

Methods of Discovery: A Guide to Research W

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Chapter 7: Research Writing and the Internet

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Introduction

As an Internet user, you probably noticed that web sites are different from traditional, printed texts that might be found in the bookstore or the library. To read a website, one has to follow links, and the order in which you choose to follow those links is often entirely up to you. The linked nature of websites allows readers to move quickly and directly between pages. Web texts also often use more graphics and other multimedia content than traditional texts. Finally, many web texts look different from printed texts, employing web-specific layouts, writing styles and formats.

Heavy Internet use has changed our reading and writing habits, although we very seldom think about it. The average user of the World Wide Web sees the Internet primarily as a source of information and entertainment, or a means of communication. We use the web to plan trips, download music and movies, and find research sources. However, the Internet is also a powerful new writing environment that allows us to create an entirely new kind of texts impossible in more traditional, printed media. In addition to providing information or connecting us with other people in a flash, the Internet has revolutionized ways in which many people read, write, and even think.

The kind of writing most often found on the Internet is called hypertext, and this chapter is about the possibilities that hypertext can open to researchers and writers. This chapter will discuss how writing in hypertext in and other new media helps us redefine what it means to conduct and present research.

As mentioned above, websites often contain elements impossible in printed texts. Such elements include audio and video clips, animations, and so on, unusual color designs and page layouts, and so on. Collectively, these elements have come to be known as "new media". New media writing has become an integral part of writing for the web as a whole, and it is important to understand the basic principles in order to become a competent writer of Internet texts. This chapter will cover such principles.

Next, the chapter will discuss visual rhetoric and its relevance for researchers and writers. Briefly defined, visual rhetoric is the study of use of images and other visual elements for persuasive purposes. Of course, visual arguments are possible in non-computerized writing environments. The genre of the photo essay genre, for example uses visual persuasion to achieve its goals. At the same time, because hypertext writing typically uses both verbal and visual elements, web and new media authors should understand how visual rhetoric works and how to incorporate its principles in their work.

Theoretical discussions are rarely of any use if they are not followed by practical advice helping readers to implement them. Therefore, in this chapter, you will also be offered advice on how to design, build, publish, and maintain a website.

So, why learn about hypertext and new media writing? There are at least two reasons. Firstly, being able to read and create complex hypertexts widens any writer's repertoire of approaches strategies and techniques. Having this skill will broaden your definitions of writing and reading by including non-linear, linked texts and visual and multimedia elements along with words. That will ultimately allow you to match a wider variety of writing strategies and techniques to a wider variety of rhetorical situations. Secondly, as hypertext and new media writing become more and more popular and penetrate more areas of our life, being a savvy reader of such texts and understanding how they work to achieve their persuasive goals becomes almost indispensable for an educated person living in the twenty-first century. Academic writers, government agencies, political campaigners, entertainers, and countless other authors and groups use web and new media writing to influence their readerships. Understanding how those texts work and being able to create them will make you a better student, professional, and citizen.

The structure of this chapter is somewhat different from the structure of other chapters in this book. To the extent that this is possible in printed media, I have tried to give this chapter a look and feel of a hypertext. This is why it contains several "hyperlinks." In some cases, explicit connections and transitions between sections are not provided, instead leaving it up to you, the reader, to supply them.

Definition of Hypertext

Let us begin with an extended definition of the term "hypertext." As has already been mentioned, texts most often found on the Internet are called hypertexts. Hypertext writing is what has defined the Internet and what has given it its current importance in various spheres of life. Briefly defined, a hypertext is a collection of linked elements, sometimes called "nodes." Readers can travel between the linked texts, reading them either in a linear or a non-linear order. This ability to move among the nodes of a hypertext following many different paths distinguishes it from most non-hypertext writing which typically has to be read from beginning to end and in a linear fashion. As we will see below, this characteristic opens up a vast array of possibilities for readers and writers of hypertexts.

The Internet itself is a vast collection of linked texts. There is not a central computer anywhere on the World Wide Web which hosts the "main" site of the Internet from which reading of all Internet sites has to start. Instead, all locations on the web are equal, if not in the quality of information they contain, then at least in their position relative to other sites.

Most Internet sites contain links to other sites, which allows interested readers to move beyond one site and into many others. The word "hyper" in "hypertext" comes from Greek for "over," which means that by following hyperlinks, readers of a website are able to move between the site's pages or parts of one page directly and non-sequentially. For example, if a website consists of ten pages, typically, in order to get from the home page to page number six or seven, readers do not have to go through the first five or six pages consecutively, as they would in a traditional, printed text. Similarly, an author of a website may choose to place hyperlinks to different passages or words within the same page, thus making it possible for readers to move quickly between lines, sentences, and paragraphs, reading some of them while skipping others. This is not the case with linear writing which we see in print. For example, this chapter is written as a linear text, and I expect my readers to begin reading the chapter in the beginning and proceed sequentially.

The concepts of linking and connecting are at the heart of every hypertext. Traditional texts

create connections between paragraphs and between chapters through explicit means, such as transitional sentences. In hypertexts, such transitions and connections may be created through a thoughtful and deliberate placing of hyperlinks between chunks of text. This new way of constructing a text has enormous implications for the kinds of research and writing which we are about to discuss in this chapter.

Hyperlink: Text as a Network

The term “hypertext” was coined in the 1960s by Theodore H. Nelson who defined it as “non-sequential writing—text that branches and allows choices to the reader, best read on an interactive screen. As popularly conceived, this is a series of text chunks connected by links which offer the reader different pathways.”

Theorist of hypertext George Landow once wrote that hypertext was based on the idea that texts were “composed of blocks of words (or images) linked electronically by multiple paths, chains, or trails in an open-ended, perpetually unfinished textuality described by the terms link, node, network, web, and path....”

It may seem to us that the view of texts as networks of ideas only became possible with the advent of computers and the Internet. However, many scholars have argued that hypertext reflects the true nature of all writing and all thinking because it emphasizes connection of ideas rather than orderly production of neat texts. The computer just made is possible for writers to make and display these connections in a new way. Another influential author, Jay David Bolter argued in his book *Writing Space* that all texts are networks of ideas. The difference is in the way that different types of texts are able to express the relationships between ideas. In traditional texts, those ideas are presented as hierarchies. For example, a traditional school paper may contain a thesis statement with various types of support of it. Such a paper is a hierarchy of ideas, which means that the thesis is the first or main idea, with the supporting ideas taking subordinate roles. The reading of a traditional text often begins with the main idea and proceeds to the supporting ones. The reading (and, by extension, the writing) of such a text is sequential, which means that it proceeds from the first sentence, paragraph, or chapter to the next, and so on.

Computer technology has allowed us to present texts as networks of related elements rather than as hierarchies. To be sure, some ideas presented in a hypertext may be more important than others and websites, particularly academic ones, may contain thesis-like elements and support. At the same time, hypertext has refashioned the reading and writing processes, encouraging us to see texts and the meaning they represent as networks rather than sequences of ideas.

Key Features of Hypertext Reading and Writing

Hypertexts possess several characteristics not present in traditional printed texts. These characteristics of hypertexts are very important because they redefine ways in which we read and write such texts. These characteristics include the following:

- Hypertexts are non-linear and non-sequential. To read a web text, it is not necessary to begin on the first page and end on the last. Instead, readers can move freely between

pages, constructing their own reading paths.

