned with motivating the reader to read it and it tries to avoid emotional appeals” (59). And as late as 1999, Fisher claimed, “the information must be presented ‘unambiguously and unemotionally’” (360). While in many cases avoiding emotional appeals is advisable, adding “the human element” to technical documents can serve a valid purpose. Whitburn notes, “the human element is likely to enhance many kinds of communication involving the adaptation of an audience relatively unfamiliar with the subject being presented. Personality in such a communication can help stimulate interest” (76).

Some online help systems may benefit from the inclusion of the human element and emotional appeals to stimulate interest and motivate users. For example, an online help system may benefit from emotional appeals by attempting to attract the attention of users, addressing users’ attitudes, and acknowledging the social and political impact of the document (Carliner 568-569). These are just a few ways to appeal to users’ emotions.
Implementing affective design is one of the greatest challenges for technical communicators (Carliner 569).

In Chapter Three, I discuss a heuristic evaluation I conducted of an online help system and a third-party manual. In Chapter Four, I provide an analysis of the heuristic evaluation and recommendations for implementing affective design in online help systems.
CHAPTER THREE: THE HEURISTIC EVALUATION

Nobody likes to be called a dummy. Yet, Americans have catapulted the *For Dummies* series to bestseller status. The implication is not quite clear: are we dummies? Are we actually smart, but we sometimes need things explained to us as if we are dummies? Or is it a little of both? Whatever the case may be, Americans have purchased titles as diverse as *Beer for Dummies*, *Marriage for Dummies*, and *DOS for Dummies*. The simplicity implied in the books’ titles is perhaps one explanation for their popularity. But simplicity is hardly the entire picture. The computer-related *For Dummies* books, through the use of humor and an anxiety-soothing personal tone, offer a welcome contrast to traditional software documentation.

In this chapter I provide a heuristic evaluation of *Word 2000 for Windows for Dummies* and Microsoft Word Help, Microsoft Word 2000’s official online help system. In heuristic evaluations, “usability experts judge the usability of a product against a specific set of heuristics, or principles” (Barnum 35). Ultimately, the purpose of this evaluation is to analyze how *Word 2000 for Windows for Dummies* uses affective design and how affective design strategies used in *Word 2000 for Windows for Dummies* can be transferred to online help systems. Since there is considerable overlap among the physical, cognitive, and affective levels of design—I discuss this overlap in greater detail at the end of this chapter—I evaluate all three levels to gain a better understanding of the role of affective design.
Method of Evaluation

The basis for the heuristic evaluation is Carliner’s three-part framework for information design, which I discussed in detail in Chapter 2. While Carliner presents his framework prescriptively, he acknowledges that the prescriptive nature of the framework is one of its weaknesses (570). Technical communicators and researchers can overcome this weakness by adapting the framework to meet their needs. To meet the purposes of this evaluation, I have made some changes to Carliner’s framework, especially at the cognitive level, which I discuss below.

Physical Level

The physical level of Carliner’s framework refers to the user’s ability to find information: “From the user’s perspective, good physical design lets them find information of interest easily” (Carliner 564). Carliner appropriately lists the physical level first. If users cannot find information of interest quickly, they will likely end their search, and the document will have failed. To evaluate the physical level of the two documents, I examine three aspects of physical design:

- Page and Screen Design
  - Does the document have a consistent layout?
  - Does the document make effective use of white space?
  - Do headings allow the reader to scan for information?
  - Does the type help or hinder the search and reading process?
Graphical Devices

- Does the document include graphical devices, such as icons, that call readers’ attention to key elements of information?

Retrievability Aids

- Does the document have a thorough table of contents?
- Does the document have an index?
- If an online document, does the document use hyperlinks to link related information?
- If an online document, does the document present the user with multiple, easy access methods?
- If a print document, does the document contain headers and footers to situate the reader within the text?

Cognitive Level

Once users find the information, they must be able to understand the information in order to use it. Carliner addresses the users’ ability to understand information at the cognitive level of his framework. When describing the cognitive level, though, Carliner focuses on the broad issue of the design process—that is, defining users’ performance goals and finding a solution to meet those goals (Carliner 566). Although the broad focus of the design process can reveal valuable information concerning how technical communicators create usable documents, for this analysis I focus on a specific aspect of this process: the writing used to communicate procedural information to the users.
Diction: In order for users to understand the information, they need to understand the words used to convey that information.²

- What is the diction’s level of technicality?
- Is the diction likely to obscure meaning or facilitate understanding?

Procedures: Procedures are the step-by-step instructions that guide users through a task (Barker 63). This part of the heuristic evaluation was adapted from Thomas Barker’s chapter titled “Writing to Guide—Procedures” (63-91).

- Are the procedures task-oriented or feature-oriented?
- Do the procedures have a task name? Are the task names descriptive?
- Does the author provide overviews that indicate “what the task will allow him or her to accomplish in a work setting” (Barker 83)?
- Are the steps numbered to clearly indicate their chronological order?
- Do the steps use imperative verbs?
- Does the author provide elaborations on the steps (for example, possible mistakes to avoid; definitions of terms; alternatives such as keystrokes, toolbars, or function keys; ways to tell if a step has been performed correctly; or sources of additional information) (Barker 86)?
- Are screen captures used to facilitate learning?

Diction and procedures are only two aspects of a document’s cognitive design. They are, however, key to providing users with procedural discourse that they can understand and use efficiently.

² Carliner places diction in the affective level of design. Diction, of course, can influence both cognition and affective design. I discuss this overlap at the end of this chapter in the section titled “Overlap Among the Levels” and again in Chapter Four in the section titled “Overlap.” For the purposes of this heuristic evaluation, diction will be discussed primarily as a cognitive issue.
Affective Level

Once users find and understand the information, are they motivated to use it? This is the question that Carliner addresses at the affective level of design. To evaluate the affective design of the two documents, I examine four areas described by Carliner (568-569). These four areas, if used effectively, may bridge the emotional disconnect among the users, the documentation, and the software application. Through these four areas of affective design, users such as my former co-worker, for example, can be made to feel at ease about using online help systems.

- Attention: Before users can perform the tasks described in communication products, they need to feel compelled to read about them.
  - Does the document attract users' attention in a way that compels them to read the information?
  - How does the document attract users' attention?

