



*404 Object not Found*  
Total Museum of Contemporary Art

October 24<sup>th</sup> 2007  
Seoul, Korea

---

## **The DOCAM Project: Issues and challenges**

Sylvie Lacerte, PhD  
Coordinator DOCAM Research Alliance

---

### **Introduction**

The DOCAM (Documentation and conservation of the media arts heritage) research Alliance was initiated by the Daniel Langlois foundation for art, science and technology, Montréal, following alarming observations on the rapid state of obsolescence of many of the components contained in the media and technological artworks included in various museum collections.

Furthermore, outside from the preservation and restoration issues, the DLF noted that little research and work had been undertaken on the topics of specific documentation, cataloguing and conservation strategies, as well as semantics or terminology endeavours through the description vocabulary of artworks, nor much exploration on the history of technologies used by artists.

Funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) and other partners, the DOCAM Alliance has undertaken in 2005, a major multidisciplinary research endeavour, spanned over a five year period (2005-2009), whose ultimate objective is to produce tangible lasting results. The various DOCAM partners include universities and museums, which, with the DLF, have created many interdisciplinary research committees that have been delving into the various issues and challenges encountered by museums that hold technological or media artworks in their collections.

### **General Overview**

Today museums of modern and contemporary art are facing a number of new challenges that have surfaced with the recent surge of works of art featuring technological components. These works deteriorate as their original elements break down, and the context of technological development too often eludes

specialists and historians. Created during various eras, the artworks may be analog, digital, mechanical or electronic; they are also often multimedia and include materials that range from machines, software, electronic systems and analog or digital images to traditional (sculpted and pictorial elements) and non-traditional (industrial materials and techniques) mixed media. In fact, cultural institutions are grappling with two types of problems. On the one hand, they must create effective strategies to preserve past works of art featuring technological components. On the other hand, they must record, preserve and understand the technologies through which these works were assembled, with professional rigour as well as an in-depth comprehension of the historical context within which the technologies in question were developed. And these problems are not limited to contemporary art and museums. They are also observed in the culture industries, public heritage institutions, and establishments of higher education that have amassed collections of teaching or research materials over the recent decades.

This situation becomes much more perplexing when one realizes that curators, art historians and conservators have not been adequately trained to deal with the new problems surrounding the documentation and the preservation of artworks including technological, electronic or digital components. Their training in this regard is insufficient, because only a handful of art history and conservation programs in Canada focus on this realm. Numerous research projects are being conducted in the archival management domain on the preservation of electronic documents, but very few such projects exist in the specific fields of art history, museums studies, visual and media arts and art conservation. Standards and indeed terminology, through a descriptive vocabulary for such artistic works, are lacking and do not allow for precise and adequate documentation of these works. Historical documentation is generally rare and poorly preserved, and the [Centre for Research and Documentation \(CR+D\) at the Daniel Langlois Foundation for Art, Science and Technology](#) is one of the few places in the occidental world to document the field of electronic and digital art.

### **Principal objectives of the DOCAM Research Alliance**

The DOCAM Research Alliance puts forth five main objectives that it would like to realize at the end of its endeavour. They are:

- \* Conduct multidisciplinary research into the sciences, techniques and practices needed to resolve the problems of preserving the artworks and heritage associated with technological and electronic art in the fields of the visual and performing arts (theatre, music, dance and performance), architecture and design;

\* Promote a transmission of knowledge and further discussion among academic researchers, students, and practitioners in the connected fields, while focusing on a new sphere whose mandate will be to preserve works with technological, electronic and digital elements;

\* Develop a series of new tools essential to documenting and preserving works of art with technological components, such as a bilingual glossary and an a thesaurus (if the five years allow us to do so), a typology and historical listing of technologies, a cataloguing structure adapted to works with technological components, and a "best practices" guides in cataloguing and conservation/restoration for key professionals;

\* Contribute to the training of the next generation of artists, historians, curators, art critics, conservators, cataloguers, archivists, technologists and engineers, as well as professionals responsible for preserving electronic works of art, and in doing so, respond to the growing need of institutions for professionals trained in these new disciplines. It is also urgent to develop continuing education programs for the professionals already grappling with these issues;

\* The ultimate objective of the Alliance at the end of its five-year mandate of research activities is to produce tangible and lasting results, such as the implementation of new university programs, the adoption by the targeted community of tools developed by the Alliance, and the development of cultural policies adapted to the new reality of works of art that feature technological components.