- By being able to choose reading paths and links to follow, a reader of hypertext acquires a more active role than a reader of a traditional text. Hypertexts can feel like they have "no end."
- Hypertexts present ideas and information in a non-hierarchical manner unlike traditional printed texts that are usually organized along "thesis-evidence" lines.
- Hypertext blurs the boundaries between different texts by linking them together. This allows skilled hypertext writers a wider range of rhetorical moves, strategies, and techniques.
- Hypertexts use graphics and other multimedia for persuasive purposes more than many traditional texts.

Let us now consider each of these features of hypertext in some detail.

Hypertexts are non-linear and non-sequential. To read a web text, it is not necessary to begin on the first page and end on the last. Most websites have home or front pages with a number of hyperlinks leading readers to other pages on the site. Readers approach most web texts selectively, visiting only those links that interest them and frequently skipping the others. The non-linear and non-sequential organization of most hypertexts allows readers not to begin on the front page and go, systematically, through all the links even if those links are of no interest to them. Sequential reading is usually possible only in relatively simple websites with a small number of hyperlinks.

Certainly, it is possible to read a traditional printed text selectively, too. We browse magazines and newspapers casually instead of reading them from the first to the last page, for example. However, each separate text, each separate article in any of these traditional publications is meant to be read sequentially, and it is extremely hard to create a coherent message out of a non-sequential reading of such a text.

Exploration Activity—Reading Hypertexts

Examine ways in which you approach reading hypertexts. Visit two or three websites of your choice and trace your reading paths. Choose sites that are fairly complex and will give you enough reading options. You can complete this activity on your own or with a partner. Record your answers to the questions below and share them with your classmates.

- Assuming that you entered each of the sites through the homepage, did you read the homepage from top to bottom? If not, why not, and at what point did you decide to leave the homepage?
- Did you visit all the links leading from the homepage? Why not? What attracted you to the links that you did visit?
- If other pages on the site had links leading you to other pages within the site, did you visit any of them, and how did you decide which ones to follow?
- If the site contains links to other sites (and almost every website does), did you follow any of them? Did you return to the original site or keep following those external links?

The next key feature of hypertext is the increased ability of the reader to choose the reading paths. By being able to choose reading paths and links to follow, a reader of hypertext acquires a more active role than a reader of a traditional text. Hypertexts can feel like they have no end, taking readers back and forth between various pages. As evident from the activity above, readers of hypertext are usually able to choose their own reading paths. A reader entering the

site through the front page may or may not decide to read it and go straight to the linked pages instead. Then, it is up to the reader what links to choose, and in what order to follow them. This freedom to navigate between various parts of a hypertext freely allows readers to create the shape and the meaning of that text almost entirely. Skillful hypertext writers recognize this fact and create multiple paths for their readers to follow and multiple textual possibilities to explore.

An even more interesting situation can occur when we access a website after a search engine search. Often, when we type a search term into a search engine, the results do not lead us to the homepage of a website. Instead, we are taken directly to the page of a website which contains the information we are looking for. That page, and not the front page, becomes our entry point into the hypertext we are reading. If we get all the information we need from that one page, we may not ever visit the site's homepage or any other pages on the site. Thus, different readers may create different versions of the same hypertext, depending on the pages they visited and the order they visited them in.

Hyperlink: An Experiment in Reading Hyper Fiction

Fiction writers realized the potential of hypertext early on and began creating hypertext works. Such works have become known collectively as hyperfiction and are easy to find on the Internet. Instead of writing a linear story with a sequential plot, authors of such works create their stories as hypertexts, by linking multiple pages together. The more sophisticated works of hyperfiction may consist of hundreds, even thousands of linked pages. Some of these works are better than others, but, because they are hypertexts, they place a new set of demands on their readers.

Try an experiment. Read a work of hyperfiction, like Deena Larson's hyperfiction called "Disappearing Rain" which can be found at <http://www.deenalarsen.net/rain/>. Go to the website and read as much of this work of hyperfiction as you wish. Then ask yourself some basic questions about your reading:

- In your opinion, what is the story about?
- Who are the main characters?
- What is the sequence of events in the story?
- How does the story end?

Record and reflect on your reading process. Chart your reading paths by recording which links you visited and how the story unfolded for you.

If we look at the first page of "Disappearing Rain," we notice that readers are presented with two reading paths right from the start: Part I Water Leavings, and Part II Water Journeys. Depending on which of the two reading paths we choose, we get two different stories. As we visit more and more pages within the hypertext, we are always faced with the necessity to make choices about where in the text to go next. While reading a traditional text, we are usually expected to proceed linearly and sequentially and we do not have to make choices which page to read next.

Successful Hypertext Reading Strategies

Readers who have never encountered a complex hyperfiction work like Larsen's are likely to approach the task of reading it with the same set of expectations and strategies as we would reading a linear text. The problem is, of course, that, when reading hypertexts, these old expectations of what a text should look and feel like will be disrupted and the old reading strategies, which worked well for traditional texts, are likely not to work. This disruption of expectations may lead such readers frustrated and not knowing how to approach reading other similar hypertexts. To become a better reader of hyperfiction and other hypertexts, follow the following techniques. As you will see, most of them are based on the fundamental strategies of critical reading which are discussed in detail in Chapter Three of this book while others are specific to hypertext reading only.

- Approach the reading of every hypertext with a critical mind; remember that in order to create meaning, you need to "attack" the text instead of waiting for its meaning to come to you.
- Chart your reading paths: remember what page you have just visited and notice where you are going next. If necessary, keep written notes of your reading paths. This will help you make sense of the reading.
- Try different reading paths. Note, for example, how the meaning of the text changes and how the arguments presented in it may be perceived differently, when you start on different pages and when you follow different links. Consider the purpose, intended audience, and context of every hypertext, just as you would while reading other, linear texts.
- Literary hypertexts, like the story Disappearing Rain, are designed to have several meanings. When reading hyperfiction, it is sometimes useful to abandon attempts to "get" one meaning out of a story. Hypertext authors often attempt to create several plot lines within the same story, and skillful readers of such texts will attempt to create as many readings as possible. So, unlike in traditional texts where it is usually possible to say how the story ends with a high degree of certainty, good hyperfiction will allow readers to construct different endings and storylines depending on the links they choose to follow.
- Discuss your reading paths and outcomes with others. Just as you would discuss your readings of traditional texts, share your results with classmates, teachers, and other readers. As you know from reading Chapter Three of this book, active reading is a dialogic process.