- Motivation: After attracting users' attention, documents must motivate users to use the information in the communication product.
  - Does the document provide motivation for users to use the information?
  - Does the document presuppose that the users will be motivated before turning to the document?
  - How does the document motivate users? (For example, explaining the benefits of a procedure, use of color, use of humor, writing style)

- Change Management: Technology can change the way people work or live.
  - Does the document anticipate changes that may result from the technology being discussed?
How does the document address the anxiety and apprehension that are often by-products of such change?

Legal and Ethical Issues

Does the document address possible conflicts of interest, which may undermine user confidence in the reliability of the information?

Does the document meet its stated and implied promises?

These are not the only affective design principles. Users’ values and beliefs and the political context of the document also influence affective design. And like the physical and cognitive levels of design, the affective level is best understood within the context of the other two levels.

Word 2000 For Windows For Dummies

Background on the Text

Word 2000 for Windows for Dummies (WWD) was published in 1999 by Hungry Minds, Inc. The author, Dan Gookin, described as a long-time computer user, has written several computer-related books for the For Dummies series, including the first book in the series, DOS for Dummies. In the Introduction to WWD, Gookin writes

This book informs and entertains. And it has a serious attitude problem. After all, I don’t want to teach you to love Microsoft Word. Instead, be prepared to encounter some informative, down-to-earth explanations—in English—of how to get the job done by using Microsoft Word (1).
In this brief excerpt, Gookin alludes to and exemplifies the underlying concept behind the *For Dummies* series: “From the start, *For Dummies* was a simple yet powerful concept: Relate to the anxiety and frustration that people feel about technology by poking fun at it with books that are insightful and educational and make difficult material interesting and easy” *(For Dummies Web Site)*. From Gookin’s comments and from the web site’s excerpt, pathos appears to play an important role in the books’ approach.

**Physical Level**

*Page and Screen Design:* Gookin uses a consistent page layout throughout the text. Icons always appear in the left margin of a page. First and second level headings use the same typeface and type size throughout the book. However, Gookin does not effectively use white space. The pages appear crowded with text, and for some users, especially users who are uncomfortable with computer technology, the crowded pages may seem intimidating. Contributing to the appearance of crowded pages is small type size for the body text. While the type size is consistent with most published books, the combination of small type size and little white space adds to the crowded appearance of pages.

*Graphical Devices:* Gookin uses four icons throughout the book to draw users’ attention to key information. The Tip icon “flags useful, helpful tips or shortcuts” *(5)*. The Remember icon “marks a friendly reminder to do something” *(5)*. The Warning icon “marks a friendly reminder not to do something” *(5)*. And the Technical Stuff icon “alerts [users] to overly nerdy information and technical discussions of the topic at hand” *(5)*. The four icons appear in the left margin of pages throughout the book.
Gookin makes minor use of screen captures. Partial screen captures are the most common screen captures in WWD; they illustrate specific windows, icons, and drop-down menus. Gookin provides few full screen captures.

**Retrievability Aids:** Gookin provides two tables of contents: a Contents at a Glance, which is a two-page general overview of the book’s contents; and a Table of Contents, which offers a more thorough look at the book’s contents. At the end of the book, there is a 13-page index, and throughout the book headers situate the reader within the text by providing the page number, part number and title, and chapter number and title. Each of the retrievability aids allows the book to serve as a reference source, which the author claims is the appropriate manner to use the book (Gookin 1).

**Cognitive Level**

**Diction:** Gookin uses diction with a low level of technicality. The low level of technicality reinforces the conversational tone of the book and likely facilitates understanding.

**Procedures:** The procedures are task-oriented, and they feature task-oriented task names. “Changing Line Spacing” (148), “Making Partial Boxes” (233), and “Adding a Toolbar Button” (318) are examples of clear, direct task-oriented task names. However, some of the task-oriented task names are unclear or wordy. For example, “The Wide and Narrow Choice” does not indicate to users what the task is about (Gookin 171). And “Printing More Than One Copy of Something” is a wordy version of “Printing Multiple Copies” (Gookin 196).
Gookin provides overviews for each procedure. The overviews indicate what the outcome of the task is and why the user would want to complete the task. A few overviews also include an anecdote from the author’s own experiences with Microsoft Word. After the overviews, most of the procedures contain numbered steps. Gookin presents the numbered steps in a bold typeface, which draws attention to the steps on each page. Gookin consistently uses imperative verbs for each step. Elaborations on the steps indicate mistakes to avoid, alternative keystrokes, ways to tell if a step has been performed correctly, and sources of additional information.

Windows and icons are the most common type of screen capture. They serve an important purpose: to illustrate to the user what a window will look like, where to type information in a window, or which button to click. The book contains few full screen captures. Screen captures, as I discuss in further detail in Chapter Four, influence the affective level of design.

One of the obvious strengths of the *For Dummies* series is the consideration given to affective design.

**Affective Level**

Attention: Gookin uses several strategies to attract readers’ attention. The bright yellow cover functions to draw attention to the book. A cartoon character with a balloon caption (“Find out how to jazz up your text with graphics”) on the cover serves the same purpose. Page seven displays six reduced-size comics poking fun at human interactions with computers. These six comics appear in full-size later in the book; one comic marks the beginning of each of the six parts of the book. Throughout the book, the author uses
witty phrases as headings to grab the readers’ attention. A few examples include “The Story of Tab,” “Splash Me Down a Table,” and “Impruv Yor Spellling wit Werd.” The author also uses icons to attract readers’ attention to key pieces of information.

Motivation: In the Introduction to WWD, the author states that WWD is “the tightest, fastest, and bestest book for [Microsoft Word 2000]” (1). By making this claim, the author provides a clear motivation for the users: use this book, the best book for the product, and it will teach you “how to get the job done” (1). The title of the series, *For Dummies*, also motivates the reader by implying that anyone can learn to use Microsoft Word—even dummies.

The author’s use of first-person is another motivational strategy. The result is an informal, conversational tone, which draws the reader into the text. The first-person narration affects reader motivation because the reader no longer feels as though she is acting alone. The user now has company, the author, who wants her to succeed with the program.

Finally, the author motivates the reader by presenting himself as a credible provider of information. In addition to providing a brief biography at the beginning of the book, the author also offers a critique of Microsoft Word, admitting that the program is not perfect. This critique runs throughout the book, reminding the reader that the author is a credible source of information. For example, in Chapter 35, the author warns readers of “a scary weird thing that you should avoid at all costs” (356). The warning concerns permanently deleting items from a menu. The author comments, “What kind of sick mind thought up that trick, huh?” (356). Comments such as these reinforce the author’s
credibility by demonstrating that he is not afraid to critique Microsoft Word when appropriate.

