

DRAFT

## Chapter 2

### EVERYTHING IS TEXT

Workmen painting the walls and handrails of a flight of stairs were preparing to leave for the evening when they discovered a problem. They had no **WET PAINT** signs. Having no signs, they needed something that would persuade people not to touch the walls in the stairwell. Their solution came quickly enough, however: they simply stretched a band of 2 inch masking tape across the entrance of the stairs, effectively preventing people from entering the stairwell. They wrote nothing on the tape; they simply stretched it from wall to wall across the entrance. The system worked perfectly. The first and most obvious question is “why would such a simple system work”? There were no **WET PAINT** signs, or any signs for that matter. There was nothing written on the tape – no warning there – and the tape didn’t have the strength to stop an adult. Moreover, a child could have walked under it without ducking. I watched the tape off and on for all of the next day. Although the paint was long dried, nobody crossed the barrier; everybody used the alternate stairwell. Why?

Simply stated, the tape was seen metaphorically by the would-be stair-climbers. I had never seen anybody use this approach to blocking a stairwell before, but I still had no problem recognizing the statement: “**DO NOT ENTER.**” The tape was an extra-linguistic metaphor (a metaphor existing outside of normal language) that made the workmen’s “**DO NOT ENTER**” wishes perfectly clear.

## **Text Is Not Necessarily Linguistic in the Normal Sense of the Term**

Generally, most people (even linguists) work on the assumption that texts are alphanumeric. For example in the introduction of What Writing Does and How It Does It, [1] Charles Brazerman and Paul Prior define “text” as, “include[ing] any written inscription” (7). A few critical theorists, however, have a broader view. According to some of them, there is no such thing as a non-text. For them, anything that can be recognized in any sense of the word is by definition “text.” For example Jacques Derrida suggests, “Il n’y a pas de hors-texte” – “There is no outside-text” [2]. To reinforce that statement and to make its meaning more clear, in LIMITED INC [3] he says,

The concept of text I propose is limited neither to the graphic, nor to the book, nor even to discourse, and even less to the semantic, representational, symbolic, ideal, or ideological sphere. What I call 'text' implies all the structures called 'real', 'economic', 'historical', 'socio-institutional,' in short: all possible referents. Another way of recalling once again that 'there is nothing outside the text. (. . .)

Derrida suggests that anything (physical or conceptual) is text.

### **Ravings of an ivory tower egghead**

Initially, for many working professional writers, this may seem the ravings of an ivory-tower egghead with nothing better to do than to make up erudite pronouncements that really have nothing to do with the profession of writing. Given the older traditions of writers, Derrida’s pronouncements are, in fact, not particularly important. But given the occurrence and complexity of interactive media, recognizing a broader definition of “text” is fundamental to evaluating and writing the many new texts we find on the Internet.

Click a link and you get a transition. As I pointed out in chapter 1, readers of websites typically visualize themselves traveling from one place to the other. Web developers, of course, recognize that the

reader is actually importing and loading pages – the sense of strolling though a remote site is an illusion. Even so, when they discuss sites, planning sites, and building sites experts still think of them and discuss them in terms of traveling (navigating) through a place. Jacob Nielsen, for example, says [4], “On the Web . . . the user fundamentally controls his or her navigation through the pages” (25) and “A website is like a house with a thousand doors” (179). Users of a web site will typically view the site as made up of a hierarchy of sorts; there is a home page and subsequent pages existing deeper and deeper in the hierarchy. Nielsen makes this point effectively: “Most sites have a hierarchical structure with progressively more detailed information. Other sites have a tabular structure . . .” (198). Those are effective ways to describe websites, but they are also illusions. These are metaphors the users create to remember where to expect certain components (texts) of information or navigation.

The developer will also see the site as a different structure, as a (usually nested) collection of directories or folders on a hard drive in a server. In the end, this is also an illusion. There are no folders on the hard drive, only a file allocation table that tells where all the files are. Even the individual files are often not in one place; they are liable to be scattered all over the drive and, in some cases, across several drives. My point is this: whenever we design or discuss websites, we invent nonexistent, purely conceptual structures – metaphors accepted by consensus. In fact, everything about the Internet is that way. Pages aren’t really pages, and text isn’t really text; what we see on the screen isn’t what’s really happening in the computer. Instead, the computer translates its impenetrable activities into something meaningful for us. The text we read is really nothing more than zeros and ones adding up to the command, “put black here and put white here.” But in the end there are really no zeros or ones, there are circuits (transistors) active or inactive. We are down to the realization that everything we see in digital media is a metaphor, and “text” takes on a whole new meaning.