Exploration Activity—Charting your Hypertext Reading Path

You are now invited to experience reading a complex hypertext on your own and to reflect on your reading process. You can work with "Disappearing Rain," or you can select a hypertext from the following list. These particular texts are useful to analyze because they are complex yet interesting and stimulating. They also include a variety of genres from academic webs, to hyperfiction, to poetry. Choose from the following:

- The Victorian Web, by George Landow (<http://www.victorianweb.org/>)
- The Post-Colonial Web, by George Landow (www.postcolonialweb.org)
- Kairos: A Journal of Rhetoric, Technology and Pedagogy (<http://kairos.technorhetoric.net/>)

Your instructor will be able to suggest other hypertexts. Working on your own or with a partner, begin reading these texts. If you do not have access to a computer in your classroom,

complete the activity at home or in a computer lab and share your results with your classmates. As you read, complete the following tasks and answer the following questions:

- As you navigate through the site, on a piece of paper carefully note which pages you follow and which ones you skip.
- What story or argument, if you are reading an academic web, emerges from your reading? Or, are there multiple stories or arguments? If so, how do they change depending on the reading path you choose?
- What differences in your own reading process do you notice between this experience and reading a linear text? How, for example, do you decide which page to go to next? Is this decision-making process similar or different from what you do when reading a traditional text?
- Can you confidently point to a “beginning,” a “middle,” or an “end” of the story or argument? Why not?
- After you finish your reading, find someone else in the class who read the same text as you and compare notes. How similar or different were your readings of the same text?

It is likely that different readers will choose different paths in these hypertexts. Each of these texts contains numerous pages and external links for the reader to choose from. The kind of story or argument you construct while reading will depend on the reading path you choose to take. Thus, hypertext with its multiple readings paths allows for multiple stories or arguments, beginnings, middles, and ends. Ultimately, it allows for a multiplicity of meanings of the same physical text.

Of course, readers of traditional linear texts also create different meanings as they read. As you can learn from the chapter on reading of this book, good readers are active readers who work to construct a meaning out of a text instead of simply expecting this meaning to come to them. Multiple interpretations of texts constructed by different readers make arguments about those texts’ meaning and significance possible. Yet, only readers of hypertexts construct their meaning based on the physical reading path that they take. As a result, a reader of a hypertext, especially of a complex one has to be more active in constructing a meaning out of that text. In a hypertext, there are few or no signposts, such as transitions between paragraphs, for the reader to follow. It is up to the reader to create those missing connections between the parts of the story or argument.

Impact of Web Writing on Research Writing

How can the non-linearity of reading and writing hypertext impact the research writing process, and what does it mean to us as researching writers? What practical changes to the ways in which we conduct, analyze, and present research can it introduce? In order to answer these questions, consider this: hypertext has changed the definition and the nature of a written argument. In addition to the traditional linear argument based along the thesis-defense lines, writers can now create multi-faceted, almost three-dimensional works in hypertext. Such works can highlight connections and associations between ideas, arguments, and proofs in a new way.

Earlier, I briefly compared the hierarchical structure of a linear text with a multi-directional nature of a hypertext. Let us now revisit that comparison in order to examine how hypertext can redefine research writing. Consider, for example, a typical academic linear text, such as the research paper. A good academic argument makes a claim and offers evidence to support

that claim. The thesis may be stated in the beginning of the paper or built up gradually throughout it. In either case, traditional academic texts attempt to present a coherent and unified point of view and they do so in coherent and unified voices. All the evidence, all the research, and all the explanations and clarifications that the writer of such a text uses, are designed to help him or her advance the claim made in the paper. In order to guide readers through the text, the writer deploys certain signposts throughout it, such as transitions between paragraphs, subheadings, and other devices designed to show the reader where the argument is going next and how the reader is supposed to follow that argument. A good linear argument is a hierarchy, whose elements follow each other logically and sequentially.

Web texts are usually constructed in a different way. Hypertext writing allows writers to create arguments by connecting research, ideas, and points of view in a non-hierarchical and a non-sequential manner. If we compare a linear text is a straight line and if the reader of such a text typically follows that line from beginning to end arriving at a resolution at the end, a hypertext can be compared to a three-dimensional writing space. Writing hypertexts often means moving into different directions, juxtaposing and connecting different points of view, utilizing different, often contradicting research, and writing in purposefully dissonant voices. Consider, for example, George Landow's Victorian Web, which can be found at www.victorianweb.org. From the front page of that complex site, readers have access to a plethora of resources devoted to many aspects of the Victorian world. The resources found on this website include articles on Victorian literature, history, society, science, and many other areas. The site is encyclopedic in its scope allowing readers to learn about different aspects of the same large content area. In addition, the numerous pages of the site link to other sites dedicated to Victorian studies, which gives readers immediate access to more resources on the subject.

Victorian web, like other academic sites similar to it, collects a vast amount of research in one place. Readers are presented with many arguments, or claims, about the Victorian world as they browse through the pages and visit the external links that interest them. But the site presents its content not hierarchically, as traditional academic paper would, but rather by connecting many related pages with related information together into one web resource. It serves as a collection resources, a clearing house of knowledge which allows readers to make their own connections and create their own lines of argument as their travel among its pages. Other comprehensive academic hypertexts follow the same strategy.

Hyperlink 2—Writing Hierarchy vs. Writing Space, or Hypertext Writing as Connection

To take advantage of the possibilities that hypertext offers writers, it is necessary to understand some fundamental theoretical premises behind those possibilities. As was mentioned earlier in this chapter, traditional writing, especially academic writing, is usually hierarchical while hypertext writing is usually spatial. To write a hierarchical text means to subordinate some elements others. In making a linear argument, a writer often has to make a "pro or con" choice, which may lead to neglecting, suppressing, or dismissing the research that does not support the writer's thesis.

In his book *Writing Space*, author Jay David Bolter suggests that hypertext writing is similar to constructing a three-dimensional object. According to Bolter, "Electronic writing is not only inclusive; it is also constructive. It enables the writer to build new elements from traditional ones.... The writer draws a link from one paragraph to another paragraph that explains or elaborates it." (60).

Traditional texts emphasize the product, the finished linear paper, while hypertext writing values connecting ideas. In a writing class where students write only traditional, linear papers, the texts are self-contained and clearly delineated. In a class which experiments with hypertext writing, texts may consist entirely or in part of linked ideas and theories.

In order to understand this key feature of hypertext, we need to reconsider the way we define the word "writing." Instead of thinking in terms of producing a final paper which has a defined number of pages and in which ideas follow one another in a neat sequence, we will need to learn to see writing as a process as connecting ideas in productive ways.

These are, then, possible implications of hypertext writing theory for the researching writer:

- Think of writing in spatial rather than linear terms.
- Hypertext writing spaces invite all points of view, research data, and voices, including contradicting ones.
- A hypertext is similar to a purposeful collage of facts, ideas, and conclusions.
- Instead of subordinating some elements of the text to others, the task of a hypertext writer is to arrange and connect those elements in an interesting and creative way.

Revision Project—From a Linear Essay to a Writing Space

Revise an existing linear paper that you have written for this or any other class into a hypertext. The paper you choose should be argumentative in nature and contain research. It can be on any subject, and, in selecting the text to work with, you should treat the term "argument" broadly. In addition to the "pro-con" or debate-style arguments, consider exploratory papers that examine a problem or a theory, or try to answer a question.

Treat this revision as an experiment in converting a linear argument into a non-linear one. There is no pre-determined form or shape that your hypertext should take. Understand, however, that during this activity you will likely need to make significant changes to your paper, including writing new text and conducting research. For advice on how to design, build, and publish your website, consult the appropriate section later in this chapter.

As you plan your hypertext revision, consider the following questions:

- Given the capability of hypertext writing to present multiple arguments and points of view, will you need to revise the main claim of your paper to include other points of view or arguments?
- Do you need to include new arguments or evidence into the writing by linking your work to the works of others?
- Consider the arrangement of various parts of your hypertext. How should pages be linked to highlight the main ideas of your argument in the best way?
- Consider the ease of navigation of your site. Will your readers be able to find information on your site easily and logically?
- How can you use graphics and other visual elements to influence your readers?

