

## Internet Art and the Archive

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*Internet art is ephemeral by nature and several initiatives have been taken to preserve it for the future. Apart from formal archives holding art of this kind, there are also artworks which exist outside these web based institutions. In what way can they be regarded as archived? In the article, criteria are suggested which can be used to judge whether an artwork is active or archived and these criteria are applied in the analysis of twelve different artworks. Different kinds of dating are important for how the status of a work is perceived by the visitor. The concepts of explicit and implicit archiving are used to characterize archiving of Internet art, where works can be “dead” and “alive” at the same time.*

*Keywords: internet art, implicit archiving, explicit archiving, web archiving*

Internet art is an ephemeral art form, and early specimens of this species are threatened by extinction as technical development advances at a reckless pace. The cultural institutions that have hitherto been in charge of preserving our art heritage are facing new challenges in their endeavour to rescue digital art for the future. At the same time as “Web projects created just minutes ago are already becoming stale” (Mayfield 2002), many artworks from the pioneering days of the web are still accessible on the Net.

Net art can take many different forms. A Net artwork can be a self-contained site, like *Black people love us* by Chelsea and Jonah Peretti (2002). It can be a program that searches the Net and presents the viewer with the result. *1:1* by Lisa Jevbratt (1999) and *HellHunt* by Thomas

Broomé (2001) belong to this type of Net art. The Internet was used to gather participants to the performance *Kings X phone in* by Keith Bunting (1994). In this case, the Net part of the artwork consisted of a simple text page with a notice to go to Kings Cross or to call the phone booths in the area at a certain time. Another type of art connected to the Internet is computer programs like *Web Stalker*, an alternative browser which makes the web appear in a completely different fashion than regular web browsers like Internet Explorer (Green, Fuller & Pope 1997).

Of the artworks mentioned above, only *HellHunt* is not online any longer, the other works are still alive and active in varying degrees. But will they be ten years from now? Several initiatives to preserve digital art have been taken. Rhizome, an art community on the Net dedicated to the presentation, discussion and preservation of new media art, established in 1999 an archive called ArtBase, which contains new media art, video installations as well as web sites. Walker Art Center has devoted a section of its web site to a permanent collection of Net art. A larger, collaborative project is the Variable Media Network, of which the Guggenheim Museum is one of the founders. Rhizome and the Walker Art Center are among the partners of the project, whose first conference was held in 2001. The Variable Media Network is built on the active participation of the artists, who are supposed to supply guidelines for a future translation of their work to another medium, should the present medium become obsolete. The idea of media independence is what this project is promoting and they are trying to find practical solutions to how to realise (Depocas, Ippolito & Jones 2003). A European initiative is Capturing Unstable Media, a project that carried out research on the preservation of electronic arts (Fauconnier & Frommé 2003). It took as its starting point the V2\_archive, which contains documentation of projects (Fauconnier 2001).

The Variable Media Network (n.d.) has chosen four different strategies for preserving new media art:

1. storage,
2. emulation,
3. migration, and
4. reinterpretation.

Storage is the conventional museum strategy, which means that the physical object (in the case of digital art, the hardware and the software that belongs to it) is taken care of by the archiving institution. Emulation implies that the bond to the original equipment is severed, i.e. a program that was written for Macintosh is rewritten to run in the Windows environment. The migration strategy involves upgrading programs and files to current versions, e.g. a web page that was designed for Netscape 3 is upgraded to work with a later version of the browser. Reinterpretation, finally, is the most hazardous solution, difficult to undertake without consulting the artist.

With the exception of the last one, these are basically the same strategies that the founder of Rhizome, Mark Tribe (2000), has outlined for the preservation of Net art. A strategy for preserving digital information in general was elaborated already in 1996 by a research group within RLG, the Research Libraries Group. The report recommends migration as the primary strategy (Garret & Waters 1996).

Art historian Hans Dieter Huber (2001) states that if Net art is to be preserved, it has to be collected, and to be able to decide what to collect or not one has to put Net art in a historical context. If people started collecting Net art, it would be more widely spread and hence better preserved. He points out that books stand a better chance of surviving than e.g. oil paintings, which often exist only in one copy. In this respect, the Internet seems to be an ideal environment for survival. The archiving method advocated by Huber is thus wide simultaneous distribution.

General solutions for archiving the whole web, such as the Wayback Machine, also exist. Some art sites can, of course, be brought up from the depth of this giant container. When you search for a specific URL, you are presented with a table of dates, from which you can choose an archived version of that page.

The purpose of this article, however, is not to answer the question of what can be done to save Internet art, but rather to examine the ontological problems of *what archiving means in the context of the web*. I will do this from the point of view of my double background in art history and informatics, in an attempt to make these two disciplines overlap. The web is in itself a giant archive, and every web page can in this way be regarded as archived as soon as it is published. Archiving is also an

activity intrinsic to web publishing. Every web site with self-respect has a section called Archive, where for instance old meeting minutes or pages about previous exhibitions are to be found. This kind of archiving only involves moving the links from their original place to another heading, which does not influence the files in any way. This rather passive form of archiving is negatively defined; it is achieved by *not removing* the material. It is also a phenomenon unique to the Internet. In the real world, physical constraints prevent art exhibitions from being left hanging while a new space is made use of for the next show. But this kind of implicit archiving is exactly what happens in the virtual space of the Internet, where existent pages normally do not have to be taken off-line in order to accommodate new ones. Like all web pages, Net art can be taken off-line, linger on or fizzle out. Or it can be explicitly archived.

