

SWITCH

---

Manuscript 1062

---

## The Construction of Art on the Internet and the Mediating Influence of the Search Engine

Brett Stalbaum

Follow this and additional works at: <https://scholarworks.sjsu.edu/switch>

Archived from <https://github.com/NickSzydowski/switch>.

---

<art>

# of the world wide web

PART I

## The Construction of Art on the Internet and the Mediating Influence of the Search Engine

Brett Stalbaum on Mar 15 1997

issue 06

**The purpose of this article is to explore the intersection between notions about what art is on the internet and the mediating influence of the search engine. I will argue that although ontological knowledge about net art as mediated through search engines derives from the diffuse and contingent network of culture at large, there are proximal processes stemming from the use of search engines which simultaneously disperse and pool art epistemology. Because of the protocols that facilitate digital communications, it is possible to identify examples of various art mediating factors with specificity via hypertext links. In the final analysis it is shown that search engines play a mostly distributive role in a process of self definition on the internet which is in turn fed by a complex weave of mass culture assumptions about art and artists. I posit that an understanding of sub-cultural identity formation can be of use to artists in forming an economically based critical subjectivity in which to operate.**

Surfing the internet is a participation in a computer mediated knowledge construction. No knowledge is benign. It is coated in an active layer of semiotic cultural connotations, agglutinations, and associations from the broadest mass culture discourse to the deeply personal. The HTTP protocol, HTML and specifically the hypertext link form the basic underlying technology through which the consumers of 'information' on the internet 'arrive' at the 'site' where the potentially relevant data they are seeking is presented. The vastness of data on the net in turn has spawned the need to categorize it, leading to the search engine.

For most web users the use of search engines is integral to the experience of using the internet. With the World Wide Web's position as the largest, fastest growing and most accessed protocol on the internet, search engines have become large and frequently accessed ontological presences. At the outset of my research it seemed quite plausible to me that search engines and their categorization methods would prove to have a heavy influence in the construction of what net art is. An examination of search engine techniques and technology shows however that they serve as a facilitating layer conducting other cultural factors.

### Searchscape: How Search Engines Work

There are three general types of search engines available on the internet, of which many are, in practice, hybrids. The three basic models are differentiated by both technique and audience or purpose. The first of these models is the most dominant:

the search robot. Robotic search engines are programmed to actively search the internet, visiting sites and compiling abstracted lists of keywords derived from what the robot finds in the sites it examines. When a user submits a query to the robot's index, it returns to the user a hit list of pages which contain the word or words that the user is searching for. **Alta Vista** and **HotBOT** are good examples of pure robots. Alta Vista's FAQ file provides a good technical description of their technology.

The second type of search engine takes the library card file as a model for categorization versus robotic keyword abstraction and hit lists. These are called catalogs or indices, and to purists are not even properly defined as search engines. Here links to WWW pages are placed in categories or subject headings by RL humans. Good examples catalogs are **Magellan** and **Yahoo!**. When you perform a search in Yahoo!, it returns results based on its subject directories; not on text robotically culled from the actual pages on the web. Srinija Srinivasan is the Ontological Expert at Yahoo!. She heads a working group of employees titled "Catalogers", or less formally referred to as the "Surfing division." Srinivasan described their page categorization process to me in an interview:

"Several thousand sites are submitted to Yahoo! daily. The surfers spend most of their time cataloging and looking at submissions. The rest of the time they proactively search the net looking for new things. [I]'d also add that in addition to adding new sites to yahoo - making yahoo bigger - a significant part of a surfer's day is spent revisiting existing areas in yahoo, reorganizing/updating/further subcategorizing as necessary to keep the existing hierarchy as up-to-date and easy to navigate as possible - making yahoo better."

"For most broad queries, yahoo provides an effective subject-oriented organization of what's on the net, much like a table of contents. automated search engines are more like back-of-book indexes, good for very specific, needle-in-a-haystack types of queries."