Most importantly, the DOCAM community is developing an important international network that can share its results, and compare its methods for the documentation and conservation of media art.

### **DOCAM's research Committees**

The Alliance has divided its tasks into six research committees, in order to implement all of its objectives in a realistic manner. The work of these committees is overlooked by a Steering Committee, formed by the chairs of all research Committees, the director of DOCAM's research (also director of the CR+D), the Alliance's comptroller (also the director of the FDL) and DOCAM's Coordinator. All committees and the steering committee, each meet, four times during the year to report on the progress of the research and to present their planning for the next year's endeavours.

### **Conservation and Preservation/Cases Studies**

Case studies in restoration and conservation:

The case studies are starting to allow the DOCAM community to draw methodological and technological conclusions that will help guide institutions in their collecting activities, on the strategies to adopt during acquisition of artworks, as well as long-term preservation methodologies for the artworks.

Many of the case studies are being conducted in museum facilities and restoration laboratories or in the DLF offices, and provide students with an opportunity to complete work and research internships in the company of professionals. Eventually the case studies will make a significant contribution to museums that are lacking resources by allowing work to be conducted on their own collections. These case studies will extend to the exhibition stage, if possible, at the end of the 5-year period.

The case studies selected for the year 2006-2007 are *Nut'ka* by Vancouver artist Stan Douglas, and Jenny Holzer's *Unex Sign # 2*. Both of these works are in the National Gallery of Canada's collection in Ottawa. In addition, Toronto artist David Rokeby's two versions of *Machine for taking time* have been under «scrutiny» by the committee. A 2hour and 45 minutes interview with Rokeby conducted by the chair of the committee, Richard Gagnier<sup>1</sup> and his DOCAM research assistant Ariane Noël de Tilly, is accessible on DOCAM's website. Finally, the Canadian Centre for Architecture in Montréal is carrying out a case study on *The Embryological House Project* by Los Angeles architect Greg Lynn, which is in the process of being acquired by this institution. This case study is important for an institution such as the CCA, as it is the first time that it is in the process of acquiring a large amount of digital files. Part of a report, on the first step of this case study, is also accessible on our website. A visit to Greg Lynn's Studio was organized in the fall of 2007 and a videotaped interview was conducted with the architect, in order to further the research and find answers to many of the questions the researchers formulated when going more deeply into the digital files.

**Methodology:** Prior to engaging into the case studies, the committee created a Specification's manual and a Typology to help the researchers, museum professionals and the artists find a way to categorize the problems at hand, in view of the technologies in the artworks. Interviews with the artists and their technicians, is another methodological tool that has proven to be very efficient so far.

## **Documentation and Archival Management**

Current documentation practices in the arts tend to be passive and most often follow the production of a work. Museums that acquire works of art with technological elements possess neither the tools nor the methodologies to accurately document the technological dimensions of these works or make allowances for their high degree of variability. Within the context of works with technological components, documentation is vital to conservation. The main role of the Documentation and Archival Management research committee is to develop strategies and structures adapted to works of art featuring technological components. The committee has been creating tools to

---

<sup>1</sup> Richard Gagnier, has left the NGC and has been chief conservator at the Montréal Museum of Fine Arts, since September 2007.

link archival material to the technological elements contained in the works. These tools will play a very important role in preserving the works and will also provide for a global understanding of the place these works take up in the history of media technologies. A typology of the documentation found in the artists' archives and museums is also in the process of being produced.