### **Archiving**

It is common to regard “archived” as a synonym to obsolete or dead. But archiving also means that a work has been selected to have eternal life. This selection process plays an important role when museums add a work to their collections. It is vital for an artist’s career to be represented in museums. This act of consecration, to use Bourdieu’s terminology, can equally well be performed by Net based institutions, like Rhizome and Walker Art Center, as well as by traditional institutions. In this respect there is no difference between the Net and the physical world. But there are some conceptions of archiving that take on a different meaning in the Internet context. As I have outlined above, there exists implicit archiving as opposed to explicit archiving. In the world of traditional, physical archives, explicit archiving is the default value and there is no need for this distinction. In the following analysis of Internet artworks, I have discerned two types of explicit archiving. One is when the artist has put the label Archived on the web site. The other is when the artwork has been included in an archive such as the ArtBase.

Normally, when something is archived, it means that it is hidden and stowed away. This kind of archiving occurs in the digital realm as well, when files are compressed before being placed in an archive or transferred on a network. The files then have to be decompressed in order to be read and accessed again. This aspect of archiving does not occur in the

context of Net art. Contrary to being made more inaccessible, it is highlighted and brought out into the cyber air. All web artworks in an archive can be equally visible and available, as opposed to physical objects in a museum collection, of which only a few can be on display in the museum halls.

Dates have a given place in archival metadata. When a piece of Net art is included in a collection, information about creation date etc. has to be supplied (Rinehart 2002). When an artwork exists outside such a collection, dates explicitly stated in the artwork itself play an important role as clues to the archival status of a work. There is also a kind of indirect dating, such as mentioning of versions of operating systems and browsers, which can be useful when judging the age of a work. This is somewhat similar to the way the age of a film can be judged by car models and fashion details. The dates of user contributions and references from other web sites also contribute to the impression of the archival status of a work.

These are some important criteria used in the following analysis of the artworks. As this is a new field, there is no ready made tool kit for the purpose, and the analysis will reflect the complexity of the field.

### **Artworks/Case Studies**

Below I intend to examine some artworks in their capacity as archival records in the search for an archival mode. All the works are classical Internet works that have received a great deal of attention from the art world and are included in handbooks such as *Internet Art* (Greene 2004). I have tried to include in my sample works with different qualities, so that many aspects of archiving can be brought to the fore. Among these aspects are age, theme, functionality, interactivity, degree of user participation, updating frequency, use made of web facilities such as frames and type of version. Some of the works belong to the pioneering days of the Internet, some are fairly recent, some take on a critical theme such as racism, some can be regarded as poetic, some exist in their full version, some are demo versions, some are frequently updated and some have been left unchanged for nearly a decade. Five of the works are archived in the Rhizome ArtBase: *Telegarden*, *Fantastic prayers*, *Web Stalker*, *My boyfriend came back from the war* and *Apartment*. *Web Stalker* is a cloned

object, which means that it is stored on a server at Rhizome. The rest of them are linked objects. All works in the ArtBase are furnished with information about the works and the artists. *Please change beliefs* is a part of the Walker Art Center Permanent Collection. *Form art* is part of the collection of the Center for Culture & Communication Foundation, C3. The remaining artworks have no explicit collection/archive affiliation. (The information below has been gathered from the web sites themselves and from the web sites of the archiving institutions.)

### *Telegarden*

Artists: Ken Goldberg and Joseph Santarromana  
Year: 1995-2004  
Host: University of Southern California and Ars Electronica  
In archive/collection: Rhizome ArtBase  
URL: <http://www.usc.edu/dept/garden/>

This is a project that combined a virtual community with the physical world. A small garden was tended by members of the *Telegarden* community, who could plant seeds and water plants with the help of a robot that was controlled via the Internet.

Today, if the guest entrance on the above web page is chosen, you come to the original site at Berkeley University, signed with Ken Goldberg's e-mail address. The site now consists of only one page, with links to other related pages. It is a kind of obituary notice that tells the visitor that the project has been finished and includes some of its history. There is a link to the official archive of *Telegarden*, maintained by a person with the alias Captain. The archive contains photos and video clips, some of which appear to be internal jokes for the former members. From the archive page there is a link to a demo tour, which is the only "live" possibility left. The last date mentioned on the pages is 2004.

### *The digital hijack*

Artist: Ken Jones at etoy  
Year: 1996  
Host: etoy  
URL: <http://www.hijack.org/>

This hijacking action started 31 March 1996 and was stopped 1 August 1996. When a visitor of a search engine entered a popular keyword, such as Porsche, lifestyle, etc., among the hits he got dummy pages generated by a software agent created by etoy. These dummy pages announced that you are “hostage No. so and so” and that you are to be taken to the Internet Underground.

