

there are six essentials in painting
the first is *spirit*
the second, *rhythm*
the third, *thought*
the fourth, *scenery*
the fifth, *the brush*
and the last is the *ink*

Ching Hao, *The Spirit of the Brush*

What is an infostructure?

Infostructure is a word that I've decided to coin, because we need a word like it. It is an easy cognitive slip from *infrastructure* to here, for both refer to a necessary groundwork that must be laid.

An infrastructure, as we all know, refers to the physical substrate which must be laid down in order to provide a service. A notable example of an infrastructure is the U.S. national highway system, which provides roads so that we can get from nearly any point in the United States to nearly any other point. Similarly, there is the telephone infrastructure which enables me to call almost anywhere in the world from my room. And there is my personal favorite, the Internet, which allows me to provide this rumination to you through the magic of computer networking. In all of these cases, the infrastructure refers solely to the wires, or the asphalt, not the things which ride on top.

An *infostructure* is similar, except that it doesn't refer to anything physical. An infostructure is the layout of *information* in a manner such that it can be navigated -- it's what's created any time an amount of information is organized in a useful fashion. A table of contents is an infostructure, as is a bibliography, or an index. GopherSpace is an infostructure. The World Wide Web is an infostructure.

What is needed, as the Internet continues to grow, is people who understand how to create and maintain infostructures -- Internet Librarians, if you will. There's too much stuff out there, and no decent way to find all of it (unless you're an accomplished [Internet Hunter](#) (*Sorry, couldn't resist >=*)). This isn't what I'm trying to provide with this page, however, lest you get your hopes up.

What's important in an infostructure?

Take a look at existing examples -- bibliographies or tables of contents, for instance. Many people are hot to discard everything we've learned in past millenia in favor of the "revolutionary new possibilities of the computer". What they forget is that there is *nothing new about what the computer does*. This seems lunatic, but think about it for a second -- all the computer does for us is simplify the task of moving data around. It makes it easier for us to play with information, but it doesn't do anything that wasn't possible

before. For instance, I could've pulled up text and graphic images from halfway across the world 50 years before Mosaic was ever conceived of -- through a system called [InterLibrary Loan](#). And hypertext is just footnotes and bibliographies writ large.

The important things in an infostructure are to:

- Present a clear ordering of information by subject (table of contents), or some other form of reasonable entry into the infostructure. Some useful forms are:
 - Table of Contents
 - Searchable Index
 - What's New (with the organic nature of online documents, a time-oriented ordering will help the infonaut quickly orient herself with what is new and/or changed in otherwise familiar territory)
- Only make a document as long as it needs to be. If it can be logically decomposed into more than one document, do so. But only decompose a document if the narrative branches from the linear structure of the current document.
- Correspondingly, make sure a document is richly cross-referenced, so that if reader wants to ask, "Why?", she can. But don't put in so many links that the reader gets lost trying to follow them all.
- Provide a clear, consistent navigation structure. You should always be easily able to navigate to all documents which immediately relate, but you should also always be able to get any other document in the infostructure with a minimum of fuss. Always provide access to the original table of contents, or it's equivalent.

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[James "Eric" Tilton, Hyperspace Pseudo-Philosopher, jtilton@willamette.edu](#)