**More to the point, computers speak their own languages**

If we drill down to the very core of the computer we will find gates – and gates, or gates, not gates, nor gates and more (figure2-1). These are electronic devices that behave in specialized ways when electrified. They may turn on, turn off, or flip-flop on and off depending on the conditions. A typical Pentium chip contains billions of these gates. In fact, any chip in any computer, any diode or transistor is made up of these gates. It's how computers work, how they think, how they communicate. Suppose you have eight of these in a row connected to eight wires leading to eight diodes, and some are turned on while others are turned off (figure2-2). The resulting word might be defined something like "0100110." This is why computers are binary; they are made up of gates, and everything is always either on or off.

If we look at the combination of diodes, "0100110," it is easy enough to say, "it is a pattern we can recognize and can be designated as a character much as dit-dit-dit-dot can be characterized as a 'v' in Morse code." But this is not how computers see it. In fact, it is difficult to say a computer can see the character at all. Nonetheless they respond to it in a predictable way. The question this raises (at least for me) is when does an apparently random condition become meaningful text? In effect, we turn on our computers and an electrical signal travels to a chip that flip-flops on and off at more than a billion vibrations per second. These vibrations (called "the clock rate") are then transmitted in waves throughout the processor with all of its different gates. The original signal is nothing more than a consistent frequency of pulses – "0101010101" – and exists for as long as the computer is on. At this point the signal provides no meaning other than the fact it exists. Pass the signal through a series of gates, however, and we get a meaningful pattern. Press the "m" key on your computer and the keyboard sends the signal "01101101" to the processor. Press the "z," and you get '01111010.' When you press a key, it permits the signal to pass through a specialized series of gates that defines the final binary output. The processor does its thing and the characters "mz" appear on your monitor, although the computer still sees "01101101 01111010." These characters (which you see on your monitor) are being held in a virtual space within the computer, existing more as digital potentialities than as the objects you see.

Now suppose you save the article you were writing. You might send it to your hard drive. Suppose your hard drive is nearly full and largely fragmented. If the article is long, it will be too large for a single sector on the hard drive and will likely be broken in pieces which are liable to wind up anywhere on the drive. A file allocation table keeps track of where everything is. If you could see the content on the hard drive, everything would be combinations of magnetic pulses that match the ones and zeros that make up the lowest level of machine language we find meaningful. As a final note on this, it is important to keep in mind that computers do not talk to themselves and each other in terms of ones and zeros. They communicate using electric pulses. The ones and zeros are metaphors we apply to the pulses – “one” for the pulse and “zero” for its absence.

### **In Short**

Understanding how the texts work in interactive media requires recognizing a broader definition of “text”, and that begins with understanding where the things we call “text” begin and end. Moreover, understanding how the texts work and how “users” (and computers) interact with them gives us pause to consider that “text” needs to be redefined. We need to explore where “text” begins in computer communication and where it began historically.

### **IT’S ALL IN THE METAPHOR**

I. A. Richards argues, “Thought is metaphoric and proceeds by comparison, and the metaphors of language derive therefrom” (1936). [5] His argument proceeds from predecessors such as Friedrich Nietzsche, who wrote, [6]

A nerve stimulus, first transformed into a percept! First metaphor! The precept again copied into a sound! Second metaphor! . . . When we talk about trees, snow, and flowers, we believe we know something about the things themselves, and yet we only possess metaphors of the things (1892 )

If you look at the fruit of a lemon tree, you are imputing meaning to electrochemical signals in your brain.