Hypertext Blurs Boundaries Between Texts and Redefines Authorship.

Another novel aspect of hypertext writing is the way in which it often blurs the boundaries between texts that are otherwise separate and distinct from one another. Most websites contain external links that lead their readers to other sites written by other authors. In a well designed and rhetorically effective website, every external link has at least some relation to the subject or argument of the site it appears on.

While allowing readers access to a vast array of resources on the topic, this practice of linking also raises a very important question: are the sites links to a given hypertext parts of that hypertext or are they separate entities? In other words, if hypertext writing redefines research and argument by emphasizing connection of ideas, theories, and points of view over their subordination, then are these external links extensions of the original texts, or are they independent, separate texts? If by appearing on the original site, those linked become extensions of this site, how does this affect the reader's experience of the hypertext and what implications does the ability to link to other texts have for the researching writer?

Answering these questions is important for every researcher and writer. To understand why, let us again consider a traditional linear text, such as an academic research paper. A traditional research paper is a closed entity with definite boundaries. It begins on the first page and ends on the last. It is a self-contained text with a, presumably, self-contained and more-or-less conclusive argument. Academic papers contain footnotes, bibliographies, and other references to external sources used in the writing of the paper, and interested readers can find and read those sources.

However, those external sources are also independent and self-contained texts that probably have footnotes and bibliographies of their own. In this sense, they are not parts of the paper in which they were quoted or summarized. The original paper and its sources exist independently as distinctly separate texts. When writing a traditional academic essay and we cannot simply insert an external text into our and tell my readers to consult it on their own. Instead of inserting the external text in full into traditional academic essays, we are expected to summarize, paraphrase, or quote this text and use it in the construction of our own argument. As authors of linear academic papers, we have to relate, explain, and comment on all borrowed material using our own words. Not doing so will likely lead to accusations of laziness, incompetence, or plagiarism.

Yet, hypertexts, including respected academic hypertexts, include links to other texts as parts of their arguments all the time. Many hypertexts depend on those links for their very existence. This is certainly the case with Victorian Web, a site discussed earlier in the chapter.

The site's front page offers us twenty links to various topics of Victorian studies. Click on some of those links, and you will be taken to other pages, also with extensive collection of links to various Victorian resources. You will also quickly notice that a vast majority of the articles to which those links lead were written not by Landow but by other contributors. Are those external texts not a part of the Victorian Web hypertext? And if so, what will become of Landow's web if all those links are taken out? It is easy to see that if the links were removed, the only page left would be the front page with the table of contents.

Does the fact that Landow's text relies on linking other works so heavily invalidate it as an academic project? Not at all since all as long as the text that the Victorian Web links together

are credible and reliable. And what about the articles themselves—they use plenty of external links that lead to other complete texts written by others?

Academic web texts are not the only ones that depend on some type of external links for their very existence. Consider, for example, any news service on the web, such as MSNBC (www.msnbc.com), or any sports website, such as ESPN (www.espn.com). Both sites have extensive news and other content, but, after a closer examination, it becomes clear that parts of this content are, in fact, external links. MSNBC for example, publishes on their website a lot of news stories created by reporters from the news agencies Reuters, Associated Press, and others. Similarly, the ESPN site links to sites of various sports teams and other external content.

Webtexts' heavy dependence on links, including external links, means the following:

- Because of the linked nature of hypertexts, it is sometimes difficult to clearly define their boundaries.
- Complex hypertexts are often collaborative with authors from different organizations and even from different countries contributing to their content. Excellent examples of such collaboration on the web are wikis which are discussed later in this chapter.
- Ways of including and acknowledging research and external sources inadmissible in linear writing are common practice in hypertext. The most common way is linking directly to the external source in addition to or instead of paraphrasing, summarizing, or quoting it.

So, does the above mean that authors of hypertexts can simply collect existing texts, quickly throw them together, and have a great, rhetorically effective text? Thinking about hypertext writing as just a collage, a haphazard collection of chunks of text would be incorrect and dangerous. Web texts like Landow's Victorian Web and other similar complex hypertexts are carefully planned and executed arguments. Their authors go to great lengths planning the location of the linked texts within their hypertexts as well as when, where, and how their readers would access those texts. They also tie together their hypertext arguments by writing additional commentary that clarifies, comments on, and complements the linked texts.

More and more academic writers produce web texts instead of or in addition to traditional linear articles because they realize that such texts promote ways of thinking which have been valued by critical readers and writers for a long time, since well before the advent of computer technologies. Such ways of thinking include analyzing multiple arguments and ideas in conjunction with one another, presenting multiple arguments and perspectives, and so on. Linked texts allow writers to relate and connect ideas and even existing texts in addition to producing a text from scratch. This is certainly unusual way of thinking about writing, one that may seem strange to people without much hypertext reading and writing experience.

Understanding composing in this new way will probably require a significant shift in the mindset of many writers. Instead of closing in on a single thesis or conclusion, as linear texts tend to do, web texts often branch out in search of ideas and sources. They open themselves up instead of closing down. They allow their authors to present ideas and arguments in new and interesting ways.

At the same time, with all the excitement and opportunity that web research and writing has to offer, it is important to see hypertext compositions not as superior to traditional, linear texts, but as different, ones that are based on different ideas about writing and ones that allow writers to develop and express their ideas in a different way. Contrary to some radical predictions about the imminent demise of traditional academic argumentation, it is here to

stay. Therefore, it is important to see hypertext reading and writing skills as another tool in the toolbox, not a replacement for older, more established genres and ways of writing.

Hypertext Writing Project: Writing Through Linking Existing Web Texts into a Hypertext Argument

This project invites you to create a hypertext, in a way similar to Landow's Victorian Web in method, although not necessarily in topic, by carefully selecting existing texts and linking them together into an argument. Unlike Landow, however, also write a page or two of additional commentary to the collection of texts you have created that would introduce and explain your argument to your readers.

As you select and link the components of your hypertext, keep in mind that the word argument in this case does not mean a "pro or con" debate. You will not need to have a thesis statement and come up with "proofs" or "evidence" for it. Instead, the term argument in this case means a treatment of some topic or subject that would allow your readers to understand it and, if they want to, research it further. I suggest the following steps for this project:

1. Use your favorite invention strategies and techniques to come up with a subject.
2. Conduct searches for appropriate web texts to include into your project. Be sure to follow the criteria for selecting reliable and trustworthy Internet sources that are discussed in Chapter 4 of this book. NOTE: While conducting your research, remember not to look just for sources that support whatever opinion or point of view you have on the subject of your investigation. Remember that hypertext calls for writing in many voices and from many positions and points of view.
3. Now that you have found your research sources, the process of working with them is really very similar to the one you should use when writing a linear text. You can read more about how to find relevant and reliable research sources in Chapter 4 of this book. Here, however, are a few pointers.
 4. Read everything you found carefully and several times. While reading, take notes, write summaries, and pose questions.
 5. What ideas, opinions, and theories about your subject emerge from your readings? Write a brief summary of those ideas and theories.
 6. How does what your sources say about your subject compare to what you know or believe about it? In other words, have you found out anything new during your research?
 7. Now that you have decided what your sources' views about your topic are, it is time to think about the best ways to arrange them within your hypertext. Basically, you will need to decide which links you will want your readers to go to and in what order.
 8. Provide some commentary to the argument that you have created. You have a couple of options here. On the one hand, you can create a separate page in your hypertext where all your commentary will be located and from which your readers will be able to visit the links. On the other hand, you could write a more or less conventional paper on your subject, but, instead, of citing your sources in in-text parentheses and at the end, as you would in a traditional paper, you would link them directly into the text. The first option is more interesting because it allows you to fulfill the potential of hypertext more fully by providing your readers with a non-linear and recursive reading experience.