**Change Management:** The author discusses how Microsoft Word 2000 should and could change the way the user approaches writing tasks. In one instance, the author urges users to only use one space after a “period” (Gookin 351-352). More significantly, the author mentions how a friend edits by cutting blocks of text and then pasting them to the end of the document, just in case he decides to use the edited text later. Gookin admonishes this practice, criticizing his friend’s inability to part with his own words. But the issue illustrates how the software program can change the way a person edits a document. Although the author mentions these and other minor changes, he does not examine how composing a document with a word processor is different than composing a document with a typewriter, and how a user can adapt his or her writing process to the new technology. In the author’s defense, though, such a discussion may be beyond the scope of this book.

**Legal and Ethical Issues:** In the introduction to WWD, the author acknowledges that Microsoft Word is not a perfect software program. For many readers, this is a critical ethical issue, because if the author does not acknowledge the faults of a program, which some readers feel authors of help systems do not do, then the credibility of the author and the perceived value of the information he or she provides diminishes. And with the diminished credibility and perceived value, users may feel less motivated to act on the information. The author does not address the legal issues concerning software licensing.
Word 2000 for Windows for Dummies demonstrates a lighthearted approach to documentation. But this lighthearted approach conceals a sophisticated rhetorical strategy that incorporates physical, cognitive, and affective design principles.

Microsoft Word Help

Background on the Text

Microsoft Word Help comes with Microsoft Word 2000. The help system provides users with information about the software program. This information ranges from installation procedures to formatting and editing text to licensing agreement information. Users have two access methods into the help system, as well as multiple search options. In addition to the online help system, Microsoft Word users can consult the book Discovering Microsoft Office 2000 or the Read Me file, which come with Microsoft Word 2000. Users can also refer to information posted to the World Wide Web at the Word 2000 Support Center (http://support.microsoft.com/default.aspx?scid=fh;en-us;wrd20&product=wrd).

Physical Level

Access: Users have two primary ways to enter Microsoft Word Help. They can press “F1” on the keyboard, or they can select “Microsoft Word Help” from the “Help” menu. If the Office Assistant is activated, a character, such as Clippit, the Genius, or the Dot, will appear when users try to access the help file. The Assistant asks users, “What would you like to do?” Users can then type in what they want to do, select search, and the
Office Assistant will access the section of Microsoft Word Help that relates to what they are looking for. If the Office Assistant is not activated, the Microsoft Word Help window will open when users access the help file.

Page and Screen Design: Microsoft Word Help presents users with a consistent screen design. Each screen begins with a first level heading, which describes the content of the screen (e.g., Create a Template, Insert Line Breaks, Hyphenate Text), allowing users to easily identify the content of a screen. Many screens also contain second level headings. Both first level and second level headings have a consistent typeface and type size within the levels throughout Microsoft Word Help. The steps for specific procedures are numbered. The numbers allow users to quickly identify where on a screen the steps are given. The online help system uses white space effectively, and the pages do not appear crowded. The typeface and type size are appropriate for an online document; most users will not have difficulty reading the text on the screen (Schriver 506-508).

Graphical Devices: Microsoft Word Help offers few graphical devices. Other than headings, the most common graphical device in the online help is the icon. Icons appear throughout the online help, and they show users what to click on in the program in order to successfully complete a task. Some of the icons are linked to pop-up windows, providing further detail, such as a definition of a term or concept. Microsoft Word Help does not use warning icons or helpful tips icons to identify important information. The online help also does not provide any screen captures.

Retrievability Aids: Once users get past the Office Assistant, Microsoft Word Help provides a table of contents and an index. The table of contents uses the common book metaphor. The index allows users to search for a keyword, choose a keyword from
a list, or type in and search for a topic. In addition to a table of contents and an index, Microsoft Word Help provides users with an Answer Wizard, which allows them to type in a question and search for help topics that are related to the question. Although not every screen in the online help contains hyperlinks to related information, many screens do include such links.

Cognitive Level

Diction: The author uses diction with a low level of technicality. Since the users will likely know the words the author uses, the users will read and process the information more efficiently (Barker 259).

Procedures: The procedures are task-oriented, and they feature descriptive task names. The author consistently uses imperative verbs in the task names: “Delete an Autocorrect Entry,” “Undo Mistakes,” and “Remove a Style.” The author provides procedure overviews, which, Barker explains, help users understand the conceptual framework of a software program (389) However, the procedure overviews do not appear on the same screens that provide the list of steps for the procedure, and many of the screens with the lists of steps do not offer links to the procedure overview screen. For many of the task screens, after the task name, the author immediately lists the steps for the procedure, which are numbered chronologically.

Like the task names, the steps use imperative verbs, and they are clear and concise. For the most part, the help author provides few elaborations. Most of the steps do not offer any elaborations. Occasionally, though, steps include icons that users can click on to view a pop-up definition. Some steps contain an elaboration that anticipates a
problem a user may face in completing the step. And some procedures conclude with Notes or Tips, which offer additional information for completing the task successfully.

Screen captures play a small role in the help file. There are no full screen captures or screen captures of windows. Links are provided to the actual page, but when users click on these links, the online help system is minimized. Some users may have difficulty finding the help screen again, especially if they did not expect the help screen to disappear when they clicked on the link. Icons are the only screen captures used to facilitate learning.

Affective Level

**Attention:** Microsoft Word Help initially attracts users' attention through the Office Assistants. The Office Assistants provide a colorful, animated contrast to the predominantly black and white interface of Microsoft Word. The Office Assistants also engage the users by asking them a direct question, "What would you like to do?" Once inside the online help system, though, little is done to attract users' attention. The default setting for the screen appearance is a white background and black text, even though color is easy to display in online displays (Jones 130). Users can change the background and text colors; however, most users probably are not aware this is possible or would not bother to do so. Microsoft Word Help also does not use humor in its presentation of the information, which can be used to attract users' attention.