The electrochemical signals are not fruit; they are your physical response to reflections from fruit. You apply the metaphor (“visual construct of a lemon”) to make sense of those signals (Nietzsche’s first metaphor). When you say “lemon,” that word is a metaphor for the construct in your mind. If, instead, you painted a picture of the lemon you are seeing, that would be a metaphor of a different kind, but a metaphor nonetheless. You might paint several oblong rocks yellow and put them in a bowl. Nobody would think they were lemons, but everybody who “knows” lemons, understands the metaphor. In each case you will have created an artificial construct designed to transfer your knowledge of the lemons in your brain to another (note that I intentionally do not use “person” here; transfer of knowledge can occur between a variety of beings).

If we expand these metaphors by stringing them together like beads, many of them become narratives. Eubanks explains in “Poetics and Narrativity,” “Many theorists distinguish between a story and a narrative this way: a story is what happened, and a narrative is the way what happened is recounted in words” (34). [7] In this, a third level of metaphor, the metaphors that are words combine to become the metaphor for an event. In the sentence, “On this past weekend, I saw my dog dig up and gobble down a mouse,” I tell a narrative that has evolved from a physical experience of converting combinations of signals into meaning and then into words. I could as easily have described the process using a series of drawings.

### **Conventions Make Metaphors Textual**

Something as simple as a painted rock, or even an unpainted one, can pass information from one person to another. Boy Scouts, for example, stack rocks to indicate a trail – a trailside signpost of sorts. Because the metaphors are imputed by the reader, in many cases such texts have no human author but are still read by a reader. Rocks contain the history of the world; in Unearthing the Dragon: the Great Feathered Dinosaur Discovery, Mark Norell discusses finding “the smoking gun” for the hypothesis that carnivorous theropods (the Velociraptors of Jurassic Park fame) sported feathers. Some of these theropods, apparently curled up in sleep with a head tucked under a wing, this implies a story of sorts, a

narrative about the nature of their lives and transition into death. The rock I described above narrates the nature of the dinosaur and the events leading to its death, but the original narrative is not recounted in words. Instead, paleontologists impute meaning to the rock, “These guys had died suddenly and were preserved sleeping like the Roman Victims of the eruption of Mount Vesuvius in Pompeii. Yes sleeping” [8]. He goes on with an analogy, “If you have ever seen birds asleep, you know they sit in a characteristic posture. Their wings lie on their sides and wrap around the body. The head is tucked in between the elbow and the torso” (64).

If I may return to the computer, a definition “text” may begin with the idea of patterns that contain or seem to contain meaning. The pattern “010101010” seems to contain meaning for the computer technologist and I suppose for the computer, itself. The pattern of the rocks seems to contain meaning for the paleontologist – though a purist theorist might suggest the meaning is brought to the pattern by the reader rather than pattern bringing meaning to the reader. Astrologers

In effect, to impute meaning to the Norell’s rock, paleontologists apply a metaphor – “birds asleep.” Putting hundreds of the right rocks in a row, makes a rock-bound codec describing the entire history and evolution of dinosaurs into the birds we see today – a narrative readable only to those who know and agree with the conventions of reading rocks. Since the publication of Norell’s book, even more persuasive bird/dinosaur narratives have been found. In a sense, the rock narrative is forever incomplete but is consistently updated. Metaphors applied to the rocks permit them to become texts.

### **The rocks are metaphors and the metaphors are texts**

If anything can be a metaphor, anything can be a text. In “White Mythology,” Derrida argues that words are like coins with their exergue worn off (per the translator, exergue is the part of the coin where date and engraver’s marks are). According to Derrida, a word has a source, and in that source is an original metaphor (meaning) that is usually long lost [9]. For example, although many can point to the event where the computer mouse got its name, fewer know where the name “calculus” was born to math.

Today we “calculate” (meaning “work with pebbles”) to find solutions to math problems, and “calculate” has an interesting history that effectively makes Derrida’s (and my) point that all things are texts. The original word “calculus” evolved in two directions. In one case it became “calculate (as in solve a math problem),” but in another case it became kidney stone – (as in renal calculus). The kidney stone dates back to the original use of “calculi” in Greece – pebbles or stones. “Calculate” as a derivative of “calculi,” goes back to counting boards that were used to solve mathematical problems in ancient Rome and, before that, ancient Greece. The people who calculated, used pebbles or tokens (also called “calculi”) on these tables to calculate solutions to arithmetic problems. The tables were of different sorts and sizes, but the earliest were covered with sand. Lines could be scribed into the sand, and calculi could be placed on the lines – the mathematical process was not altogether unlike using a contemporary abacus. The sand provided the additional advantage of providing a place to note the solutions (among the ancients, notation and problem solving used different processes). The ancient Greek word for “sand table” by the way is “abax,” a word that evolved into “abacus.” The word also came to mean “tablet.” You will usually find an abax on the top of a Greek or Roman column.