Visual Rhetoric in Hypertext Writing

Images and other visual elements play a two-fold role in research writing, both in traditional and in web texts. On the one hand, they can be useful research sources, allowing writers to learn more about the topics they are investigating. We have touched upon such use of images in Chapter Four of this book. On the other hand, images can be powerful tools for argument and expression, enhancing verbal texts and helping the writer reach and influence his or her target audience.

Of course, visual argumentation did not appear with the advent of the Internet. Writers have been using illustrations, graphs and charts, creative document layouts and fonts for centuries. Yet, the Internet seems to have popularized visual persuasion to an extent that a vast majority of websites include at least some elements of it, and some even depend on the visuals for their content and style.

The Internet allows authors of hypertext to use graphics and other visual elements in ways that traditional printed texts often do not. In addition to images, web texts can contain video clips, interactive menus, graphs and charts. Finally, many websites use color schemes and fonts that are not usually seen in print. All these elements of visual will work to the writer's advantage only when they are used judiciously and according to principles of visual rhetoric. Otherwise, they can become a distraction to the readers or even make the text confusing and unreadable.

Just like in any other text, visual elements in a rhetorically effective text, reflect and supports the writer's purpose and show that writer's sensitivity to the needs of the audience. A branch of rhetorical studies, called visual rhetoric, studies the persuasive power of images and other graphical elements. The scope of visual rhetoric includes images, film, fine and performance arts, statistical charts, document layout and design, and several other types of visual persuasion. Visual rhetoric studies both purely visual and hybrid visual/textual arguments across many spheres of life, academic disciplines, and professions. Many of the principles of visual rhetoric are the same or similar to the ones which apply to verbal texts and which were discussed in Chapter One of this book. This section covers fundamental rhetorical principles in relation to visual persuasion.

 Purpose, Audience, and Context in Visual Persuasion

Knowing your purpose, audience, and context in which the work is created and will be read is as important for visual persuasion as it is in verbal arguments. Use the following questions to analyze images and other visual arguments.

- What is the purpose of the work?
- Who is the intended audience?
- Is the intended audience friendly or hostile to the argument?
- Do social conditions exist which will help the audience to accept or reject the argument? For example, after natural disasters, relief agencies are almost certain to succeed with their fund raising campaigns because their audiences are willing to give.
- What is the context in which the image was created and will be read? For example, did any significant events lead to its creation and will those events influence its public perception?
- What knowledge, background, or previous experiences with the subject does the audience have? Can that experience make the readers more or less receptive to the argument presented in the image?
- How do colors, fonts, and layout of the work influence its perception?
- How relevant, reliable, and appropriate is the work as a research source? Does it help you to learn something new about your topic and to convey that knowledge to your readers?

Apply these questions to one or several visual arguments, such as advertisements, magazine covers, photographs, websites, and other texts that use visual persuasion.

 The Three Rhetorical Appeals in Visual Persuasion

To remind, the three rhetorical appeals are logos (appeal to reason), pathos (appeal to emotion), and ethos (appeal to the credibility of the author). Skilled authors of visual arguments use all three appeals to their advantage. In order to become a successful reader and writer of such arguments, it is necessary to know how to use all three appeals. According to popular perception, a picture is “worth a thousand words”. Behind this statement is the idea that visual arguments are capable of directly capturing reality while words always add an extra layer of description and interpretation that prevents us from seeing things as they truly are.

Another popular notion is that visual arguments are based on emotion more than on reason or ethos of the author. While it is true that photos, paintings, films, and other visual arguments can invoke a stronger and more immediate emotional response in us than many verbal texts, sophisticated visual rhetoricians rarely neglect the other two appeals. However, different kinds of visual arguments use the three appeals in different ways, depending on their purpose, intended audience, genre, and format. In this sense, visual persuasion is no different from verbal argumentation.

For example, if a relief agency raising money to feed the needy publishes images of starving children (Figure 10.1), it clearly attempts to appeal to the readers’ emotions first. However, the images can be accompanied by text that contains statistics and other information helping the readers understand the argument and act. If that is the case, then logical appeal comes into play. Finally, decisions of the audience to contribute or not to contribute to the relief efforts will often depend on the credibility of the organization that has made the appeal.

Figure 10.1

Consider, on the other hand, Figure 10.2 which a graph or chart devoted to poverty rates the US. It is likely that this type of visual argument will appeal primarily to the logos of the audience by including numbers and percentages that would explain the problem. However, as we look at such a graph and realize the extent of the problem, we are likely to feel strong emotions as well. Finally, the credibility of the author is important because it may influence our decision about donating money to the organization.

Figure 10.2

In order to become a critical reader of images and other visual arguments, it is important to consider the following questions

- Who is the author and what is the source of the work. Are they credible? (Ethos).
- What elements of the visual work appeal to the viewers’ reason? (Logos)
- What elements of the work appeal to emotion? (Pathos)
- Which of the appeals dominate and does this domination make the argument more or less effective?
- How would the argument and your reception of it change if one or two of the appeals were removed or reduced?

Apply these questions to one or several visual arguments of different types. Work with photos, cartoons, statistical charts from various academic disciplines, and so on. Share the results with your classmates and instructor.

 Exploration Activity—Analyzing the Use of Graphics on the Web

Working on your own or with a partner, examine one or several websites rich in graphics. Try to decide what role those graphics play on the website and what goals the website’s authors tried to achieve by placing them there. Consider the following questions. When you finish,

discuss your results with the rest of the class and with your instructor.

1. What is the purpose and intended audience of the site, and how do its visual elements help accomplish that purpose and reach the audience?
2. How many images are there on the site and how big are they? Do they overwhelm you and prevent you from understanding the overall message or argument of the text?
3. How do images, backgrounds, menu bars, and so on, contribute to the site's message or argument? What would the site lose (or gain) if the graphics were removed or altered? In answering this question, try to go beyond simple oppositions such as "boring-interesting," Instead, think in rhetorical terms and consider how these elements of visual rhetoric help or prevent the site's authors from achieving their purposes and reaching their target audience.
4. Consider the specific ways in which the graphics on the site contribute to the argument presented on the site. Do they offer evidence, support, illustration, for example? Or, perhaps, they help to engage the reader by appealing to our emotions?
5. If there are graphs and charts on the site, are they easy to read and understand, and are they relevant to the argument?
6. If the site uses navigation icons, menu button, and so on are they effective? Can you easily determine what they mean?

 Signs and Icons

Images can persuade either in conjunction with texts or by themselves.

