Alain Dépocas

Digital Preservation: Recording the Recording

The Documentary Strategy

"Where is the wisdom we have lost in knowledge? Where is the knowledge we have lost in information?"

T.S. Fliot¹

Introduction

The hypothesis at the outset is that improved efforts to preserve new media art works will be insufficient without the support of structured documentation.

Documentation of both the works and the context in which they evolve must be seen as fundamental factors of conservation. In fact, if we take into account the huge volatility, for example, of certain on-line projects, it is more than likely that in many cases this documentation will soon be the only remaining trace of the work. What will give real value to a collection of digital art is documentation, meta-data, contextualization, and guaranteed long term access to that documentation.

It remains to be seen which documentary structure is the most appropriate. It is especially important to experiment with different forms of dissemination of this documentation, for example by experimenting with different database interfaces.

These are some of the challenges that the Daniel Langlois Foundation's Centre for Research and Documentation (CR+D) is facing.

Lesson from the past: 19th century panoramas

Almost nothing remains of the panoramas of the 19th century, those large circular paintings that were probably the very first immersive technology, except for eyewitness accounts and documentation. The "objects" themselves have practically all disappeared. Only a few specimens remain. But how can we, today, truly "experience" a panorama? Merely visiting one of relics that still exist offers us less than we might believe. What is missing is the entire cultural context.

Paradoxically, it is mainly through documentation that we can now understand what effect panoramas had on the 19th-century public, and what the representational issues were. The ability to *understand* what the panorama was in terms of representational context seems to me at least equally as important today as the few panoramas still in existence.² Naturally, as you will have guessed, there is a parallel to be drawn with today's new media art. Is it enough to try to preserve new media art, even assuming that the compatible equipment needed to access them would still be available in the future? I fear not. As with the 19th-century panoramas, "objects" and "artifacts" will not be enough. We will also have to record the context. The best preservation efforts will be insufficient without the support of structured documentation.

Of course, the panorama is just one example. There are many other cases of total, or near-total, disappearance of media.³ Sometimes, it can be a specific use of a technology that disappears. Here I am thinking of works and other cultural activities on the French

Minitel for example, those of Fred Forest and Orlan, for instance. Only the documentary trace of these uses remains.

The importance and challenges of documentation for archiving and preserving new media art works

Traditionally, documentation involves three types of activity:

- Research: Locating the relevant data
- Preservation: Perpetuating the data
- Dissemination: Making the data available

All too often, in practice, only the first type is taken into account. Even today, very few organizations have established real policies for managing documentation and research findings. Most of the time, research is done piece by piece, without specific methodological structures, without any concern for data preservation which would allow data to be reused, but above all, without concern for the dissemination of the data.

Considering the increased importance for arts using new technologies of documentary support, it is imperative that a major effort at managing research data should be made. A strict documentary practice is all the more important since the sources of information on new media art are relatively sparse and unstructured and just as volatile as the works themselves.

Moreover, we must compensate for the fact that organizations producing the traditional basic tools for art research (periodicals, reference indexes) have, to all intents and purposes, not yet begun to take the cultural activity present on the Web into serious consideration. You will not find any mention of *Rhizome* in *Art Index*, for example. In fact, the principal analysis, commentary and even documentation concerning new media art, are unsurprisingly carried out on the Web or on other types of digital format. However, contrary to what we might believe, this does not really facilitate our access to them, at least not in the long term.

It is in this context that the Daniel Langlois Foundation's CR+D is developing a major collection of documentation covering the last 40 years of the history, artworks and practices associated with electronic and digital media arts, and they will make this information available to researchers. The collection already comprises important documentary and archive collections such as the *Images du Futur Documents Collection, The Steina and Woody Vasulka Archives*, and *The Experiments in Art and Technology (E.A.T.) Document Collection.* Through multiple cross indexes, the CR+D's relational database links data about documents, individuals, organizations, events, concepts and art works, thus enabling the linked information to be seen from a multitude of viewpoints.⁴

Documenting new media art

Now, here are some issues concerning the documentation of new media art. First of all, we have to accept, and therefore take into account, the fact that most electronic and new media art works are temporary.

Archiving and documenting the ephemeral may seem a paradox, but this necessity arises when the technologies behind this ephemeral work make this practice possible. With the arrival of new technologies of information and digital media, the notions of "muse-um", "library", "archives", or "documentation center" will increasingly come together. This convergence may be explained in part by the fact that the best way to preserve new media art work will increasingly be to document it and to disseminate both the work and its documentation. Another reason for this convergence is that, in this new context, the art works and its documentation are inseparable. They are two faces of the same coin.

The challenge presented by documenting new media art works is based on the structure of this documentation, for both the data acquisition phase and the dissemination phase. Ironically, preserving and disseminating this documentation usually poses problems similar to those for the works themselves. We must document as many aspects as possible of artistic activities involving new technologies, and keep some record of the evolution of these new art forms.

- Create an open, collaborative, living and updateable documentation in the image of the new media themselves.
- Propose path or trajectory to follow in the structure of the database managing this documentation.
- Rethink the presentation and dissemination of documentation on digital art, create a laboratory to test new interfaces for publishing research data.