The third type of search engine is the editorial or special interest search engine. This type of search engine caters to a wide range of special interest groups, ranging from linguistic communities to various other interest groups or sub-cultures. Examples are a number of engines dedicated to language groups (**German, Italian, Malaysian** etc.), engines serving to specific interest areas, such as **The Airport Search Engine**, or search engines such as **GayZoo** and **Disinformation** that serve various sub-cultural concerns. This type of engine seems mostly to be of the catalog or index variety containing links that relate to the language, topic or group around which they are built.

In actual practice, many of the search engines discussed combine or duplicate many of the techniques and results practiced in the other types. **Excite**, for example, is a sophisticated robot that also contains consumer oriented content based on the opinions of celebrity experts. Yahoo! is an interesting case in this respect as it uses Alta Vista's robust search services as a secondary enhancement to its own catalog. If there is no relevant match in Yahoo!'s "table of contents", the query is turned over to Alta Vista's "back-of-book index."

Looking for art on the internet via search services is generally an experience in irrelevancy, particularly with the search robots. "Art" is a very general word in the English language and as a concept in western culture. Alta Vista, for example, turned up six million hits on my query for "art", one million for "fine art", and four thousand for "web-specific art." Even with a query as narrow as "web-specific art" and the relatively tiny number of hits it returned, the pages referenced were eclectic, often irrelevant and therefore difficult to assimilate into any consistent description of what "web-specific art" may be. (**Appendix 1**) This is due in large part to the vastness of the internet, which makes any kind of deductive research difficult. An inductive approach is necessitated, and this leads me to review HTML, Hypertext and examples of their application in developing a general sense of what processes are at work in the ontological development of internet art.

## Artscape 1: coded and submitted artistic self-identification

An HTML document contains a head and a body, literally represented by the markup code `<HEAD>...</HEAD>` and `<BODY>...</BODY>`. The type of data stored inside of these HTML markups shows them to be analogous to notions about human nature based on the concept of a mind/body split. The `<HEAD>`, which is not presented by browser software, contains the document's pseudo self awareness. At the very minimum the `<HEAD>` contains the document's name, as well as often containing information about it's nature, behavior, purpose, author, and relationships to other HTML documents or executable scripts. The `<BODY>` of a HTML document contains it's outward appearance: the markup code that that is presented by client browser software as text, hypertext, images, Quicktime movies, forms, tables, etc. The `<BODY>` presents the outward visual, textual and multimedia content of a web document, and the `<HEAD>` in effect holds the document's identity.

This identity, coded through HTML markup code such as `<TITLE>`, `<LINK>`, and `<META>`, is of course the result of human agency. The data embedded in the `<TITLE>` and `<META>` markup is that which is sought out by the search robots who in turn use it to perform keyword searches. If there is no relevant `<META>` data in the HTML document's `<HEAD>`, then the robot typically proceeds to abstract keywords from the document's `<BODY>` text. HTML identity as mediated by a robotic search engine is therefore based on the document's author and their own coded and textual description of the document. Therefore, it follows that for an artist working with the web as a medium that it is the artist's culturally mediated self-definition and application of artistic identity to the work qualifies the work as art. Here are some examples from real HTML documents:

```
<HEAD>
<TITLE>6 1 6 8</TITLE>
<META NAME="description" CONTENT="6168 exhibits web-specific art and
narrative
that explores the human condition.">
<META NAME="keywords" CONTENT="web-specific experiential new media art
narrative">
</HEAD>
```

**Figure 1. 6168** January 1997 <http://web20.mindlink.net/ph/>

```
<!-- info for internet search engines ----!>

<META name="wango:CADRE Institute Undergraduate Site" content="WANGO
features the latest student research and artwork in 3D animation,
interactivity, networked environments, digital video, performance, and
installation. Also available: information about the CADRE Institutes
Computers in Art undergraduate program, course offerings, and CIA news.
San Jose State University / School of Art and Design / The CADRE
Institute. San Jose, California.">

<META name="keywords" content="Computers in Art, computer graphics, VRML,
networked environments, undergraduate art programs, CADRE, wango, digital
video, performance, installation, SJSU computer art, computer graphic
```