One category of images which are almost always used without any accompanying text are called are often called signs or icons. Because their users have agreed on their meaning, signs do not need any text to convey meanings. Consider, for example, traffic signs or computer icons. Once we learn what those images mean, we do not need words to supplement them. We view them "as a whole" deriving meaning from their appearance.

Signs are arbitrary which means that when they are first invented, there is no settled and concrete relationship between their appearance and what they mean. Images become signs over time, through frequent and repeated use by many people and through social negotiation of their meaning. Consider, for example, what would happen if the government decided to introduce a completely new system of traffic signs. Brochures explaining the new system would probably be printed and classes helping drivers and pedestrians to learn them would be organized. But the transition to the new system is bound to be slow and gradual. Diligent learners will learn the new signs, to be sure, but it will take time and repeated use of that new system to forget the old system and to begin associating the appearance of the new signs with the concepts or actions they represent.

To understand the socially agreed nature of signs better, consider Figure 10.1 below. The "Stop" sign is a red octagon with white letters in the middle. When we read the word "STOP" on it, we know what to do. Now consider the sign that warns us of an approaching "Stop" sign. There are no words on this sign, yet most of us will easily understand its meaning because of the familiar red octagon and the arrow pointing forward.

The fact that traffic signs are different from country to country is further proof of their societal and local nature. Consider, for example, the European sign "No stopping" (Figure 10.1) and notice how different it is from its US counterpart. Getting used to the meaning of signs from other signs systems, such as foreign countries takes time. Such signs become understandable and persuasive only when their meaning is internalized

A similar process is applicable to such computer icons as "under construction," or website navigation signs such as "forward," "back," and so on, as well as other socially agreed-upon signs.

"STOP", USA "Stop sign ahead," USA "No Stopping", Europe

Figure 10.3

When images are used in conjunction with text, to illustrate or enhance it, the way we read them and their meaning is usually heavily influenced by the text around as well as by our previous knowledge and experience with the subject or concept that those images represent. For example, when we go to a fine arts museum, we are usually given some type of textual clues designed to help us view and appreciate works of art. There could be a sign on the wall next to a painting explaining the history behind it, for example, or an audio tour that accompanies an art exhibition. When we are given such textual clues to help us understand the images we are looking at, our reading of those images, is influenced, if not determined by the accompanying text. Similarly, our previous experience with the subject of an image or a movie will influence the way in which perceive the work. Psychologists know that people who have lived through traumatic events are negatively affected by images of those or similar events, more so than the people who did not experience the trauma firsthand.

Understanding how signs work and persuade has several implications for visual rhetoricians.

- If you have an international or inter-cultural audience, do not assume that all your readers will know and understand the same signs.
- Use only concrete, clear, and unambiguous signs.
- Avoid signs and icons that can be offensive to all or some of your readers.
- Be aware of the needs of users with disabilities. Provide alternative ways to understand the content of your site. See the section on website accessibility below.

 Good Practices in Using Graphics in Web Design

Every element of your text should contribute to its overall meaning. Therefore, if you do decide to use graphics in your hypertexts, you should carefully plan their use and consider how they will impact the success of your text. In planning the use of graphics in your hypertext, follow the following principles:

1. Use visual elements to enhance your argument. Do not use unrelated graphics, no matter how spectacular they are.
2. Graphics should help your audience understand your message and be easy to read. For example, light-yellow text on an orange background (an extreme example, I realize) will only create eyestrain.
3. When using images and other graphics to illustrate text, place them next to the relevant passages.
4. Provide captions for each photograph, chart, and drawing.
5. If you borrow images and other graphics from the web, document their source using an accepted citation system.
6. Realize that the layout of your text and the fonts used are also parts of the argument.
7. Be extremely careful with digital alteration of images. Altering them may infringe copyright and makes others suspect you of dishonesty.

 Two Visual Rhetoric Projects

This section offers you two visual rhetoric projects. The first project is a rhetorical analysis of a visual rhetoric object or artifact. In the second project, you are invited to create a series of images which, on their own or in conjunction with text, can present an argument or tell a story.

<C> Visual Rhetorical Analysis Project

Public projects that involve visual elements are chosen and built not only on the basis of their cost-effectiveness and usefulness, but also on the basis of their aesthetic and visual appeal. For example, the Freedom Tower which will replace the World Trade Center Towers in New

York City was carefully chosen not only according to its commercial and practical value, but also on the basis of the rhetorical statement it would make.

Therefore, evaluating the appeal and rhetorical effectiveness of various texts, from magazines and websites, to buildings and whole cities, is a very real task facing professionals in many fields.

For the purposes of this project, you are a consultant who has been hired by a client to evaluate the rhetorical and aesthetic appeal of an artifact. You need to analyze this artifact as a statement of visual rhetoric. Apply the features and key principles of visual rhetorical that you have learned from reading this chapter.

Consider the following types of rhetorical statements:

- Books, journals, and other printed materials
- Advertisements, both printed and TV
- Films and music videos
- Comic strips and cartoons
- Websites
- Buildings and groups of buildings

Prepare an analytical document covering the following areas.

Describe the artifact you are analyzing and explain what makes it a rhetorical statement.

Focus on the visual elements. Remember that you are a rhetorician first and an art critic second. Remember that you are writing for an audience of professional and academics, therefore you will need to formally cite and document all external sources, including the artifacts you are analyzing, using an accepted citation system.

<C> Visual Narrative or Concept Project

Create a visual argument consisting of several images (and text, if you like). The images you use can be borrowed from the web other sources. Alternatively, you can take your own photos or create your own digital images using Adobe Photoshop or similar computer program. Keep in mind that, as all writing, your argument must have a clear purpose and address a defined audience. Use all three rhetorical appeals. Try one or several of the following genres: photo essay, comic strip, political cartoon, collage, and so on.

You may also choose to provide textual commentary to your work helping your readers to understand your argument and the process of the work's creation. If you know how to use Macromedia Flash or other computer animation programs, you may decide to produce a mini-movie or cartoon.

<A> Web Portfolios

One of the most common use of web texts in education, especially in the humanities, are web portfolios. A portfolio is a collection of your work that presents and explains your accomplishments to others and allows them to judge your professional strengths. A web portfolio such a collection presented online in the form of a website. Portfolios in general and web portfolios in particular are excellent tools for learning, reflecting, and presenting your work. They are used by professionals in various fields and disciplines, from teachers and writers to photographers and visual designers. This section offers you reasons to build and maintain a professional portfolio and practical advice on how to do it.

 Reasons to Keep a Portfolio

- A portfolio allows you to share your work with a large audience.
- A portfolio allows you to select your best work for sharing with others.
- When used as a grading and evaluation tool, portfolios allow the writer to control the process of assessment to some degree.
- Portfolios are powerful reflection tools. They allow the writer to see his or her work in sum and to reflect on it, thus enabling improvement.

- Portfolios are powerful revision tools because they allow the writer to include not only finished work, but also work in progress. That, in turn, allows us to consider revision venues and possibilities.

 What Do Portfolios Contain, Who Reads Them, and How Are They Evaluated?

As stated above, portfolios can be used as evaluation and reflection tools. Many writing teachers prefer the portfolio assessment method to other methods of evaluating student writing. In addition, a portfolio may be a way for you to share your writing with your classmates, family, and friends. Last but not least, many employers, especially in "creative" professions such as writing, teaching, or design require job applicants to submit online or other kinds of portfolios for review.