Scholars suggest that the word “abax” may had its roots in the Hebrew word “abaq” -- “dust.” In fact, one of the original meanings of “abaq” was sand used as a writing surface. The suggestion that “abaq” became “abax” is tentative, but the fact that much early counting and calculating using dusty *abaci* is not in dispute. Scholars have tracked the process to Babylon, and before that to Sumer at least 6000 years ago.

### **Derrida and Human Literacy**

Earlier, I suggested that web users metaphorically passed through space on websites; in a similar manner, you and I have passed through time and space. “Calculus” is a good example of Derrida’s suggestion that words are nothing more than coins (tokens) with their surface worn smooth, but I want to point out that Derrida is more right than he knew. When he is talking about the worn coin in “white

metaphor,” he is also talking about all of literacy. Along with the Chinese, Egyptians, Indians, Mesoamericans, the Sumerians are among the inventors of writing [10]. Some of writing’s inventors evolved the process from images to alphabet, but the Sumerians evolved from physical objects (tokens or calculi) to alphabet. According to Malati Shednge [11], the Sumerians developed a pebble-shaped clay token, called a “imna”. Ironically, as “calculus” translates into pebble, so does “imna.” The earliest tokens were probably blank, though their shapes (round, cone, disk, etc) indicated numerical value. Eventually, however, the Sumerians added icons (ideographs) to the tokens. The icons might indicate sheep, hides, women, or baskets of barley. This represents what may be the first example of an adjective (a number) and a noun being written together. In short, the earliest written text was a physical object sometimes part of a contract, sometimes part of an inventory -- technical documents of the day. The original contracts and inventories included these objects placed in a hollow clay balls (“bulles”) with images of the tokens impressed onto the surface. Eventually, the clay balls were flattened out and became pages, and the shapes of the imna became icon shapes impressed into the pages. The first Sumerian text was a token not unlike a coin, but the origin and nature of that coin is long worn away. As Derrida says, the exergue is long worn off.

### **Origins of other writing developments**

The Egyptians, Chinese, and the Mesoamericans took a somewhat different route to literacy. In all cases, their documentation began as pictographic drawings. Individual hieroglyphics served two purposes. In one context, the image stood for what it depicted (e.g., a man was depicted as a drawing of a man). In the other context, the hieroglyph stood for a sound, a character that could be added to other character to form words. For example the binary character “0110010” is an owl in hieroglyphics and an “m” in the Roman alphabet. Where the Sumerians began writing by using physical icons, the Egyptians began writing with drawings that evolved into hieroglyphics. Eventually, the hieroglyphics were used only in formal and religious settings. The priests used a modified form of hieroglyphics for informal use – hieratic – but for normal communication and documentation, scribes used demotic, a highly modified

script that evolved from hieroglyphs. Today, as we look at our alphabet, we can trace much of it back to comparable pictographs.

### **In Short**

What we typically call text is a coin, a metaphor with its original exergue worn away. The original tokens (calculi and imna) and drawings that preceded the written word evolved into formalized strokes that meant the same thing within different conventions. Only the Chinese remained with a pictographic written word. Our texts are all stylized descendents of tokens and images. It time, we came to assume the alphanumeric characters we call “text” represented all of text. Actually, it only represents an insignificant portion of the patterns from which we can draw meaning. If we realize that, it becomes easy to accept the argument that with the right conventions in place, anything can be a text.

### **SO WHAT DOES A 6000 OR 7000 YEAR DETOUR GET US?**

I teach graduate courses to working professional writers every semester, and every semester I invite them to discuss the meaning of “text.” They would never have trouble seeing the alphanumeric words you are reading as textual, but they always have a hard time seeing photographs, charts and graphs, even icons as also being textual. They even become surprisingly resistant to an expansive definition of “text.” But alphanumeric texts represent only one component of many we use to transfer meaning. By not recognizing the others, examiners and writers of websites are at a disadvantage when attempting to evaluate the documents. We think of the process of reading webpages as touring. We think of the website as a place. We are not touring, however, we are reading, but we are reading in a way that tends to go unrecognized, and the website is not a place (not a house with many doors) it is a document, but it is a document where much of what we see represents a new texts and new genres.