Documentation of new media art must not be a mere illustration, but an interpretation, an attitude. And to reflect this attitude, the documentation must be based on a structure similar to that of its subject's. The challenge of documentation with respect to a network-structured piece, made up of hyperlinks, non-linear in nature, would lie in attempting to propose a map, an interface to make it possible to explore the work, rather than in trying to capture the work or contain it.

The new nature of the archive

All this has to be put into the perspective of the new nature of the archive. In his text The *Art of Archiving* Geoffrey Batchen stated that

The archive is no longer a matter of discrete objects (files, books, art works, etc.) stored and retrieved in specific places (libraries, museums, etc.).

Now the archive is also a continuous stream of data, without geography or container, continuously transmitted and therefore without temporal restriction (always available in the here and now).³

The Web forces us to re-examine what we mean by "preserve," to reconsider the definition of the term "Archiving". In this context, where everything becomes an archive, where instant accessibility to a gigantic mass of information has become possible, and in the context of a medium of availability, the definition of archive shifts from the notion of accumulation, of storing information, to that of navigation, of links between pieces of information, of mapping, and of the ability to identify relevant information. Like the Wunderblock, Freud's famous magic writing pad, the screen of a computer connected to the Internet is virtually capable of displaying the entire contents of the Web, however just one page at a time.

Above all an archive exists through its catalogue. This is even more the case with the Web. A document or a work on the Web does not really exist if no link points to it. It is the equivalent of a drawing tacked to a telephone pole. The drawing exists but only provided that someone:

- passes by
- notices it
- recognizes it as a work.

This raises the following questions: Does a Web work exist without the index pointing to it? Do we preserve Web sites or indexes?

To be pointed to is therefore a condition for existence. To make it accessible and to access it, is to preserve. It is worth remembering that accessing a Web site already means archiving it! We archive without knowing it since the contents of the sites we have visited may

be found on the hard drive of our computer, in the cache. Therefore, access to the site ensures its perpetuation.

This is just the opposite of the situation in the analogue world, where preservation means less access to the original document. In the digital world, information is only preserved through interaction. Preservation and the commitment to long-term access are now inseparable. There is no preservation without dissemination, and dissemination is the condition for preservation Moreover, on some sites, the content we access only exists for the moment of access. It is therefore, in a way, the access itself that allows the content to exist

The specific nature of new media art

The question of the specific nature and definition of new media art is essential for an understanding of the issues involved in its archiving and documentation. Depending on how we define its nature, the methods, tools and consequences of archiving it change considerably. Constructing a typology of new media art would help determine conditions of preservation and take the nature of the works into account in preservation and documentation activities.

If, for example, we choose to speak of "artistic activities," or even "cultural activities," rather than of a static work of art, we shift from a dynamic of *archiving* to a dynamic of *recording*.

Many types of new media cannot be transposed as copies, at least not in their entirety, only as instances (the actualization of one of the many states possible). This, for example, is true for most Web art works, mainly the ones that use interactivity. Alternatively, if we define the Web as an "event and communication space," we leave the realm of the circumscribed, stable object and enter the realm of mobility. If the Web is a space, it is therefore possible to map it. But how do we map mobility? Possibly by recording paths. If, as Simon Gibbs states in a text published on The Shock of the View, a work of Web art is not an object but a phenomenon, the way we try to preserve and document it is altered accordingly.

If new media art can be ephemeral, in continual development, that is if it is a transitory or transitional object, then to preserve and document it we must adapt, and accept this state of being a transitional object. Denying this would mean taking away its fundamental specific nature. Understanding and grasping all the consequences of this open, transitory aspect requires a profound paradigm shift.

Unlike other forms of events-based artistic expressions such as dance or music, Web art and many other types of new media art are not a traceless art form. They lie in a hybrid position, between the physical art object, and the artistic events, of which the only trace is its documentation, produced with means external to itself.

So, the question is how are we to document and archive cultural activities, transitional objects, phenomena, and trajectories? Perhaps a model can be found in the work of Jean-Luc Godard and his *Histoire(s)* du *Cinéma*, which may well be the best memoirs of cinema ... and which demonstrate the validity of using subjectivity as a mnemonic condition. In this context the question could also become: Do we preserve a *film* or do we preserve *cinema*?

Lastly, the search for new media art's specific nature must not become reductive. It must take into account the wide variability of artistic activity involving new technologies and its capacity for transformation. Naturally, numerous typologies are possible. They only serve to show that there are many artistic intervention strategies possible, each involving a specific preservation and documentation strategy. Through a typology exercise, we

could understand that for some types of works, the problem of preservation shifts from the *how to* to the *what to*. For example, with procedural art, must we collect all objects or occurrences yielded by such projects?

An interesting historic case is Jean-Pierre Balpe and his *Générateur de poésie* (Poetry generator). Presented in the 1985 exhibition *Les immatériaux*, shown at the Centre Georges Pompidou in Paris, the *Poetry generator* was a computer program that produced automatic poetry during the entire period of the exhibition. According to Balpe, the poems were printed, and after the exhibition, the BPI (Public Information Library) of the Pompidou Centre asked the artist for permission to preserve the works for documentation. The interesting point is that they kept the thousands of poems printed out, but threw away the computer program itself which was the thing the artist considered to be the real work.