What remains of the project is a demo site. All the links at the top and bottom of the page point to the search page itself. The options *The best of Porsche*, *The best of Lifestyle*, *The best of Penthouse* and *The best of Formula* all lead to the same tour, where it is stated that you have been kidnapped, in search for your keyword. If you choose *The best of Porsche*, the text “ON THE SEARCH FOR ‘PORSCHE’ YOU HAVE BEEN KIDNAPPED!” will appear.

***Fantastic prayers***

Artists: Constance DeJong (writer), Tony Oursler (artist), and Stephen Vitiello (musician).

Year: 1995

Host: Dia Art Foundation

In archive/collection: Rhizome ArtBase

URL: <http://www.diacenter.org/rooftop/webproj/fprayer/fprayer.html>

*Fantastic prayers* is a work that explores the multimedia possibilities of the Internet, and consists of sound and video clips as well as text files. It is an example of the early web collage technique. The archiving information is limited to the statement “Please note: This is the title page for the 1995 Fantastic Prayers website.” that appears at the top of the page. All links and files work. The site is not dependent on user input. As it probably appears now just as it did when it was new, it cannot be regarded as a demo version.

***Please change beliefs***

Artist: Jenny Holzer

Year: 1995

Host: äda ‘web, Walker Art Center

In archive/collection: Walker Art Center Permanent Collection

URL: <http://adaweb.walkerart.org/project/holzer/cgi/pcb.cgi>

A set of truisms constitutes the basis of this text-based work, which presents the visitor with truisms and invites him to change beliefs. During the first years of the work, the visitor could edit the truisms and submit them to the master list. There are five archives of visitors' submissions, the last one from 1998. The interactivity is still there, but no submissions are saved any longer. Although not explicitly stated, what remains of the work is some kind of demo version. No archival statement is supplied on the site.

### *Web Stalker*

Artists: Matthew Fuller, Colin Green, and Simon Pope

Year: 1997

Host: artist's own web site, Backspace.org

In archive/collection: Rhizome ArtBase

URL: <http://bak.spc.org/iod/>

<http://rhizome.org/artbase/1694/index.html> (cloned art object in ArtBase)

The *Web Stalker* is an alternative browser. As a piece of downloadable software, it has appeared in four versions, the first three for Macintosh only, and the fourth for Windows as well. It works on my 2005 PC laptop. The site has a really minimalistic web design. Many links do not work any longer. Archival material such as texts by the artists, information about reviews and awards granted to I/O/D is provided. No "last updated" date is given, but the last date mentioned is 2000, when *Web Stalker* received the Webby Award. The site is not explicitly archived: "Keep an eye on the I/O/D Web site for information regarding updates and events concerning the Web Stalker", the Readme page says.

### *My boyfriend came back from the war*

Artist: Olia Lialina

Year: 1996

Host: artist's own web site, Teleportacia

In archive/collection: Rhizome ArtBase

URL: <http://www.teleportacia.org/war/>

This work builds on frames, which progressively divide the screen into smaller and smaller windows, filled with text or images, while the story



of a soldier returning from the war evolves. The visitor can take different routes through the story. One of the entry pages of the site consists of a list of paraphrases, or remixes, of the work done by other artists. Under the heading Archive there are neatly ordered tables of all the html files of the work as well as financial records, server locations and other information pertaining to the work.

***Form art***

Artist: Alexei Shulgin

Year: 1997

Host: C3 (Center for Culture &amp; Communication Foundation)

URL: <http://www.c3.hu/collection/form/>

Users are usually required to fill in a form when ordering something from a web store or downloading software. A form consists of elements such as text fields, radio buttons, checkboxes, submit buttons, and drop down boxes. These elements are the building blocks of this piece of web art, where Shulgin plays with elements and uses them for quite different purposes than originally intended. *Form art* is an interactive piece, rather like a game that can be played over and over again.

C3 has a gallery section and a collection section. The last section functions like an archive, where pieces are gathered that have a chance of being shown again, or are important for the understanding of the development of media art, according to the C3 webpage.

***GenoChoice***

Artist: Virgil Wong

Year: 1999

Host: artist's own web site

URL: <http://www.genochoice.com>

On this web site, prospective parents can supply their DNA and order a tailored baby. The visitor is invited to press his thumb against the screen and in this way have his DNA scanned into a database. When the genetic profile for the child is presented, remedies for genetic defects are suggested. Luckily, the insurance company will pay the hefty invoice.

This mock hospital site comes in an html version and a QuickTime-version, and a Flash version has been promised for some time now.

### *Black people love us*

Artist: Chelsea and Jonah Peretti

Year: 2002

Host: artists' own web site

URL: <http://www.blackpeopleloveus.com>

This is an art site meant to provoke reflection about racism. It has the form of a home page satire. The white couple Sally and Johnny boasts of being popular with black people, because they treat them with respect. The site has a deliberately corny web design and staged family snap shots which look slightly exaggerated. It has a section with testimonials from their black friends and a section with letters from visitors. It also has a “serious” section with links to anti-racist web sites.



Figure 1. The Black people love us web site.