**Motivation:** Microsoft Word Help provides little explicit motivation for users to use the information. The author of Microsoft Word Help also does not assure users that he or she is the most credible source of information, which would likely motivate users to
use the information. Users are left to assume that since Microsoft Word Help was produced by Microsoft Corp., it is the most credible and thorough source of information about the software program; however, many users feel that the company that produces the software may have a conflict of interest in providing the most thorough documentation, which may require pointing out faults with the program.

The author addresses the users directly through second person. But the author maintains a distance that creates an impersonal tone for the help system; the author never uses first-person, and the user is “left alone” to complete the task. Adding to the impersonal tone, the author does not use humor.

Change Management: The first screen in Microsoft Word Help’s table of contents is “What’s new in Microsoft Word?” On the screen, the author lists numerous links to information about additions to the current version of Microsoft Word and how these additions improve earlier versions of Word. The information provided describes how the additions may change the way users use Microsoft Word. However, the author does not discuss the additions within the larger context of how word processing may change a user’s writing process. The author does not attempt to alleviate any anxiety users may have about such changes. The author assumes the value of the new features without giving consideration to users’ anxiety about the complexity that may accompany the new features.

Legal and Ethical Issues: Microsoft Word Help extensively covers the legal issues concerning software licensing. The final topic in the help file is End-User License Agreement, which contains two sub-topics: End-User License Agreement, and Questions and Answers about the End-User License Agreement. The End-User License Agreement
informs users about the legal obligations of the purchaser of Microsoft Word. In other words, the license agreement states how the purchaser can and cannot legally use Microsoft Word. The presentation of this information, however, does not convey a positive tone to users. Microsoft Word Help does not address an ethical concern that many users have: will the authors of the online help disclose possible faults in the program?

Microsoft Word Help displays strong physical and cognitive design principles. However, the help system is limited in its use of affective design principles. Unlike *Word 2000 for Windows for Dummies*, Microsoft Word Help does little to draw the reader into the text, gain the reader’s trust, or motivate the reader to use the information.

**Overlap Among the Levels**

The above heuristic evaluation treats each of the three design levels as if they are mutually exclusive. Yet, there is considerable overlap among the levels. As Carliner explains, “Naming an issue and placing it within the context of the framework calls attention to the issue, but does not always adequately describe its full breadth” (570). For example, page and screen design fall into the physical level. However, page and screen design can impact a user’s motivation, an aspect of affective design. An online help screen with long paragraphs of small type, numerous screen captures, and sparse white space may intimidate novice users, lessening their motivation to use the documentation. The same online help screen may annoy experienced users, causing them to abandon the documentation. In both instances, ineffective screen design, a physical design principle,
affects motivation, an affective design principle. I provide additional examples of the overlap among the design levels in Chapter Three in the section titled “Overlap.”

Any analysis of a heuristic evaluation of the three levels of design, such as the heuristic evaluation offered in this chapter, must take into consideration the overlap among the three levels. The analysis should address how the overlap among the design levels affects the rhetorical dynamics of the communication product. In Chapter 4, I offer an analysis of the above heuristic evaluation that considers the overlap among the levels of design and how this overlap may affect the role of pathos in online documentation.
CHAPTER FOUR: ANALYSIS AND IMPLICATIONS

In *Dynamics in Document Design*, Karen Schriver emphasizes the importance of making a good impression—with documents, that is. She writes, "Document designers get only one chance to dramatize themselves and the organizations they work for, one chance to communicate effectively with the reader" (183). Technical communicators cannot adjust their documents once they are in users’ hands, therefore making what users first think, feel, or believe about a document of paramount importance. Affective design not only influences users’ first impressions but also engages users on an emotional level throughout their interaction with a document.

Later in this chapter, I propose recommendations for implementing affective design into online help. I also discuss the objections technical communicators may face when trying to use my recommendations. First, though, I provide an analysis of the heuristic evaluation offered in Chapter Three.

*Analysis of the Heuristic Evaluation*

*Physical Level*

*Word 2000 for Windows for Dummies* and Microsoft Word Help both present users with a consistent page or screen layout. Both documents adhere to basic principles of technical communication—headings throughout the document that allow users to scan for information, consistent typeface and type size for body text and headings, consistent alignment of various design elements. And both documents provide excellent retrievability aids. The two documents, though, are not equal for all aspects of physical
design. Microsoft Word Help, for instance, uses active white space and type size more effectively than *Word 2000 for Windows for Dummies* to create pages that do not appear crowded. *Word 2000 for Windows for Dummies*, however, uses graphical devices more effectively than Microsoft Word Help. For example, *Word 2000 for Windows for Dummies* uses a Tip icon, a Remember icon, and a Warning Icon. These icons allow users to find valuable information quickly, and they also attract users’ attention—an important affective design principle. *Word 2000 for Windows for Dummies* also uses screen captures to display windows and menus, whereas Microsoft Word Help does not\(^3\). The lack of screen captures throughout the help system may have a negative impact on user cognition and motivation (van der Meij and Gellvij 539).

**Cognitive Level**

At the cognitive level, *Word 2000 for Windows for Dummies* and Microsoft Word Help exhibit striking similarities. Both use diction with a low level of technicality. The procedures in both documents are task-oriented, and the authors use numbered steps and imperative verbs for the procedures. There are, however, differences. Some of the procedure task names in *Word 2000 for Windows for Dummies* are less concise and less clear than the task names in Microsoft Word Help. This is often the result of the author’s

\(^3\) Some may argue that screen captures are more important in print documents than in online help systems because users of online help systems have access to the actual screens while they are reading the online help. In other words, the help and the screens the help describes appear on the same screen, so it is unnecessary to represent with screen captures the screens being described. However, many online help systems, such as Microsoft Word 2000, obstruct users’ view of the screen they were working on before opening the online help system. Consequently, users have to switch between the online help screen and the screen they were working on, potentially causing the user to confuse what was described in the online help and what is displayed on the screen. A screen capture can give users a visual image to remember when switching from the online help to the screen they were working on. Furthermore, screen captures can be used to verify menus and windows that are not immediately apparent on the screen.
attempt to use humor, which, like any other rhetorical strategy, can have a positive or a negative effect on a document’s effectiveness, depending on how it is used. Microsoft Word Help, on the other hand, does not include as many elaborations as *Word 2000 for Windows for Dummies*, and the procedure overviews in Microsoft Word Help may not be easily accessible from the procedures that they describe. Overviews and elaborations give readers valuable contextual information that allows them to complete the tasks successfully, and, as I discuss in the “Overlap” section of this chapter, they influence a document’s affective design. For users who access an online help system through context-sensitive help, overviews may be unnecessary because the users will already understand why the task is necessary and what the outcome of the task should be. However, for users who do not access an online help system through context-sensitive help, overviews provide valuable contextual information.