If you are producing a portfolio as part of a writing class, the evaluation methods will, of course, be set by your teacher and may vary from one class to another. Nevertheless, most teachers try to follow some fundamental principles in evaluating their students' portfolios, adjusting them to the specific goals and objectives of their classes. Here are those principles:

- Portfolios are usually evaluated "as a whole" with the understanding that they represent the sum of a writer's work. In the words, although a portfolio contains several pieces of writing, many teachers assign one grade for it instead of grading each component separately.
- You may be asked to include not only the final drafts of a paper, but also one or several preliminary drafts. This allows your readers to see how well you can revise. You may also be asked to produce an additional draft of some of your work specifically for the portfolio.
- Most portfolios contain some kind of commentary or reflection. For example, you may be asked to write a letter to your readers, explaining your accomplishments as a writer or chart ways for future improvement. This is done because portfolios are tools not only for evaluation but also for reflection, for taking stock where you are as a writer. You may also be asked to reflect on your research process.
- Job candidates constructing a professional portfolio as a part of their application typically have more flexibility with the portfolio's content and method of presentation. At the same time, in some professions, candidates are expected to include certain documents. For example, when applying for a teaching position, you will almost always be required to submit a statement of your teaching as a part of the portfolio.

 A Sample Portfolio Assignment

Below is a sample writing portfolio assignment. It is a modified version of the portfolio assignment that I give to my writing students. If writing portfolios are used in your class, be sure to consult your teacher for specific assignment requirements and to understand them.

<C> Purpose

For the final project of this class, assemble a portfolio which will showcase your best work and allow you to reflect on your growth as a reader and writer during the term. You will submit your portfolio as a website.

<C> Audience

You will be writing for two audiences. One is your instructor and your classmates, whom you are trying to show what you can do as a reader and writer. The other one is yourself as you reflect on the work you have done during the term.

<C> Contents and Process

The portfolio must contain the following items:

- Original versions of two of the three essays written for the class. The choice of which

papers to include is yours, but try include the ones that showcase your work best.

- A revision of one of the essays. You may revise either one of the essays whose original versions you are submitting in the portfolio, or the third essay that you wrote during the term and which would not otherwise be included into the portfolio. The revision must be in content rather than in style and grammar only. For more revision guidelines, see the explanation below.

- A reflection piece addressing the following questions.

1. Describe your progress throughout the course, both as a reader and a writer. What has been difficult and what has been easy? What has been new and what has been old? Where have you changed and where have you remained the same?
2. Discuss one writing assignment that presented you with an unusual problem or challenge. How did you solve that problem?
3. What has been the most and the least challenging aspect of this class? Discuss reading and writing assignments, response assignments, group work, and so on.

<C> Revision Guidelines:

Choose a paper which you would like to take through another revision. Remember that this has to be a genuine revision, which means that you will have to make changes to the contents of the essay, not just edit its mechanics or brush up on its grammar. The idea is to create a new version of the paper which is in some way different from the existing one. You are offered, but are not limited to the following revision options.

- Revise or modify your stance on the subject of the essay and explain this new stance and the reasons for the change. You may choose to revise your purpose, your target audience, or both.
- Add new external research sources. If you choose to do this, remember that your research sources should help you achieve some new rhetorical goal in your paper that its previous version was not achieving.
- Include elements of a different style and voice. For example, if the current version of the paper does not contain personal narratives, add some. Similarly, if you feel that your paper is too heavily based on personal narratives, you may opt for balancing it with other kinds of writing.
- Add new genres: poetry, journalistic writing, fiction, scenes, etc. Again, remember that you need to be able to understand what the additions allow you to accomplish rhetorically.

<A> How to Design, Build, and Publish Your Hypertext

In the preceding section of this chapter, you learned about the various uses of hypertext and the opportunities it gives researchers and writers. However, if you have never designed and published a website before, the talk of constructing one now may seem daunting.

This section will teach you how to design, build, and publish your own hypertext. Web design is a large discipline and, of course, it cannot be covered in full in this chapter. Therefore, we will concentrate only on the basics. If you get interested in learning about web design further, plenty of other sources covering this topic are available. As all writing, hypertext writing is governed by principles of rhetoric.

 Analyze your writing purpose and audience.

Your goal as a web writer is to convey some message to a group of people. Therefore, before attempting anything else, you need to decide what that message is and who your intended readers are. Your purpose, intended audience, and writing context will determine the kinds of topics your site addresses, the kinds of materials it includes, and the kind of writing style it uses. In order to answers the questions about purpose, audience, and context, work through some of the rhetorical activities presented in Chapter One of this book.

 Develop an Arrange the Content of your Site.

The content of the website is what will attract visitors. Even the most attractive website with the best graphics and multimedia, but without relevant content, will not be visit. After determining your purpose and analyzing your audience and context, create the content that is worthy of your readers.

When arranging information for the website, consider your own reading preferences. Most people get tired reading long texts on computer screen that require lots of scrolling. Therefore, consider chunking your content. Chunking is breaking up of texts into logical and relatively small content units. These units can consist of several or more paragraphs of text. When deciding where to break up your text, consider how much scrolling would be required to read it. If possible, place each chunk of text on a separate page and link the pages together. If possible, fit each chunk of text on one screen so that your readers do not have to scroll much. To keep track of the content and structural changes you are making to the text, it is a good idea to save each chunk as a separate file using a word processor.

<C> Choose Between Deep and Shallow Design of your Site

Now, plan your hypertext. One conventional planning technique that works well for hypertext planning is mind mapping because, like hypertext, it allows you to take your ideas into multiple directions simultaneously. To remind, you can find a discussion of mind mapping in the Invention section of Chapter Two of this book. Creating a visual map of your future hypertext will allow you to see the relationship between its various pages and to anticipate ways in which your readers may decide to move among them. You can create such a visual map on a piece of paper or using such concept-mapping software as Mind Manager or other. When deciding how to connect the pages of your future website, you can choose between a shallow and a deep design. A website with a shallow design has only two levels. The home page is connected directly to all other pages on the site. For an illustration of a shallow design, see Figure 10.2

A shallow design provides certain advantages. It allows your readers to navigate your site with ease. Typically, a shallow design is suitable for sites with relatively few pages and information that can be easily categorized and logically arranged on the front page.

Figure 10.4

A web text with a deep structure has three or more levels. The home page leads to two, three or more other pages, which, in turn, are linked to more pages on a lower level. Only the second level pages are accessible directly from the front page.

It is easy to see that a writer can keep adding levels to his or her text if the rhetorical situation and the content of the text demand it. If you decide to choose the deep design, consider the fact that your readers will not be able to access lower-level pages from the front page. This will have implications for deciding where to locate the information you want your readers to access more easily and where to locate less important information. In addition, several studies have suggested that it many be more difficult to find information of deep sites and that only the very motivated users will be willing to read all pages on all levels in search of everything they need.