***Apartment***

Artists: Marek Walczak and Martin Wattenberg  
Year: 2001  
Host: Turbulence  
In archive/collection: Rhizome ArtBase  
URL: <http://www.turbulence.org/Works/apartment/>

This work was commissioned by Turbulence in 2001. It starts with an empty screen and a blinking cursor, which prompts the user to enter a word. The program performs a semantic analysis of the word, and starts drawing a plan of an apartment, where rooms are labelled according to their function and filled with the words entered. The apartment thus created could be saved and used to be archived on the site. There are 16 archives organized in cities, dated from 2001 to 2002. A 2d and a 3d-version are available. The development during the first year of the work can be followed in a log book.

***They rule***

Artist: Josh On  
Year: 2002  
Host: artist's own web site  
In archive/collection: V2\_Archive  
URL: <http://www.theyrule.net/>

With the help of *They rule*, a visitor can visualize the power structure of corporate USA. A database with information about board members forms the basis of the work. The main visual elements are an executive office chair, a boardroom table, and a male or female board member. When the visitor picks a company name from a list, a table appears on the screen. The table can be expanded to show all board members of the company. Maps of connections between companies can be produced by the visitor and the maps can be saved. The first version of *They rule* was created in 2001, and a second version was made in 2004. The site is continually updated.

## Discussion

In what way can the above artworks be regarded as archived? The first three examples are explicitly archived works, furnished with an archive statement on one of the first pages. The effect is as if a stamp with the text “archived” had been put on the surface of a painting. This mode of presentation is possible because the surface of a web page is erasable and will not be damaged by this addition. The advantage is that the authenticity of the work is retained while the message is clear and cannot be misunderstood by the visitor. Through the demo versions of *Tele-garden*, *The digital hijack* and *Please change beliefs* the visitor can experience the interactivity of the works. This is in the tradition of information technology. Before the era of real time computing and reliable network connections, canned versions were often used for demonstrating new software. *Fantastic prayers* cannot be regarded as a demo version; it still exists in its original version. The interactivity is here restricted to choosing between links to Quick Time films, sound and text files. This means that without the archive statement, it could be perceived as an old fashioned, but fully working, web site.

### *Direct Dating*

Some of the artworks include dates, generally the starting date of the project. *The digital hijack* is unique among the artworks chosen in that it is the only one with explicit time limits. On the search page it is stated when the project was started and when it was stopped. *Apartment* has a starting date, it was opened 12 February 2001, but no closing date is given. This may imply that it is an ongoing project that has no need for a fixed termination point in time.

The dating of web pages is a strong convention within web design (Nielsen 1998). Because of the fast updating possibilities of this medium, visitors expect the information given on web pages in general to be up to date and accurate. A common sight is a page footing that contains e.g. “Last updated 12 January 2006”. The recommendations of the Swedish Agency for Public Management (Statskontoret) for the design and maintenance of web sites contain instructions for the dating of web pages. Whenever a significant change in the content of the page is made, the “last updated” information should be updated. Some information can

remain correct for a long time and not be in need of updating. As a consequence the “last updated” date is not changed and the page can appear obsolete to visitors. The Swedish Agency for Public Management then recommends that a date “last checked” be entered after the “last updated” date (Statskontoret 2004).

Authorities’ web sites are very different from art web sites, but what is interesting in this context is that the authorities have thought about how the information will be perceived by visitors. It can be perceived as obsolete even if it is not. The same is true for art sites. Unless an art site is not explicitly marked as archived, a visitor has to draw conclusions about its archival status with the help of other clues. None of the artworks mentioned here has a “last updated” date. Other dates appear in connection with links, events mentioned or awards received (*Web Stalker*), or dates of copyright (*GenoChoice*). Two of the works that include archives, *Please change beliefs* and *Apartment*, have dates for each list of submissions or archived city, whereas *They rule* contains an archive, but the entries are not dated. One of the works, *Black people love us*, does not contain dates at all. This seems to me to be a deliberate choice, in order to prolong the life cycle of the work, and to avoid the effect described above, that old dates signal obsolete content.

### *Indirect Dating*

When the text Netscape 3.0 appears on the introductory page of *Form art*, visitors with some notion of computer development will be able to place it in time. The same goes for *Web Stalker*’s Windows95-version, which refers to the Windows version released in 1995. *Form art* is a time-bound work in its conception, because it reflects on the web medium itself. As such it has a limited time to attain its effect. When the news value of web forms is gone, the work will not have the same meaning any more. This is to some extent a historical process that applies to all cultural phenomena, but it is especially acute in this medium.

When these possibilities for judging the age and the up-to-dateness of an artwork are exhausted, the design can serve as a clue. *Fantastic prayers* has all the characteristics of early web design. It uses simple html features that were available at the time. Judging age from design entails the risk of misjudging retro design, of which *Black people love us* makes use. The

colour scheme is pale yellow and pink and the typeface used is Courier. There are animated gif images in the form of hearts, a smiley and snapshot-like photographs. All these ingredients are typical of personal home pages.

### *User Contributions*

The user contributions to built-in archives offer a means of judging the age of the work and at the same time of measuring the interest in it. Archives like the ones in *Apartment*, *They rule*, and *Please change beliefs* testify to the popularity of the works. They can fulfil the same function as visitors' counters on general web pages.