**Figure 2. Wango** January 1997 <http://cadre.sjsu.edu/wango/>

The <META> markup is only now coming into somewhat common use. Another very pervasive process through which the document's author can self-identify their web work as art is through the simple process of submitting the page to a search engine. Search engine submission pages typically make use of forms through which either the creator of a page, or anyone else, can submit the URL of a page and its description. Yahoo! asks for two sentences describing the page and the Yahoo! category into which the person submitting the page would most like to see it presented. (see: <http://add.yahoo.com/fast/add?>). Again, we see that the responsibility for defining the nature of the page is left primarily to its author.<sup>1</sup>

Even at Yahoo! with its human catalogers, of whom one might suspect of introducing editorial opinions regarding what is or is not art, the central role of self identification is both a de facto result and editorial goal of Yahoo!'s categorization process. The surfers at Yahoo spend most of their time responding to submissions, and as we have seen each submission comes to them with the submitter's preference of Yahoo! category and text describing it. With large numbers of submissions arriving constantly, it is a safe assumption to make that only the submissions whose self identification are obviously lacking relevancy are placed elsewhere or rejected.<sup>2</sup> In addition to this necessity in processing large numbers of submissions, Yahoo!'s policy is to follow a journalistic ethic of objectivity in their categorizations. Srinivasan verified for me the central role of self identification during our interview:

"To the extent possible, we'd like to avoid inflicting our own biases and views in our categorization; instead, we aim to represent sites the way they represent themselves. [S]elf-definition is an important aspect of our classification process."

"Our primary goal is not to be a definitive source of information akin to a dictionary or encyclopedia - in other words, our categories are not intended to authoritatively "define" what does or doesn't belong in a particular domain. [I]nstead, our primary goal is to provide intuitive access to interesting information, and that means grouping information by pools of relevance."

It is clear in the case of the major online search services that self identification is the process most proximate to the ontological formation of art on the internet, especially taken in light of the major role that search engines play in the consumer's navigation to such production. In light of this, a de facto operating definition of what internet art is emerges as: "Art on the internet is art if it is presented as art". Though completely tautological, it fits well into my experience in looking for art on the net with the help of search engines. There are, however, other mediating factors at work of which some may prove interesting in the generation of enhanced or critical notions regarding the nature of art practice on the internet.

**Artscape 2: Other Mediators. Art institutions, links pages, critical theory.**

There are other collections of knowledge on the internet beyond search engines that relate to notions of what art is, both on the net and in RL. One of these is the art oriented cultural institution whose main operation takes place in RL, yet who maintain space on the net as well. Famous traditional museums such as **the Louvre** or the **Art Institute of Chicago**, regional museums, commercial art galleries, and community

based arts organizations frequently have sites on the WWW that participate in art discourse and exert a curatorial influence regarding popular ideas about what art is. Because the main function of these sites is generally the presentation or production of objects and not digital or other media, they tend to present ideas of art that are profoundly traditional; primarily using their web sites a vehicles for advertisement intended to reach the literate, educated consumer demographic who uses the internet. As such, they are perhaps the poorest place to look for art on the internet if your goal is the location of web-specific art, yet are at the same time not to be underestimated in terms of their vast collective influence regarding ideas about art in both RL and in cyberspace.

These art institutions with web sites also often participate in another pervasive kind of discourse relating to the ontological nature of art on the internet. Links pages are hypertext collections of links to other sites and are common throughout the internet. Collections of links can be found in many different contexts, from formal academia or museum sites to artist home pages. I can attest to the fact that these types of non-engine collections of "Art" often have led me to more relevant sites than those listed in the search engines, although almost universally a search engine has served as a path the the sites containing the links pages. As such, these links serve as an extension of the search engine and often contain opinions from self identified artists regarding what (else) is good art.

The chain of hypertextual linking, where you arrive at sites of interest synergistically, is of course the basic experience of surfing the web. I bring it up in this context to show again that self identification is the fundamental process at issue here, because writing a links page to other art sites is in itself a form of art identity construction. If I create an art links page at my art site, I am pooling relevant information into an associative form of self identity. If an arts organization presents a links page, it does so for similar reasons in order to associate itself with other organizations in the same field. The end result is that self-identification is again shown as the basic qualifier for art in searchscape, with links pages playing a tertiary role to that of the engines in the search-epistemological process of defining art.