**Affective Level**

From the *For Dummies* web site and from the first pages of *Word 2000 for Windows for Dummies*, there is an explicit acknowledgement of the important role of pathos in the book’s approach. This explicit acknowledgement is supported by extensive use of affective design principles throughout the text. The author uses color and humor to attract readers’ attention. He motivates his readers by portraying Microsoft Word 2000 as an imperfect but learnable program; by using the first person and adding personal anecdotes to draw readers into the text and create solidarity with them; and by presenting himself as a credible source. The author also addresses the change that users may face by using Microsoft Word 2000; such change may cause anxiety in some users, and
addressing this change may relieve some users’ anxiety. Finally, the author avoids a legalistic tone in the text, and instead bolsters his credibility and solidarity with his readers by pointing out flaws in Microsoft Word 2000.

Microsoft Word Help demonstrates far fewer affective design principles. The author initially attracts readers’ attention through the Office Assistant. But once users are in the help system, little is done to maintain their attention. The author uses minimal color and no humor. The author also provides little motivation to the users. The author does not assure users that they are using the most credible source of information or that the information will be easy to use. The author maintains a distance from the users, never using the first-person or offering personal anecdotes. The author also does not address change management within a broad context; however, the author does discuss the changes from the previous version of Word. Finally, the author conveys a legalistic tone in presenting the licensing agreement, which may intimidate some users, while ignoring an ethical concern that many users have (that online help systems do not acknowledge the flaws in a program).

Unlike the physical and cognitive levels, at the affective level *Word 2000 for Windows for Dummies* is clearly more effective than Microsoft Word Help. The author of *Word 2000 for Windows for Dummies* uses strategies to attract and maintain users’ attention, to motivate them, to deal with change management, and to address users’ ethical concerns.
Overlap

In Chapter 3, I discussed the overlap among the physical, cognitive, and affective levels of design. Five design elements in particular found at the physical and cognitive levels influence the affective level: graphical devices, such as icons and screen captures; procedural discourse; diction; procedure overviews; and elaborations. Screen captures, a graphical device, play a role in all three levels of design. At the physical level, screen captures provide easy entry and re-entry into a text. At the cognitive level, screen captures help users understand if they are completing the task correctly by providing a capture of what the screen should look like after a specific step or after the completion of the task. At the affective level, screen captures attract users’ attention and motivate them.

Both *Word 2000 for Windows for Dummies* and Microsoft Word Help use procedural discourse to communicate to users how to complete tasks. While I discuss procedural discourse as a cognitive design element, procedural discourse also affects the affective level of design. When users are able to find clearly written procedures for tasks that enable them to achieve their goals, users are likely to have a positive emotional reaction to the procedural discourse. Clearly written procedural discourse also may reduce a user’s anxiety over his or her perceived complexity of a task. In other words, procedural discourse can affect a user’s emotional response by demonstrating that a task is easy to complete, or at least manageable.

Diction, procedure overviews, and elaborations are also cognitive design elements that play a role in affective design. Diction with a low level of technicality can intimidate users, causing them to avoid the documentation. (Of course, there are instances when a high level of technicality is appropriate; however, for most online help systems, a high
level of technicality is not appropriate.) Diction with a low level of technicality can motivate readers to continue reading the documentation and ease their fears about not understanding the documentation. The inclusion or exclusion of procedure overview and elaborations can also influence user motivation. Barker explains that “what you say in the introduction [to a procedure] gives some degree of assurance that the user, when faced with a decision in the completion of a task, will make the right decision” (84).

Word 2000 for Windows for Dummies and Microsoft Word Help use a low level of technicality in their diction. But Word 2000 for Windows for Dummies alone uses screen captures and easily accessible procedure overviews consistently throughout the text. Therefore it is not surprising that Word 2000 for Windows for Dummies, which uses affective design elements more effectively, also uses more consistently physical and cognitive design elements that influence the affective design.

Conclusion

The most distinct differences between Word 2000 for Windows for Dummies and Microsoft Word Help occur at the affective level. The differences in the other levels are, for the most part, minor, although they often influence the affective level of design as well. These differences suggest that a primary lesson to be learned from the success of the For Dummies series is that pathos can be an effective rhetorical element of technical documents. And technical communicators who incorporate pathos into their online help systems better ensure that their documents will be read and used.
Crossing Bridges: Making Connections Among Technical Communication

Genres

Before discussing how to incorporate pathos into online help files, genre deserves consideration. Aside from pathos, genre is perhaps the most obvious difference between Word 2000 for Windows for Dummies and Microsoft Word Help. The former is a print document and the latter is an online document. From a design perspective, the differences between print and online documents are significant. For example, reading online documents "requires more effort than reading the same material on paper" (Jones 272). Consequently, online documents require a larger typeface than most print documents. Also, since the resolution of screens is usually less than the resolution of printed pages, "the number of fonts that work on a screen is much smaller than those that will work on a page" (Barker 359).

From a usage patterns perspective, the differences are equally significant. Users are less likely to sit down and read an entire online document, especially an online help file, than they are an entire print document, such as a For Dummies book. Of course, users have the option of printing online help screens; however, when creating online help systems, technical communicators have to assume that many users will interact with the help system on the screen, and therefore technical communicators must design the online help system accordingly.

Some may argue that because of these differences, an analysis of a print document does little to uncover strategies for improving an online help system. At the physical level of design, this argument may be true. Typographic choices used in a print document may
not transfer successfully to an online document. Or an effective page layout used in a print document may be impractical for the limited space of a screen. However, at the affective level, where technical communicators have less experience, and where, therefore, more ambiguity about what is “right” and what is “wrong” can be expected, the potential benefits of transferring strategies from print to online cannot be categorically dismissed. Technical communicators who produce online documents may be able to learn successful affective strategies from print documents. Even better, technical communicators may be able to borrow these strategies directly from print documents without requiring much change in the strategies.

Recommendations for Incorporating Pathos in Online Help

In the qualitative field of communication, it is difficult to assign a number to matters of conveying meaning. How many pages are adequate? How many graphics should I include? How long should the executive summary be? Likewise, it is difficult to quantify the ways to incorporate pathos into online help systems. Yet, based on the analysis of the heuristic evaluation of *Word 2000 for Windows for Dummies* and Microsoft Word Help, I have developed six recommendations for incorporating pathos into online help systems.