The submissions to *Please change beliefs* have dates ranging from 1995 to 1998. Most submissions were made, and two archives created, in the summer of 1995. For the following three years, an archive a year was added, but the last one was smaller than the previous ones. The archived cities on the *Apartment* site had a peak in the northern summer of 2001, when thousands of apartments were added. The last city dates from November 2002. Was archiving stopped because the contributions ceased to arrive or because the artists were satisfied with the result and moved on to new projects that consumed their time and energy? It is hard to tell. *They rule* has a large archive of maps, that are divided into the categories recent and popular, but no dates are given, and the term archive is not used.

*My boyfriend came back from the war* includes a different kind of archive, or rather two kinds of archives. One is the explicitly labelled archive with files that make up the work; the other is the smorgasbord of various paraphrases and remixes of the work. Whereas *Please change beliefs*, *Apartment* and *They rule* invite visitors to make contributions that are to a great extent circumscribed by the artists, *My boyfriend* gives the visitor much more leeway, and demands more of him, to a degree that the term "visitor" is no longer appropriate. The contributors to the archive of remixes must be regarded as artists in their own right. The list of remixes is maintained by the artist and labels like "recovered", "lost" and "new" are attached to the links. The original version is placed first in the list, thus the artist is putting her own work at the same level as the paraphrases. The last contributions are from 2006. The work does not

appear archived, rather maintained by the artist. The original work remains intact, the development occurs by addition of remixes.

### *References from Other Sites*

Beyond the control of the artist are references made to the work from other sites on the Net. Can the archival status be gauged from references to the site? Is being referenced from other sites a criterion for being alive and hence not archived? I have used regular searches in Google on the title of the work, in combination with an advanced search function called "Find pages that link to the page". The disadvantage with the last type of search is that dates are not always mentioned.

Jonah Peretti, one of the artists behind *Black people love us*, is one of the organisers of the competition *Contagious media*. The entries consist of original web projects, and the project which receives the most hits wins. A common way to spread the rumour of a work is through discussion lists. *Black people love us* is still referenced on discussion lists, as well as on other web pages, and is in this sense active. The first reference I have found to the work is from 18 October 2002, on a personal home page/blog (Partee 2002). The latest one I have found is in a posting from 19 December 2005 on *The Opinionated Beer Page Forum*, in the category General discussion, Humor (2005). Does this mean that *Black people love us* is not archived? The letter/comment section is completed and no new comments are added. I do not know if new comments keep coming in to the artists, but a way to interpret the static mode of this section is that the need for comments from the point of view of the work has been fulfilled. The fact that the work is no longer updated indicates that it can be regarded as archived.

The same double status applies to *GenoChoice*. First launched in 1999, it currently tops the Yahoo's directory list for United Kingdom, Entertainment, Humour, which is a sign that it is still in use and in that sense not archived. The fact that it contains two versions and the promise of a third (the Flash versions have been announced for a long time, although without being realised), gives the visitor the impression that it is being maintained. It is constantly being referred or linked to on the web; when searching Google on 2 February 2006 I found a reference from 30 January 2006 (Weird Daily 2006).

### *Categorization and Canonisation*

As mentioned above, the same selection process occurs in the virtual world as in the world of physical museums. But the power of the institutions on the Net is counterbalanced by the sheer amount of other web sites, portals as well as personal web sites, which refer to artworks. Appearing on link pages is the usual way to stand out on the Internet. In this context, the fame of artworks is not restricted to the art world. As we have seen, art sites can be placed in categories such as humour, hoaxes or even, in the case of *GenoChoice*, be used as educational material.

However old and canonised a piece of web art is, visitors can still come across a work without being aware of the fact that it is archived, as long as no information is given on the site itself, as in the case of *Please change beliefs*. To discover its archived condition, a visitor has to enter the work through the site of the institution. It is also possible to enter the work by some other link or by searches for key words (Wagner 2003), and in this way, a work can be archived and still continue its normal life, so to speak. Visitors do not necessarily encounter the work with the preconception that they are going to see something from the past or a classic, canonised work of art. A living archive is in this sense not an oxymoron. Even works that are explicitly archived, such as *Telegarden*, have an afterlife, through its demo version.

### *The Record and the Archive*

What you find when you search Rhizome ArtBase or Walker Art Collection is a link to the artwork, a short description and some metadata. These are the “object details” about *Please change beliefs* in Walker Art Permanent Collection:

*Classification: DASC; Internet Art; text*

*Owner: Artist*

*Credit Line: Linked project from äda ‘web*

It is evident from the record that Walker Art Center neither owns nor hosts the work on its own server. The same is true for many works included in Rhizome ArtBase. Since these kinds of institutions seldom own the works, it is possible for a work to be included in more than one



archive. *Apartment* is part of Rhizome ArtBase, but it is also part of Turbulence Net Archives, i.e., the organisation that commissioned the work in the first place. The same goes for *Fantastic prayer*, once commissioned by Dia Center for the Arts. The work is included in the Center's list of Artists' web projects, which functions like an archive, even if it does not have that label. The medium of the web makes it possible for artists to take care of their own works. Artists like Alexei Shulgin, Olia Lialina, Colin Green, Matthew Fuller and Simon Pope, Virgil Wong, and Josh On maintain their own sites. They are strong, independent artists who are skilled in web technology and in some sense have their own "trademarks". This is evident, among other things, by the use of domain names based on the titles of the works. i.e. [www.genochoice.com](http://www.genochoice.com), [www.theyrule.net](http://www.theyrule.net), [www.blackpeopleloveus.com](http://www.blackpeopleloveus.com). They do not need the cultural consecration of museums to the same extent as other artists working in conventional media.