### **The Nature of Expanded Text**

We went back 6000 or 7000 years to see the formation of alphanumeric texts. As some have said, there are no new ideas, and the invention of writing is no exception. It evolved out of previously existing texts -- physical objects, icons, pictographs, hieroglyphs, and other things no longer seen as texts. Normally in a book about evaluating writing, there would be no need for such a broad definition of “text,” but an evaluation of digital texts presents an exception. In a website for example, we evaluate icons, menu bars, hyperlinks, videos and animations, photographs, charts and graphs, illustrations, simulations, and the occasional short chunks of alphanumeric writing. It is helpful if we recognize that these are all different texts, all rhetorical and all requiring different approaches to their evaluation and creation.

Some might suggest that if everything is a text, then the word “text” becomes meaningless. I suggest the opposite is true. If we recognize that all parts of any document are textual, meaningful questions arise every time we examine a page: “What kind of texts will make this page work?” and “What are these texts supposed to do?” and “How can we evaluate them?”

### **Meaning in alternate texts.**

Suppose I write a job application for a programming position with IBM. Suppose every word on the resume is carefully chosen, spellchecked, grammar checked, and flawless. Now suppose I print the resume on hot pink paper and sign it next to my flamingo logo. What rhetorical message does that present the HR department at IBM? I am unique? Or am I weird . . . strange . . . rhetorically inept? What it does not suggest is that I am the kind of programmer IBM is inclined to hire. I use that example because we once had a person submit an application on hot pink paper for a comparable position – nobody that saw it ever forgot “the flamingo application.” We still talk about it.

If we dissect the texts in something as simple as a resume, we find that the written component is only a small part of the rhetoric. Just as important is how much content is it holding (in academic circles a five page resume is short; in industry a three page resume is long). Paper choice is also important, as is paper size. The pattern of the writing in a resume has rhetorical value, as does the organization of the

content. In this context the paper itself can be seen as a text of sorts. Font selection and size is also important. These various measures of quality occur at a variety of levels that range from physical and logical (mechanics and spelling for example) to conceptual and aesthetic (use of whitespace).

### **In Short**

An excellent writer will evaluate the rhetorical value of a huge variety of things besides the alphanumeric text as she writes, even in something as simple as a resume. If we dissect a website, and we will later in this book, we discover infinitely more complicated texts and a need for much more careful evaluation.

### **Code switching in speech, writing, and web design**

Code switching is usually described as combining words from different languages in the same utterance. New Mexico residents often use the phrase, “bueno bye,” in a friendly substitute for “goodbye,” Latin and English are continuously switched in Catholic Mass, and Greek and Latin are commonly introduced into scientific texts. Code switching can be intentional and effective, adding an air of friendliness or professionalism to a text, but it can also be accidental, demonstrating, for example, that the speaker is struggling with a new language.

According to Marcia Buell, in “Code Switching and Second Language Writing” (99), code switching also includes changes in style. For example, a person might switch from a Southern dialect and Italian accent while telling a story.

Understanding how code switching works makes it possible to better evaluate the quality of a discourse. I would like to suggest an example of another kind of code switching. Many pages offer examples combinations of texts being organized into a more salient point. A photograph being used to illustrate a point in a segment of alphanumeric text is not unlike using Greek or Latin to reinforce a point in a work of scholarship. The intent and affect is the same -- clarification. In evaluating traditional texts, code switching is not important, but on the Internet, there are hundreds, perhaps thousands of different

rhetorical possibilities, based largely on all of the different nuances combinations of texts can generate. This makes writing for digital media a particularly complicated task and evaluation all the more difficult.

[NOTE: The chapter still needs its conclusion. The conclusion will be driven to a great extent by what happens in subsequent chapters – particularly chapters 3 and 5.]

## CITATIONS FOR CHAPTER 2

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