1. *Use first-person and include personal anecdotes.* Part of *Word 2000 for Windows for Dummies’* appeal is the personal tone established by the author’s use of first person and personal anecdotes. After reading even a few pages of the book, the reader is drawn into the text by the personal tone. The use of first person also serves to create solidarity between the author and the reader. This solidarity
between the author and the reader differs from traditional software
documentation, where the solidarity is between the author and the program.
Solidarity with the author is intended to gain users' trust, and to motivate them to
keep reading and to use the information.

2. **Use color.** Color can be used to attract users' attention. *Word 2000 for Windows
for Dummies,* for example, uses bright yellow and green on the cover to attract
readers' attention. Inside the book, however, *Word 2000 for Windows for
Dummies* does not display any color, probably because of production costs related
to printing color. Fortunately, technical communicators who produce online help
systems do not have to worry about increasing production costs by adding color.
Yet, technical communicators should be careful not to compromise physical
design through color. A dark blue background with black text, for example, does
not provide enough contrast, and users may have difficulty reading the
information on the screen. Technical communicators should use light, neutral
colors for the background, and they should keep the text black.

3. **Use humor.** Humor is another method to attract users' attention. Humor can also
help motivate users to continue reading the online help. Humor, however, should
not be used at the expense of clarity. *Word 2000 for Windows for Dummies,* for
example, uses humor effectively to gain readers' trust. But at times the humor
obscures meaning in the headings. For example, the heading “Splash Me Down a
Table,” which serves as a task name, does not clearly indicate to readers what the
task should help them accomplish. Users may suspect the task has something to
do with creating a “table,” but users may spend time trying to figure out how the
words “splash” and “down” fit into the task. As this example illustrates, humor should not be used in procedure task names or in procedural steps. Humor can be used, though, in overviews, elaborations, and introductory screens, as long as the humor does not obscure meaning.

4. **Portray the software program as learnable.** Computers intimidate many users, and intimidation can cause anxiety. Technical communicators who want to create usable and used software documentation can address user intimidation and anxiety by portraying the software program as learnable. One way to portray the program as learnable is to include personal anecdotes. For example, a technical communicator may say in an introduction to a topic, “It took me a bit to figure out how to _______. But once I did, and it wasn’t that hard, it made life a whole lot easier.” This statement conveys several important messages to the user: first, it is okay to struggle when learning a new task; second, it is possible to learn the task; and third, once learned the task will improve his or her life (or at least his or her experience with the program). Another way technical communicators can portray a program as learnable is to explain that a task can be completed in a number of different ways, but the help system will only describe one way to complete the task. By doing this, technical communicators portray complicated tasks, with multiple ways to approach them, as learnable, single units.

5. **Acknowledge the anxiety technological change can induce, and assure users that change can be dealt with successfully.** Technology creates change. For some users, such as users adopting a word processor after using a typewriter for thirty years, technological change can have a dramatic impact on how the users perform
their jobs. Technical communicators who produce online help can acknowledge this change at the macro and micro level. At the macro level, using Microsoft Word as an example, technical communicators can include a help topic titled, “Using word processing for the first time.” In this topic, the author can briefly discuss some of the differences between word processing and using a typewriter, some of the challenges the user may face when adapting to the new technology, and some of the benefits of learning the new technology. Addressing the differences, challenges, and benefits may ease users’ apprehension about the technology.

At the micro level, technical communicators can address how specific tasks may change the way a user completes a job function. For example, a user might not have given much consideration to page formatting before using a word processor. But now that he uses a word processor, the user may want to or be required to give more consideration to page formatting. Technical communicators can lead the user nonintrusively to basic information about page formatting and how formatting pages can improve the design of his documents. For example, the first screen within the Formatting topic can be titled “I’m new to formatting pages,” or a link titled “I’m new to formatting pages” can be provided at the bottom of each screen in the Formatting topic.

6. *Minimize the legalistic tone associated with licensing information, and address users’ ethical concerns.* A key issue for many readers is trust. Readers must trust an author in order to take what she is writing seriously. Two issues stand in the way of establishing trust between online help authors and readers: the legalistic
tone set by licensing agreements and the failure to acknowledge faults in the program. For legal reasons, technical communicators simply may not be allowed to omit a licensing agreement or to acknowledge faults in the program. In such instances, technical communicators can minimize the legalistic tone licensing agreements establish by adding a soft color background to the licensing agreement screen. Technical communicators can also add humor and a personal tone to the Frequently Asked Questions (FAQS) screen that often accompanies the licensing agreement; introducing humor and a personal tone in the FAQS allows technical communicators to maintain the ethos of the licensing agreement, but avoid the perception from users' that the software company is using scare tactics.

Although technical communicators may not be able to acknowledge fault or shortcomings with the software, they can discuss their own struggles with the program without blaming the program. For example, the technical communicator could write in an introduction or procedure overview, "When I first tried to ______, I made ______ mistake, and I don't want you to do the same." A statement such as this may point out a shortcoming in a program's user interface, and it will also build trust between the user and the author.

These six recommendations should be viewed not as a culmination of the research into pathos in online help systems, but rather as a starting point for such research. Future heuristic evaluations, usability tests, and applications of old and new theory will undoubtedly reveal insights into my six recommendations, as well as suggest new ways to incorporate pathos in online help systems.
Some Objections

Technical communicators who try to incorporate pathos into online help systems may encounter objections in the workplace. Some objections may come from fellow technical communicators who object to such a different approach to online help. Other objections may come directly from management, software developers, or even users who are not accustomed to aspect of affective design. Wherever the objections originate, technical communicators who want to incorporate pathos into online help systems must anticipate these objections, and be ready to respond to them.