<C> Create an Effective and Attractive Navigational Structure and Format for your Site

Moving from one page to another within a website is often called navigating. The structure of a website, what it allows and prohibits, is often called navigational structure. As has been discussed earlier, readers of hypertexts have considerable freedom in choosing what links to follow and when to follow them. However, writers can influence their readers' reading paths considerably by creative rhetorically effective and intuitive navigational structures of their sites

and by linking them carefully. In creating the navigational structure of your site, follow these steps:

- Provide your readers with a way of getting back to the home page no matter where in the text they are. They should not have to use the "Back" or "Forward" buttons of their browser, ever. Instead, place a link back to the homepage and to other pages on every page of your site.
- If you want to encourage your readers to move laterally between various pages of your hypertext without going back to the home page, consider placing links to all or most pages of the site on every page. The easiest way to accomplish this is by placing a menu of links on every page.
- Use clear and easy-to-read fonts and backgrounds. Read more about the use of graphics in hypertext writing below, in the section on visual rhetoric.
- Be sure the design of all the pages in the site is consistent. Use the same or similar colors, fonts, and position text and images similarly on all pages.

<C> Save Files and Embed Images

Before your site can be published on a server (the computer from which your readers will access your site), all its pages must be saved in a certain format. Most websites consist of files with the extension "html", which stands for "hypertext markup language." There are several ways of creating html files.

- If you wrote your content in a word processor, such as Microsoft Word, your files were saved as Word documents by default. You can now open those files and resave them for web publication. To do that, choose "Save as Web Page" in the "File" menu on the top of your screen. You can build an entire website using Word. Keep in mind, however, that if you use Microsoft Word or another word processor to create and link html files, when you open them in a web design program (to be discussed later), they may look slightly different. Therefore, take extra care making sure that your files look readable and consistent across programs.
- You can also use one of the numerous available web design programs to build your site. Perhaps the simplest web design application available is Netscape Composer, which comes packaged with the Netscape Navigator web browser. This program is free. Another free, but powerful web design tool is called Nvu, which you can download from www.nvu.com. If you have Microsoft Office installed on your computer, it likely includes Frontpage—a powerful web design tool compatible with other parts of the Office suite. Macromedia Dreamweaver is a sophisticated and expensive tool for more experienced designers. Because all these programs are web-design tools, they save files in html format by default. You can either write content directly in these programs or copy and paste your writing into them from MS Word or another word processor. For more information on how to use these web design tools, refer to their Help sections or find free-of-charge tutorials on the Internet.
- If you decide to use images or other graphics on your site, now is the time to integrate them into the design. It is best to insert images using the "Insert Image" function of your program which is usually found in the "Insert" menu. Do not simply copy and paste images on to the paste as this may lead to their incorrect placement. When using images borrowed from the web, be sure to save them on the hard drive of your computer first. Do not simply paste the web link into the page—the image will not display correctly.

<C> Create External Links

As stated earlier in this chapter, what makes hypertexts unique is their ability to link to other texts directly. Generally, your site should include at least several links to relevant resources on the Internet.

- Inserting links is easy and usually involves highlighting the text you want linked on the page and choosing the "Insert hyperlink" function of your web design program.
- After the hyperlink dialog box appears, paste or type the web address of the site you want

linked.

- Be sure to include the full web address, including the designator "http" if it appears in the address. Otherwise, the linked page will not display properly.
- When linking to an external site, it is an accepted practice among web designers to have that site open in a new window. For information on how to do that, consult your web design program's Help section or a web design tutorial.

<C> Make Your Site Accessible

Users should not have to struggle to navigate your site. In addition, visually-impaired users and users with other disabilities may have trouble accessing and reading your site if you do not help them. When designing your site, consider the following accessibility guidelines:

- Provide alternative textual descriptions for all images. When inserting images through the "Insert Image" menu, you will be required to enter a phrase or word describing your image. This is done so that readers using text-only browsers or special software that reads web texts to them could access the image.
- Choose text and background colors carefully.
- Name your files consistently. For example, avoid a mixture of upper case and lower case letters, confusing and long names, and so on. This may lead to errors when your users try to type the address into the address bar of their browser. When naming files, your goal is not to be original, but to make your site as accessible to as many people as possible.
- Name your links consistently and try to anticipate what your readers may expect to see behind a certain link. For example, "Cool Stuff" is not a good link name because it does not tell your readers where they will end up once they click on it.
- Make sure your site does not take too long to load, even on a slow Internet connection. To avoid slow download times, make your images as small as possible, but readable and avoid unnecessary animations and colorful backgrounds.

<C> Test, Publish and Maintain your site

- Test your site using different web browsers, such as Microsoft Internet Explorer, Netscape Navigator, and Mozilla Firefox. Many websites look slightly different when open with different browsers. Make changes to the layout of the pages, if necessary.
- If possible, test the site across different platforms, such as Windows, Macintosh, and Linux.
- Check that all links work and all images work. If possible, test the site on a different computer.
- Upload the site to the server (see instructions below), but do not announce it to the world yet. Test it to make sure everything works. Make changes if necessary and re-upload the files.
- Update your online publication as necessary. It is a common practice to place the date of the last update somewhere on the front page so your readers know how recent the information they are reading is.
- In order for your site to be seen by others, it needs to be published. In this case, publication means uploading all the site's files on to a remote computer called a server. If you have several publication options. Find out if your college school allocates free server space to students and faculty. If you are building a website as a part of a class assignment, your teacher may already have arranged for its hosting. If not, you may decide to use one of the free web publication services, such as Geocities (www.geocities.com), Angelfire (www.angelfire.com), and others. These services are designed for novices and are easy to use. On the other hand, they are financed by advertisers, which means that your site will contain one or several ads every time any opens it. Thus, you should publish professional portfolios and other content designed to attract and impress employers and other professionals

somewhere else. Alternatively, you can pay a commercial provider to host your site.

<A> Hyperlink: In Place of a Conclusion

I conclude this chapter with a passage from Johndan Johnson-Eilola's essay "Negative Spaces: From Production to Connection in Composition." Speaking from a writing teacher's perspective, Johnson-Eilola states:

"Over the last twenty five years...we have replaced a concern for static product with a sense of texts as dynamic, social processes. On the one hand, we insist that writing is social and that texts are not unified, bounded objects; on the other hand, we require our students to write single-voiced texts (even when they write in groups their texts aren't supposed to sound disjointed or as though they were written by committee); we grade those objects by what they contain rather than what they connect" (31).

Of course, serious, credible, and well-presented content is important for the success of any piece of writing. At the same time, this passage speaks to the importance of understanding writing not only as a means of producing finished texts (a skill that is, no doubt, important), but also as a vehicle for exploration and learning. Hypertext aids us in gaining such a vision. While it would be short-sighted to argue that traditional, linear texts are going to go away, it is equally short-sighted to deny the promise of hypertext writing and the opportunities it offers to us as researchers and writers.

A simple web search using the phrase "academic hypertexts" turns up over seventy thousand results. They range from course syllabi dedicated to hypertext writing to academic articles on the subject to discussion boards dedicated to the issue. While not all of those results may be relevant to serious students of hypertext writing and reading, many of them will. The abundance of such texts on the web as well as the level of public interest they generate is a pretty good indicator of such texts' role in the public sphere and of the importance of being able to read them critically and to produce them.

<A> Captions

Figure 10.1. Visual Argument against Poverty

Figure 10.2 Poverty Rates by Age: 1959-2003

Figure 10.3 Traffic Signs

Figure 10.4 Shallow and Deep Web Design

