Case Study
Information Organization & Retrieval

Michael Whelan
Blog, News, and More
About the Artist
Artist Statement, Biography and
Frequently Asked Questions
Art Galleries
A Large Collection of Whelan Art
The Shop
Reproductions, Original Artwork

Illustration
For over thirty years, Michael's award
winning illustration has graced the
covers of books, CDs and more.

Personal Visions
Currently, Michael devotes much of his
time to fine art, imaginative works
showcased in galleries around the world.

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Digital Art Gallery
Designing for Interactions on the Web

Overview.

The front-end developer plays a pivotal role in accessing information on the internet. Utilizing design sensibility and programming expertise, they bring content providers and users together in a process that requires a compromise in aesthetics, user research and web standards. Utilizing many of the principles discussed in The Discipline of Organizing, the front-end developer intuitively processes questions of the selection, organization, interactions, and maintenance of resources.

This study focuses on transforming an art gallery into a digital representation. There is, of course, an immense variety of artists today—painters, sculptors, writers, musicians, and metal workers just to name a few. In the digital age, it is imperative artists display their works on the internet for possible buyers and fans to peruse. While each medium of art poses its own organizational challenges, we will focus on the painter.

The central challenge is how do we organize hundreds of paintings from different mediums and painted over several decades? Since digital copies of art are just abstract representations of the physical object, a
great deal of focus in this case will be on resource descriptions. The fundamental purpose of resource descriptions in this organizing system is to support interactions.

We are currently redesigning http://www.michaelwhelan.com to better address some of the issues presented in this case study, mainly focusing on improving user interactions with the site.

**What is being organized?**

First and foremost, a digital art gallery website is part of the World Wide Web, which itself is an immense organizing system. Any organizing system on the web is a sub-system of this larger ecosystem. Any design choices made by the front-end developer must therefore take into account how users interact with the web as a whole.

Digital copies of the art become our primary domain, but a secondary domain of the original tangible pieces of artwork exists. Within these two domains, we see similarities and differences. Digital manifestations can be viewed as an “alternate representation[s] of the same abstract resource” [1.2.4] Resource descriptions effectively describe the original art, which is represented by a digital version. (However, it is possible for the digital image to have value on its own, hence the need for digital copyright protection.) Intrinsic meaning or
interpretation of the work relates to the original piece of art. Typically people are not interested in when, where, how, or why a digital replication came into existence.

A major difference in the description of these two domains is the use of tagging. In a physical art gallery, a painting will typically be accompanied by a display of some text with relevant information. This text is rarely changed, and the art is infrequently rearranged. Inside a digital art gallery, tags may be assigned or modified with relative ease, and they may be utilized to alter the representation of the images on the screen. This makes the presentation of digital art easier in some respects. There are no space constraints; reorganization is much easier, however, we are now dealing with a possibly limitless number of digital images that must be stored, viewed, cataloged, and maintained.

**Why is it being organized?**

Front-end development isn’t just about making pages and applications on the web look “pretty”. It is about creating an interface that allows users to interact with an endless number of resources. The design of a website can make these interactions seamless and intuitive—or it can be a complete nightmare.
Because resource descriptions are crucial in supporting theses interactions, the Functional Requirements for Bibliographic Records (FRBR) [4.3.2.3] can be directly applied to our digital art gallery.

It will be necessary for the user to find a particular painting through stated search criteria. This is a feature impossible in a physical gallery. How does this add to or diminish the experience of viewing artwork? Finding a painting in a physical gallery is dependent on the location of the piece while finding a painting in a digital gallery is dependent on the description vocabulary. Does the user know how to describe what they are looking for? How can we help them?

This becomes tricky with paintings where titles may have a significant meaning to the artist but may not convey meaning to the user. Therefore we must include other key terms “tags” that may be relevant to the user. When searching for a painting of a women perched in a tree the title “Perspicacity” likely will not identify the painting. We must include searchable tags in our research description to assist the user. The title and description given by the artist may have no context for the user, creating a significant vocabulary problem. [3.4.2.1]
Beautiful images lend themselves to use as thumbnails, which makes it easy for a user to identify and select a painting they are searching for. Sometimes these activities are enough, but since these digital resources correspond to a physical primary resource, our organizing system must also support obtaining. Therefore resource descriptions must also include information pertaining to price, dimensions, shipping, etc. to aid in the process of purchasing.

Navigating a digital art gallery can be done in many ways. In this case study, paintings are separated into hierarchical categories. Resource descriptions aid in the navigation through various organizing principles using book titles, painting titles, publication date, series name, etc.
How much is it being organized?

There are many different users. In the case of Michael Whelan, he has a huge following of science fiction and fantasy fans looking for particular illustrations. He is also a fine artist with non-commissioned gallery work. We will need to further refine the organization of these paintings.

The organizing system tends toward being more abstract, currently paintings are organized alphabetically within a hierarchical system based on series name and painting title. Search functionality uses key words (tags) as a controlled vocabulary to offer more granularity.

Another avenue we could explore, but have not yet, is a faceted system using even more granular resource descriptions or hues, shades, themes, objects, emotions. Much consideration would have to go into deciding whether the time spent organizing resources in this manner actually aids in the retrieval.

When is it being organized?

Interactions on the web and in our digital art gallery are continuously re-organized. Categories and initial classifications as well as tags will be set at the time of launch. New works will need to be added in
the future and some may need to be removed. Users, however, will need to be able to organize and sort based on preference and specific criteria.

This "re-organization" (search, sort, filter, etc) of an existing system to suit our needs can almost appear seamless and becomes part of the process of organizing. It blurs the line of information organization and information retrieval.

**How or by whom is it being organized?**

Information resources on the web are organized through a coalition of front-end developers, users, and third party applications such as browser search engines. Successful interactions that satisfy the Functional Requirements depend on the cohesion of this coalition.

Although there has been some attempt at web standardization, the result has become a hodgepodge of independent applications and proprietary formats. The semantic web [5.8] is the idealized version of what the web could and perhaps should become.

With great power comes great responsibility! In the never ending battle to make the web more semantic, front-end developers are tasked with finding a solution to the HTML tag soup that currently exists, attempting to organize a variety of resources in some structured way.
Decisions now have lasting consequences on how information resources will be cultivated in the future. As everyone scrambles to define standards, front-end developers are responsible for implementing these standards.

In creating a digital art gallery, we must not only plan for the interactions of our users but also for how our users interact with the web as a whole, keeping in mind semantic mark up, search engine optimization and any other future interactions that come our way.

** Note regarding deliverable: http://www.michaelwhelan.com is the original website we designed for this artist. His new fine art website has not been published yet (still under development on local host). The case study applies to both sites, but we are making many improvements based on principles learned in INFO 202.