The following are a few objections that technical communicators may face and possible responses to those objections:

- *Humor is difficult to incorporate into a help system that will be translated into multiple languages, across multiple cultures.* This is potentially the most complicated objection. The recommendations I make in this chapter are intended for an American audience. Some online help systems, though, are translated into multiple languages. And humor often does not translate well across cultural barriers. In other words, what is funny in America may not be funny in Japan, and what is funny in Japan may not be funny in Bolivia. Therefore, humor may not be a desirable, or feasible, affective design strategy. There are, however, other affective design strategies, such as first person, personal anecdotes, and change management. Of course, technical communicators who create online help systems that are distributed to multiple countries should be aware of documentation conventions for those countries.
- Past research indicates that users want help to be as non-intrusive as possible, supporting the minimalist approach to help design. What past research indicates is that users do not use online help (Grayling; Pratt). Future approaches to online help need to address users' reluctance to use online help, and changing user perceptions through humor and other affective design strategies is a good place to start.

- Management would never support a pathos-laden help system. The solution: do not make help systems pathos-laden. Instead, technical communicators should use just enough pathos to attract users' attention, to motivate them, and to gain their trust. Too much pathos, like anything else, can be more harmful than helpful. But that does not mean pathos should be treated with a minimalist approach. Using pathos is not an all-or-nothing proposition. Technical communicators may not be able to incorporate all of the recommendations I listed here, but they may be able to incorporate two of them. Sometimes a little is better than nothing.

- Pathos in online help will not be consistent with our brand. Management may object that pathos will render the online help incompatible with the company's brand. In part, this is true. Adding humor, color, or a personal tone may not fit the brand of many software programs. However, this does not mean that software companies should not use such strategies to make their documentation more effective. Technical communicators facing this objection should remind management that a slightly different look for the documentation will help build

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4 Researchers in the field of technical communication should further investigate the role technical communicators play in helping companies establish a brand. Another area to investigate is the boundaries of brand and whether advertisements, documentation, and the product need to or should ascribe to the same vision of brand.
trust between the online help and the users, but users will still associate the documentation with the software because online help is accessed through the software program.

Changing the look of an online help system is also a conservative way for a technical communicator to implement affective design into her company’s online help systems. A new look could improve the affective design, grabbing users’ attention and motivating them to use the online help without making dramatic linguistic changes to the online help system. Over time, as manager and developers became accustomed to the new look of the online help system, the technical communicator could then implement the linguistic changes, such as first person, personal anecdotes, and change management.

*Our program is not easy to learn, so why portray it that way?* Or to put the objection another way, *Our program is not for beginners, so why cater to beginners by using humor and a touchy-feely approach to documentation?* Affective design is not intended only for novice users. Experienced users can also benefit from attention grabbing and motivational design strategies. Experienced users may appreciate the personal tone of online help systems for complex software, especially if a user is frustrated after struggling with the software. And it actually may be easier or more acceptable to include affective design into a complex—and especially a very specialized—program, because there is a greater likelihood that the users belong to the same discourse community. Obviously, further testing is needed to confirm this claim. Furthermore, considering a
software program too sophisticated to include pathos is a form of elitism that can marginalize user concerns in the planning and writing of online help.

Anticipating objections and responses gives technical communicators the upper hand when trying to implement pathos into online help systems. The objections I discussed in this chapter are not the only objections that technical communicators may face, but they are certainly objections that could arise.

Embedded Help Revisited

The recommendations I offered in this chapter are not the first attempt to solve some of the problems associated with online help systems. In Chapter Two, I discussed how embedded help has been proposed as a solution to many of the problems facing online help systems. Yet, embedded help is primarily concerned with providing users with contextual information, that is, information that is relevant to the context in which the user is working. This seemingly places embedded help within Carliner’s physical level of design (can users find the information they are looking for?). But does embedded help affect the design beyond the physical level of design?

Embedded help defies easy classification in Carliner’s three-part framework for information design. Certainly, embedded help serves physical level design functions. Through embedded help, users can find the information they are looking for more easily and quickly. Embedded help may also serve cognitive level design functions, improving a users ability to understand the information because the information is available in context. And embedded help also may serve affective level design functions. For
example, embedded help can attract users’ attention and motivate them to seek further help within the online help system.

Although embedded help contains some affective design attributes, most embedded help solutions do not exhibit affective design strategies such as humor or first person. As a result, users may still feel an emotional disconnect with embedded help if the embedded help conveys the same tone as a standard help system. Also, embedded help in programs like Microsoft Word 2000, while perhaps attracting users’ attention and motivating them, does not change the appearance of the regular help system. Consequently, once users get past the embedded help, and seek further help in the online help system, they will confront a help system that looks and reads like many of the help systems that they have a negative perception of.

Technical communicators may best view embedded help as one part of a larger solution to the problems associated with many online help systems. In addition to embedded help, technical communicators need to explore additional affective design strategies, such as the ones I have discussed in this chapter.

**Conclusion**

Before software companies are willing to incorporate pathos into online help systems, researchers may have to report evidence supporting pathos’ benefits. In Chapter Five, I provide a framework for a usability test to test the recommendations I made in this chapter. I also discuss an area of online help studies that has been ignored by researchers.
CHAPTER FIVE: CREATING MORE EFFECTIVE INTERMEDIARIES

In a perfect world, humans and machines co-exist peacefully. They understand one another. They work together for mutual benefit. They speak the same language, and they rarely miscommunicate. Unfortunately, we do not live in a perfect world, so sometimes humans and machines need an intermediary—documentation. The better the documentation, the more perfect the union between human and machine.

For years researchers and practitioners have relentlessly pursued methods for making documentation, including online help systems, more usable. For the most part, these methods have dealt with the physical and cognitive levels of design. That is, researchers and practitioners have focused on making documentation more accessible, the type easier to read, information easier to find, and procedural discourse easier to understand. But they have not investigated the affective level of design. Simply put, pathos has fallen by the wayside.

In the previous chapters I have suggested a heuristic for evaluating online help systems and recommended ways to incorporate pathos into online help systems. Before companies will take a chance with pathos, though, technical communicators may need to offer a body of evidence that suggests pathos does improve users' perceptions of online help systems, while maintaining or improving the current level of usability. Since usability testing primarily aims at learning how well a product works and how to improve the product, usability testing coupled with user-preference questionnaires can provide technical communicators with the evidence they need to convince management to allow the implementation of pathos (Krug 141).
In this chapter, I propose a basic framework for conducting usability tests to gather information about my recommendations for implementing affective design in online help systems. To highlight an important but overlooked area of inquiry, I also briefly discuss the lack of attention that feminist studies has been given by researchers investigating online help systems.

**A Usability Test**

In the usability tests, researchers must focus on two questions:

- How does pathos affect the usability of online help systems?
- How does pathos affect users' perceptions of online help systems?