Another though less influential nexus of art knowledge on the internet stems from a variety of critical theory sites. Presented primarily by educational institutions, these sites present writing, theory, and criticism of a broad range of media, cyberspace and postmodern cultural issues of importance to artists even if not always exclusively participating in directly art related discourses. **CTheory** and **Postmodern Culture** are particularly robust and elderly (by Web standards), examples of these types of sites. These sites sometimes present forms of writing or theoretical production that are not constrained by the traditional forms of writing (as my own is), but that can instead be hypertextual and visual, as in the case of the Hyperweb<sup>3</sup>, or in non-traditional and clearly postmodern forms of writing such as **Zapistas: The Recombinant Movie**, (Ricardo Dominquez).

These sites should be considered carefully by artists who work with web as a medium, not only in order to familiarize one's self with criticism and theory regarding the nature of computer mediated communications and the rapidly emerging forms of subjectivity in which the art act is performed, but in order to better develop and participate in the critical nexus in a productive way. In many ways the artist (as individual in RL) is being replaced or usurped. Although there is still a certain power associated with being an artist in a culture that still somewhat respects art as a profession, one does not have to look too closely at the production of many who identify themselves as artists to realize that artmaking (particularly of objects), will not well situate them well in the emerging postindustrial, information based economy. <sup>4</sup>

It is past time to relate both our practice and theory to the potential impact of technology on meaningful art careers in a digital economy. Many artists may suffer the same fate that studio musicians in the recent past have suffered as computers (MIDI) moved into production facilities in both Hollywood and the music industry. Serious contention over the relevancy of artists and the nature of art making will continue in the future, often pitting legitimate cultural arguments against economic ones. If you believe as I do that the basic behavioral nature of any culture is economic, then it may be wise as an artist to participate in the debate about your relevancy and relate it to your art activities. This will require a conscious grounding in critical theory, social

issues, technology, and economics.<sup>5</sup>

I add to the general field of critical sites, which are potentially important to art identification, a number of subcultural and other special interest sites that often contain art related information, but that serve different identity constructions. Gayzoo and Disinformation (mentioned above) are examples of such sites which happen to also be search engines. In these cases the critical content takes the form of information mapping into indices with where the local content is focused on the concerns of more or less specific audiences. Whereas GayZoo indexes specifically gay identified sites, Disinformation "the Sub-Culture search engine," is a general index of various identifiable "sub-culture" sites.

The study of sub-cultures and cultural resistance relates to issues of identification in art practice on the web. In brief, the study of sub-cultures looks at the relationship between mass culture and the formation of sub-cultural identity including the accentuation of possible resistance to mass culture from such groups. Of particular interest to artists is the relationship between mass cultural notions of art and individual artistic identity formation as mediated by possible resistance to and rearticulation of mass culture by artists. The state of art culture on the web is a picture of art in which artistic self identification is largely determined by mass cultural ideas about art, hence serving mostly to recirculate these same cultural assumptions in both the internet and the cultural network. Under this view, many often contradictory assumptions about the artist stemming from mass culture must be reevaluated for their specific usefulness to the post-industrial artist. My short list of artistic assumptions includes: notions of autonomy, individualism, anguish, genius, personal expression, political expression, romanticism, avant-gardism, modernist notions of medium specificity and self-reference, creativity, radicalness and revolution, challenging sexual mores, historicism, as well as postmodernist pastiche and appropriation. The task of reconsideration needs to be undertaken by artists not only in critical art production but in critical writing.

The cultural network of language, both in specifically textual and broadly semiotic manifestations, is complex and inevitably contradictory. Chuck Kleinhans holds that we must nevertheless hold open the possibility of resistance amidst the complex factors of multiple subjectivities through better analysis:

"[We] must more fully consider the contradictions of both cultural texts and responses. The situation we study is one of flux and change. It can only be understood as one of context and relation. It is one that must include analysis of contingent factors."