What is the difference between Rhizome ArtBase, Walker Art Center Permanent Collection, V2\_Archive and Medien Kunst Netz? The latter is a database of virtual art, the purpose of which is to document the construction, components, setting and exhibition history as well as the technical specifications of such artworks. It aims to be "an important instrument for research on contemporary art" (Grau 2003, 12). The V2\_Archive does not have the ambition to host objects either, but has specialised in developing an object-relation data model and a large terminology thesaurus, which makes searching the archive more flexible (Fauconnier & Frommé 2003). The difference between the first two archives and the last two is small for linked objects, as the V2\_Archive and Medien Kunst Netz also link to the objects included in the databases. Rhizome has made a commitment to document and keep track of the work, whereas Medien Kunst Netz is more like a dictionary, writing history that can be revised anytime, even though the likelihood of permanence is high. *Web Stalker* is the only one of the artworks in my sample that is a cloned object in Rhizome ArtBase. Interestingly enough, Green, Fuller and Pope have kept their own web site parallel to the ArtBase one. The one in ArtBase is more up to date, though. A newer version is mentioned: "I/O/D 5 is currently being put together. We anticipate that it will be launched some time in late '99" (Green, Fuller

& Pope 1997). This version has not yet appeared, and in terms of web time it is long overdue, which may entail that it will in fact never appear.

### *New Roles for Artists and Art Professionals*

The preservation of digital art has made the necessity for a closer collaboration between institution personnel, such as curators and conservators, and artists evident. Jon Ippolito, who is an artist and curator of media arts at Guggenheim Museum, is an advocate of the development of museum practice in this direction. He thinks that the artist needs to be consulted about many aspects of the work, and that the artist's notes, props, photos etc. need to be acquired (Ippolito 1998). Today, it is common for artists to take part in the installation of their work in connection with an exhibition, and Howard Besser predicts that in the future the artist's participation in the conservation process will be equally common. He agrees with Ippolito, and sees the role of the conservator of electronic art as a combination of that of an archivist and a cultural anthropologist (Besser 2001). Both parties may feel unaccustomed to this change of roles, the artist who is normally not concerned with preserving artworks and is often eager to move on to the next project, and the curator and conservator who are used to have greater freedom of action.

A big difference between old and new web art projects is that there now exists a developed web culture to which artist can relate. In the beginning, this culture was taking shape and the artists had, in a sense, more freedom to experiment. Nobody knew if the Internet was going to be there in ten years time or if it was just another quickly passing technology. Now the Internet has become a vital part of the infrastructure of Western societies. Nearly every company and authority has a web site, and it is not used as another form of printed leaflet or billboard, it is often used for crucial functions such as income tax declaration. Citizens expect the information to be found on such web sites to be up to date and accurate. These circumstances also have an effect on the way artists approach the medium. The web is still used for temporary projects, but for some artists launching an art site is a commitment, where the updating and maintenance of the site is seen as part of the enterprise from the start. Preservation is in these cases not regarded as a task to be performed afterwards; it is part of the concept of the work.

*What Makes a Work Appear Current?*

What makes an art project appear up to date is not such an easy question to answer. *They rule* is a recent web project of an ongoing kind. Even if no promises are made about future updates, the visitor can anticipate them. *They rule* has appeared in two versions, from 2001 and 2004. It would be logical if yet another version were to come, especially as the site is continually updated with news pertaining to the theme of the artwork. Josh On gathers these news in the *They rule* weblog, and during January 2006 seven entries were made, which means it can be regarded as an active forum. It can be argued that the blog is separate from the artwork, but it can also be seen as a later addition to the work, inspired from the state of the art of web culture. It is certainly a sign of life. A completely different strategy for making their work appear current has been adopted by the Perettis, who have avoided dates completely on their site. *Black people love us* does not even have dates in the letter section, which is quite unusual, as dating of letters is a convention on the Net as well as in the physical world. The already obsolete design of *Black people love us* adds, paradoxically, to its timelessness. The retro look in combination with the lack of dates is a strategy for keeping a site up to date, which goes against the grain of web culture, but is maybe just as effective in this context.

One could look at the question of obsolescence from another point of view and say that what makes a work current is mainly its theme or topic. War, gene technology and racism are all still very current issues. *My boyfriend* dates from 1996, when the war in Chechnya had been going on for two years and the Balkan war for some years more. Even if the situation in the Balkans has calmed down, armed conflicts have shown no tendency to diminish since then. Gene technology had a major breakthrough in 1996, when the sheep Dolly was cloned by a team of scientists at the Roslin Institute in Edinburgh. The *GenoChoice* site was created three years later, and the theme of cloning pervades the work. Gene technology is as hot an issue today as in 1999 and will, with all likelihood, remain so for many years to come. Black people in contemporary USA probably have equal rights in theory, but *Black people love us* deals with the more subtle manifestations of racism that are hard to pinpoint and remedy with legislation.