The first question concerns how pathos improves, maintains, or diminishes the ease with which users can achieve their objectives. For example, does an online help system with pathos guide a user through the process of creating tables in Word as effectively, less effectively, or more effectively than an online help system without pathos? The second question concerns how pathos improves or diminishes what users think about online help systems. In other words, after using an online help system with pathos, do users feel better about their experience with online help than after using an online help system without pathos? Are they more likely to use the online help with pathos than the online help without pathos?

The following is a tentative test plan that would address both questions using Microsoft Word Help. The test involves two versions of Microsoft Word Help. The first version is a scaled-down version of Microsoft Word Help without pathos. This version contains four or five topics, exactly as they appear in the official version of Microsoft
Word Help. The second version contains the same four or five topics, but the topics include pathos—first person and personal anecdotes, color and humor, the acknowledgement of technological change, the portrayal of a learnable program, and minimal use of a legal tone.

Pre-Test Preparation

The target user, or participant, for this usability test is a novice to intermediate user who uses Microsoft Word 2000 at work or home. The user should be familiar with the basic functions of the program. In other words, before participating in the test, the user should already know how to open and save a document, and how to make basic changes in text of a document. The user should use Microsoft Word 2000 for at least two hours per week. The user may or may not have familiarity with Microsoft Word Help.

Once the user has arrived at the testing site, she receives a pre-test questionnaire. The questionnaire solicits biographical information, and questions her usage patterns with online help. The questionnaire also asks how she feels about online help systems. After the user has completed the pre-test questionnaire, she receives and signs an informed consent form.

The Test

After the user has completed the pre-test questionnaire and the informed consent form, she begins the usability part of the test. This part of the test requires the user to complete four tasks: two with the version of online help without pathos and two with the
version of online help with pathos. For example, the user may use the pathos version of the online help to insert a table with three rows and two columns, and to adjust the margins to two inches on all side of the document. And the user may use the pathos-free version of the online help to add a footer and a comment to a document. The tasks the user completes will depend on the topics the researcher includes in the two versions of the online help. The topics the researcher includes should be common tasks a user may actually need at home or work, but the topics should not be so common that the user already knows how to complete the task. The users described for this usability test, for example, may already know how to change page margins, but they probably will not know, or will need to be reminded through the online help, how create a gutter margin or insert a page break.

Throughout the test, the facilitator encourages the user to verbalize what she is thinking and doing, a common usability testing procedure known as think-aloud protocol (Barnum 235). Comments the user makes while completing the tasks will give the facilitator insight into how the user feels about the pathos in the online help system, or the lack of pathos. The facilitator may also ask the user what she is thinking when she appears confused or amused. The facilitator should write notes detailing what the user says.

Since large-scale usability tests can cost tens of thousands of dollars, many researchers and companies use discount usability testing. Discount usability testing, which requires only four to five participants, is a way for researchers and companies to perform usability testing cheaply (Neilsen). Studies indicate that testing four to five users reveals 80 percent of a product’s usability problems (Barnum 12). By testing only four to
five users, researchers will uncover 80 percent of the usability problems, if there are any, created by the implementation of pathos. Five to ten users, though, is not enough users to obtain statistically significant results concerning how pathos affects users’ perceptions. To obtain statistically significant results, researchers will have to test more than a handful of users.

Post Test Tasks

After the user has completed the usability portion of the test, she receives a post-test questionnaire. The post-test questionnaire asks the user about her experiences with both versions of Microsoft Word Help. The questionnaire also asks the user to compare specific aspects of the two versions, such as the use of first person versus the absence of first person, or the use of color versus the absence of color. Once the user completes the post-test questionnaire, the test facilitator asks her if she has any additional comments about the test or the online help systems. If the user has nothing else to add, she is free to leave.

Related Area: Feminist Studies

Surprisingly little researched has been published connecting feminist studies to online help studies. And by surprisingly little, I mean none. A letter to the editor of Technical Communication following the publication of Trevor Grayling’s “Fear and Loathing of the Help Menu,” and Grayling’s subsequent response, illustrates the absence of feminist concerns from online help studies. Madeline Artenberg, member of the New
York Metro Chapter of the Society for Technical Communication (STC), wrote of Grayling’s article, “The findings about users’ relationships to the Help menu did not address the issue of gender. Are more men inclined to discard Help quickly, use it as a last resort, etc.” (STC 133-134)? Grayling responded, “The notion that there might be gender differences simply never entered our heads...the fact that all 10 [users] turned out to be men never registered with any of us” (STC 134). Grayling later joked, “given men’s well-known reluctance to ask for directions at gas stations, it wouldn’t be surprising if they were similarly reluctant to ask for directions at the Help Menu!” (STC 134).

(Exclamation point in original.)

Grayling’s response that the lack of women participants “never registered with any of us” demonstrates how feminist concerns have slipped below the radar in online help studies. His gas station comment also indicates how cultural stereotypes may influence researchers’ own perceptions about women’s interaction with online help and the worthiness of future studies in this area. Regardless, many questions that deserve attention have not been researched. For example, are women more or less likely to use online help than men? Do women perceive online help to be more helpful than men do? Less helpful? Would women respond less favorably or more favorably than men to pathos in online help? Answers to such questions would give technical communicators a better understanding of the complexities of audience and help them produce more effective documents.

5 Even if Grayling had been aware of gender, age, or race differences among the participants in his study, the small number of participants—10—eliminated the possibility of drawing conclusions about users’ performance based on their gender, age, or race. Researchers interested in learning about differences gender, age, or race groups, need to use a larger number or participants than discount usability testing requires.
Conclusion: Changing Perceptions

In Chapter One, I stated that technical communicators and their employers cannot afford to wait until more usable documents change users' perceptions of online help systems. Simply put, the process is too slow, and evidence suggests that many users do not use the help systems, so many of the improvements may go unnoticed. And even if users' attention was directed to more usable help systems, if the help systems have the same look and feel of help systems that users' feel are unusable, the new improvements may still go unnoticed or have little impact. Pathos may be the answer. Strong affective design will change the look and feel of online help, speeding up the process of changing users' perceptions. Coupled with a strong marketing campaign directing users' attention to the emotionally engaging help system, affective design has the potential to change what users think of online help and how they use online help to achieve their objectives. The research presented in the previous chapters is in no way complete, but a step in a new direction.
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