[http://www.rtvf.nwu.edu/studies/people/kleinhans/cult\\_and\\_subcult.html](http://www.rtvf.nwu.edu/studies/people/kleinhans/cult_and_subcult.html)

Art practice on the internet may then be a possibility provided that artists open an identifiable critical space in which it can take place as a mode of identification which is suspicious or at least aware of mass assumptions about art and artists and seeks to build an alternate identification for artists and art. This is a difficult task, as I am sure that the other writers, artists and theorists working on this electronic journal can attest. In an interview with Richard Metzger, the founder of Disinformation, we can detect a healthy skepticism about whether the art world is relevant and a sense of pessimism about the possibility of useful art on the internet:

"I think the days of being a 'fine artist' except for the most socially connected amongst us is OVER. To call oneself an 'artist' is, in my opinion, an admission that you're a fool, pretty much." "How much art is there that can REALLY, TRUELY[sic] blow peoples minds these days??? If you can find some let me know about it."

## Conclusion

Art on the net is a result of many contingent factors. Self-identification on the part of the artist is the most influential factor, with networked and semiotic identification of traditional practice by art institutions, and the hypertext links provided in art oriented sites as contributing factors. All of the above are heavily facilitated through the use and influence of search engines, although search engines have on balance a primarily reflective function in the distribution of art knowledge as mediated by the above processes. All of these forces are of course in turn tied to the broadest notions of art that exist in culture at large. For artists interested in the implications of the internet on art discourse and vice versa, the most effective strategy for future production will be participation in the continued development of critical theory and its application in art practice. It is in the field of critical theory that artists can perhaps open subjective spaces for a living form of art production and a meaningful role for artists in the economy. If you accept the notion that culture is essentially determined by economic relationships, then the practice of art in a focused critical identification built around societal economic issues is a necessary way of proceeding.

---

**Appendix 1-** The first 20 hits for a query of "Web-specific art" submitted to Alta-Vista on Feb 3 1997.

**Appendix 2-** Michelle Heimbürger, surfer de yahoo!, was kind enough to share her favorite art sites with me for this article.

**Appendix 3-** An interview with Srinija Srinivasan, Ontological Expert, Yahoo!.

---

## Footnotes

<sup>1</sup>My assumption is that it is primarily the creators of pages that submit them and that even if it is submitted by another agent that they in turn categorize the page subjectively based on the pages content and therefore the self-description is maintained.

<sup>2</sup>Srinivasan: "The category of useless is a tribute to new possibilities and novel entertainment."; Search also Yahoo! under "Disturbing Trends"

<sup>3</sup>The Hyperweb was a part of a previous issue of Postmodern Culture. It is no longer available online.

<sup>4</sup>For a good introduction to post-industrial economics see:

Rifkin, Jeremy [The End of Work: the decline of the global labor force and the dawn of the post-market era](#) 1995 Published by G.P. Putnam's Sons 200 Madison Ave. NY NY 10016

<sup>5</sup>An interesting book in this respect is:

Gablik, Suzi [The Reenchantment of Art](#) 1991 Published by Thames and Hudson Inc.,

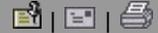
500 Fifth Avenue, NY NY 10110

While strong in its analysis of critical theory and social issues it lacks any consideration of technology or economics. I nevertheless feel that it is very useful reading.

---

I want to thank Srinija Srinivasan, Richard Metzger and Michelle Heimbürger for taking the time to speak with me or converse by Email. Thank you to Myung Lee for the concept for this article. Thank you also to the rest of the Switch staff, **CADRE** graduate students, and other art department graduate students at SJSU for input and support, especially Paula Poole .

©1997 Brett Stalbaum



## ::CrossReference

### **last 5 articles posted by Stalbaum**

**:: Introductory Notes** - Mar 12 2002

**:: Substantial Disturbance: An Interview with Faith Wilding** - May 15 2001

**:: New Media in Academia** - Jun 14 2000

**:: Editors Notes** - Jan 20 2000

**:: Web Taxonomy** - Jun 14 1998

**:: The Construction of Art on the Internet and the Mediating Influence of the Search Engine** - Mar 15 1997

**:: Conjuring Post-Worthlessness: Contemporary Web Art and the Postmodern Context : part 2** - Jan 14 1997

**:: Conjuring Post-Worthlessness: Contemporary Web Art and the Postmodern Context : part 1** - Jan 14 1997

**view all posts made by Stalbaum**

[about](#) | [contact](#) | [credits](#) | [subscribe](#)