## Conclusions

The web is at the same time ephemeral and inert. There is an abundance of old pages on the Net, which is due to the fact that however easy it is to remove a web page, it is even easier to leave it online (Wagner 2003). A tension is created by the fact that a web page might be taken down the next second, but it might also be left for the next ten years. Archival enterprises that stamp works as explicitly archived diminish this state of suspense in exchange for security. However, the suspense is part of the charm of web projects, and it shows how difficult it is to know what should and can be archived. This suspense is an aspect of the work that cannot be archived, because then it would be gone.

Does archiving have any relation to functionality? No, not necessarily. It depends on the type of the project. *Fantastic prayer*'s functionality is not reduced, in spite of its being archived. *Telegarden*'s whole idea rested on the tending of a garden, and for this type of project it is of course true that it is the more archived the less it works. Instead of the dichotomy archived/not archived, we can talk of different phases that a work goes through. *Black people love us* does not need more comments. *Apartment* does not need more apartments. These projects can still be enjoyed in their current state, but what is missing for new visitors is the sense of participating in the project. These examples, and most of the other artworks in my sample, illustrate the unique quality of Net art compared to other art forms: that it can be active/alive and accessible and simultaneously archived.

It could be argued that archiving is primarily a question of permanence. The text "this site will remain online forever" would entail that it is archived. Lialina has written a will-n-testament, where she testaments all her virtual assets to different persons and institutions (Lialina 2004). She leaves *My boyfriend* in the hands of her daughter Sofja Aleinikova, who will be the person responsible for the work's continued existence. This case is a good example of the joint archiving venture of Net art, where both institutions and private persons have to cooperate.

Instead of focusing on what is going to be lost, one could focus on what has been gained. The web is an archiving culture, and, as I pointed out in the introduction, many web sites boast an archive. The web has increased the awareness of the value of an archive. A web site without an

archive would seem too lightweight, like a balloon without ballast. No doubt, special efforts are needed to preserve Net art for the future, but the general tendency for archiving that is intrinsic to web culture should not be ignored. The title of Jakob Nielsen's 1998 web column is, after all, "Web Pages Must Live Forever".

However fast the pace of technical development may be, it does not necessarily mean that old technology is rendered obsolete. COBOL, a programming language invented by Grace Hopper in the fifties, is still running important administrative applications on many a corporate mainframe (Murach n.d.). Nobody would have expected that 50 years ago. In the same vein, programs written in the seventies often represented the year in a two digit format in order to save then precious storage space. Nobody thought that those programs would still be there in 1998, when the Y2K panic spread through the Western world. In light of this computing history, I think it is not completely unfeasible that 30 years from now we will still be able to enjoy the intricate frame-dividing story game of *My boyfriend came back from the war*.

A site that has ceased to be updated but is still online can be regarded as implicitly archived, already after a short period of time due to the quick updating pace of the Net. Even if no commitment to the future is made, it can be argued that it has entered the archive mode. The fact that it is still online means that it can be assumed that it will remain online, because remaining is the default value. In this sense, works are archived from the start and continue to be so just by virtue of being online. The archive mode would then be something pervasive, something that applies to all works, and that there is only a difference of degree, not a difference of kind between the works that are explicitly archived and those that are not. Even those that have been taken off-line, like *HellHunt* by Thomas Broomé, have left several traces on the Net. A Google search on 10 February 2006 for *hellhunt broomé* rendered 23 hits, among them a description of the project by the artist himself (Broomé 2004).

In the discussion above I have used the term archiving in both a matter-of-fact manner and in a metaphorical manner. This complicates the answer to the question about what archiving means in an Internet context, taking into account questions about the life cycle of Internet art and how the status of a work can be perceived by the audience. The no-

tion that a Net artwork can be alive and accessible and simultaneously archived is something that deserves further exploration. It is not possible to speak about the archiving of Internet art without considering that archiving is intrinsic to the Internet itself, which makes the introduction of the concept implicit archiving necessary. On the Internet, there is a blurring of borders of the archived and the non-archived, just as there is a blurring of borders between art and non-art.

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## References

All web sites visited 6 February 2006.

BESSER, HOWARD (2001). "Longevity of Electronic Art." Submitted to *International Cultural Heritage Informatics Meeting, 2001*.

<<http://www.gseis.ucla.edu/~howard/Papers/elect-art-longevity.html>>

BROOMÉ, THOMAS (2001). *HellHunt*.

<[http://www.culturegrounds.org/thomas\\_broome/hellhunt/artistframe.html](http://www.culturegrounds.org/thomas_broome/hellhunt/artistframe.html)>

BROOMÉ, THOMAS (2004). "HellHunt – A Paranoid Webspider Searching for the Devil on the Net." Paper presented at the *Inter-Society for Electronic Arts festival (ISEA) 2004*. Stockholm: The Interactive Institute.

<<http://smart.tii.se/smart/publications/pubs/hellHuntPaper.pdf>>

BUNTING, KEITH (1994). *Kings X phone in*.