Some methodological proposals for digital preservation

The archiving and library science fields have already identified some of the principal problems related to the preservation of digital documents and archives. It would be worth taking inspiration from their research, since the preservation of digital documents and that of digital art have many common features.

Here, for example, is an interesting definition of digital preservation in terms of what should be preserved: "Preserve content, context and structure, and maintain the capability to display, link and manipulate digital objects." It is probably this second aspect that represents the greatest difficulty, since it also means preserving accessibility to a multitude of software and operating systems. Again, according to Margaret Hedstrom, "Complex and expensive transformations of digital objects often are necessary to preserve digital materials so that they remain authentic representations of the original versions and useful sources for analysis and research." Therein lies the paradox of preserving digital documents: between the expressions "transformations" and "authentic representations of the original."

Amongst other digital archiving strategies, the concept of emulation⁹ and contextual envelope is increasingly being proposed by digital preservation specialists. This concept is a potential solution to the problem of the dependence of digital documents on the software needed in order to access them. It further allows the full data handling capacity to be preserved.

It involves placing the document, left in its original form, in a virtual envelope containing all the instructions necessary for its retrieval, display and processing. The envelope would contain the instructions needed to link the document to a collection of emulators that would act as a bridge between the document, which can remain stable, and the constantly evolving technological context. Thus, instead of trying indefinitely to modify a multitude of documents, managers of digital archives or collections would simply update their emulators.

A data sheet containing key specifications of a document could be incorporated into the document, in the form of metadata. In terms of preservation, this would allow such tasks as locating documents that require some sort of "intervention."

The metadata allow the document description to be included in the document itself. This way, the document becomes its own catalogue card. But the danger of metadata is that they can end up being as large as, or even larger than the document they describe. This is the augmented effect of the famous *Empire's cartographers* from Borges, who in their never-ending desire to produce ever more detailed maps, finally produced a map on the same scale as the territory itself, a duplicate of reality, its perfect representation.

It would also be worth evaluating the advantages offered by a network of organizations

collecting and preserving works of new media art according to a set of common preservation criteria. This network could also share the effort of preserving documentary resources considered important in defining the production, dissemination and receptive context of these works, and this according to standardized norms.

Through its funding programs, the Daniel Langlois Foundation is already involved in important projects concerning the preservation of digital works and development of methodologies and guidelines. Among them are Rhizome's *ArtBase*¹⁰ and the Guggenheim's *Variable Media Initiative*. ¹¹ The Daniel Langlois Foundation also launched this year a new grant program for researchers in residence that will support, among other things, research on conceptual, scientific and artistic issues involved in the preservation of digital artworks or works with digital components. The Daniel Langlois Foundation will also soon begin a concrete experimental case study involving the application of emulation for the preservation of a work of art with digital components.

Conclusion

Analyzing the issues surrounding the preservation of digital documentation in general, and more specifically Web documentation, forces us to re-examine an illusion—an illusion that was most likely the basis, or at least a driving force behind the wish to preserve everything, to archive everything, an illusion under which we believed we had real control over documentation and the information it contains.

Faced with the enormity which the Web and the new information technologies offer in two areas in particular—that of quantity, and that of the ability to preserve everything, the archivist can now only count on the notion of route, of path.

The archivist will no longer be someone who accumulates and preserves, but someone who will help to forge links.

Consequently, in response to this elusive entity, the Web, and even more specifically the activity conducted on it or with it by artists, theorists and researchers, the best attitude to adopt is not to attempt, in vain, to retain everything, but rather to try to keep that which will yield understanding.

Notes

- 1 T.S. Eliot, Choruses from "the rock," 1934
- 2 One of the best source of information about the panorama is Stephan Oettermann's The Panorama: History of a Mass medium, New York, Zone Books, 1997
- 3 See the Dead Media Project Web site, at http://www.deadmedia.org
- 4 For more information about the CR+D and to acess its database, please consult the following web site: http://www.fondation-langlois.org/e/CRD/index.html.
- 5 Geoffrey Batchen, "The Art of Archiving" in *Deep Storage: collecting, storing, and archiving in art,* Munich. Prestel. 1998, p. 46–49
- 6 Sarah Schultz, "Simon Biggs Questions Our Questions [Interview]," *The Shock of the View,* www.walkerart.org/salons/shockoftheview/sv_intro_biggs.html
- 7 Margaret Hedstrom, "Digital preservation: a time bomb for Digital Libraries," www.uky.edu/~kiernan/DL/hedstrom.html
- 8 Idem.
- 9 For more information about emulation as a digital preservation strategy, see Jeff Rothenberg, "Avoiding Technological Quicksand: Finding a Viable Technical Foundation for Digital Preservation," 1998, www.clir.org/pubs/reports/rothenberg/contents.html
- 10 rhizome.org/artbase/
- 11 www.three.org/z/varia_root/variable_media_initiative.html