<<http://www.irational.org/cybercafe/xrel.html>>

DEPOCAS, ALAIN, JON IPPOLITO & CAITLIN JONES, EDS (2003). *Permanence through Change: The Variable Media Approach*. New York: Solomon R. Guggenheim Museum. <[http://www.variablemedia.net/e/preserving/html/var\\_pub\\_index.html](http://www.variablemedia.net/e/preserving/html/var_pub_index.html)>

FAUCONNIER, SANDRA (2001). *V2\_Archive: Archive of Living Actualities*. Rotterdam: Institute for the Unstable Media. <[http://lab.v2.nl/home/\\_docs/v2\\_archive.pdf](http://lab.v2.nl/home/_docs/v2_archive.pdf)>

FAUCONNIER, SANDRA & RENS FROMMÉ (2003). *Capturing Unstable Media: Summary of Research*.

<[http://archive.v2.nl/v2\\_archive/projects/capturing/capturing\\_summary.pdf](http://archive.v2.nl/v2_archive/projects/capturing/capturing_summary.pdf)>

GARRETT, JOHN & DONALD WATERS (1996). *Preserving Digital Information: Report of the Task Force on Archiving of Digital Information*. Washington, DC: Council on Library and Information Resources. <<http://www.rlg.org/legacy/ftpd/pub/archtf/final-report.pdf>>

- GRAU, OLIVER (2003). "The Database of Virtual Art: For an Expanded Concept of Documentation." *Cultural Institutions and Digital Technology (ICHIM) '03*. Paris: École du Louvre. <<http://www.ichim.org/ichim03/PDF/016C.pdf>>
- GREEN, COLIN, MATTHEW FULLER & SIMON POPE (1997). *I/O/D Web Stalker*. <<http://bak.spc.org/iod/>>
- GREENE, RACHEL (2004). *Internet Art*. London: Thames & Hudson.
- HUBER, HANS DIETER (2001). "About the Collection, Preservation and Presentation of Bits and Bytes." Lecture given at the "under construction: art.net.dortmund.de" Conference, 19 May 2001. <<http://www.hgb-leipzig.de/ARTNINE/huber/writings/bitse.html>>
- IPPOLITO, JON (1998). "The Museum of the Future: A Contradiction in Terms?" *Artbyte* 1.2: 18-19. <[http://three.org/ippolito/writing/wri\\_cross\\_museum.html](http://three.org/ippolito/writing/wri_cross_museum.html)>
- JEVBRATT, LISA (1999). *I:1* <[http://128.111.69.4/~jevbratt/1\\_to\\_1/index\\_ng.html](http://128.111.69.4/~jevbratt/1_to_1/index_ng.html)>
- LIALINA, OLIA (2004). "Will-n-testament." *Teleportacia*. <<http://will.teleportacia.org/>>
- MAYFIELD, KENDRA (2002). "How to Preserve Digital Art?" *Wired* (23 Jul). <<http://www.wired.com/news/culture/0,1284,53712,00.html>>
- MURACH, MIKE (n.d.). *The Future of COBOL*. The Cobol Center. <<http://www.infogoal.com/cbd/cbdz040.htm>>
- NIELSEN, JAKOB (1998). "Web Pages Must Live Forever." *Alertbox* (29 Nov). <<http://www.useit.com/alertbox/981129.html>>
- THE OPINIONATED BEER PAGE (2005). "Black people love us." *The Opinionated Beer Page* (Thread 19-22 Dec). <<http://www.tobp.com/forum/forums/thread-view.asp?tid=4995&posts=8>>
- PARTEE, SCOTT (2002). "Black people love us." *Halfass* (18 Oct). <<http://halfass.com/blah/2002/10/18/black-people-love-us/>>
- PERETTI, CHELSEA & JONAH PERETTI (2002). *Black people love us*. <<http://www.blackpeopleloveus.com>>
- RINEHART, RICHARD (2002). *Preserving the Rhizome ArtBase*. New York: New Museum of Contemporary Art. <<http://rhizome.org/artbase/report.htm>>



STATSKONTORET (2004). *Vägledningen 24-timmarswebben 2.0* [Guidelines for the 24h Web]. Stockholm.

<[http://www.verva.se/upload/publikationer/2004/2004\\_01e%20V%C3%A4gledning%2024-timmarswebben%202.01.pdf](http://www.verva.se/upload/publikationer/2004/2004_01e%20V%C3%A4gledning%2024-timmarswebben%202.01.pdf)>.

TRIBE, MARK (2000). *Archiving net.art*.

<<http://www.afsnitp.dk/onoff/Texts/tribearchivingne.html>>

VARIABLE MEDIA NETWORK (n.d.). *Terms, Strategies*.

<<http://www.variablemedia.net/e/welcome.html>>

WAGNER, KARIN (2003). *Fotografi som digital bild: narration och navigation i fyra nordiska konstverk* [Photography as Digital Image: Navigation and Narration in Four Nordic Artworks]. Göteborg: Göteborgs universitet. Diss.

WEIRD DAILY (2006). "Modern Science and Technology Shine Through." *Weird Daily* (30 Jan). <<http://www.weirddaily.com/?p=2922>>