It is to this end that case studies on records collections and archive groups are conducted. Our studies include the archives of Canadian multidisciplinary artist Vera Frenkel, which is housed at the Queen's University Archives, in Kingston, Ontario, as well as architect Gregg Lynn's *Embryological House Project* digital archives corpus, in the process of being acquired by the Canadian Centre for Architecture (CCA). Recently, three case studies have been undertaken on four artworks featured in the exhibition *e:art: new technologies and contemporary art - ten years of accomplishments by the Daniel Langlois Foundation*, at the Montréal Museum of Fine Arts (September 20 - December 9, 2007). The artworks are: *Hylozoic Soil* (2007) by Toronto artist and architect Phillip Beasley; and three by American artist Jim Campbell *Photo of my Mother* (1996), *Portrait of my Father* (1994-1995) and *Motion and Rest # 5*.

### **Cataloguing Structure**

A cataloguing structure for works with technological components is being developed in order to complement current museum collection management systems. Six case studies in cataloguing have been conducted so far, using works selected by the Conservation research committee including a sampling of works that include Janet Cardiff's *Conspiracy Theory* (2002), *Sleepers* (1992) by Bill Viola, *Dervish* (1993-1995) by Gary Hill and *Battelements et Papillons* (2006) by Montréal artist Jean-Pierre Gauthier, all housed in the collection of the Musée d'art contemporain de Montréal. A fifth case study will be conducted in 2008, at the MACM, *Générique* by Montréal artist Alexandre Castonguay. The remaining case studies have been undertaken at from the Montréal Museum of Fine Arts' collection. They are: *In your Dreams* by Montreal artist Gisele Amantea (1994) and *Royal Canadian Mounted Police* by Nam June Paik (1989). In addition, the case studies have been undertaken at the same time as the Multi Mimsy database was being migrated to a newer version in each museum. This process allowed the researchers and their assistants to create new entries into the database, which did not exist before they undertook the work on the case studies and the migration.

### **Pedagogical Committee: the DOCAM Seminar**

The pedagogical committee is chaired in an alternate fashion by researchers from McGill University (Art History and Communication Studies) one year and by a researcher from l'Université du Québec à Montréal (Fine Arts Faculty), the following year. The principal role of this committee is the organization of the *DOCAM Seminar* that puts forth issues and challenges related to the documentation and conservation of media arts. This Seminar is designed for MA and PhD students from all Montréal universities (McGill University, UQÀM,

Université de Montréal and Concordia University). All members of this committee come from the DOCAM partner universities. Up till now two seminars have been offered by McGill (2006) and by UQAM (2007). DOCAM's coordination unit has drawn up, in collaboration with the Pedagogical Committee, a survey handed to the students at the end of each term, in order to glean their comments, as well as to find out about their degree of satisfaction on the contents and the knowledge acquired during the Seminar. The answers provided by the students, on the 2006 and 2007 Seminars, have been very enlightening, so far, to provide us with better tools for the preparation of future seminars. The survey also proved to be very helpful for the amelioration of the diverse contents that should be presented to the new cohorts of students. A summary meeting is held at the end of each term, where the members of the committee evaluate the work that has been accomplished in light of the essays and the surveys that have been handed in by the students. That way it allows everyone to gauge the strengths and the weaknesses of the Seminar. The Committee is also interested in developing other pedagogical activities such as e-learning, through DOCAM's website, continuing education for museum professionals, summer university, etc..

#### Emulation of DOCAM on the students

Moreover, as a corollary of the contribution of DOCAM to the student's academic curricula, whether through the Seminar or their work as research assistants, is the fact that some of them have changed their research subjects altogether and that many others have participated to numerous international conferences (Harvard University, Glasgow, re-place, Berlin 2007, etc.), while a few have also had the opportunity to publish essays and articles in various scholarly journals or art magazines.

#### **History of Technology - Technological Timeline**

This committee is so to speak a *service committee* to the Alliance's researchers. It has created a typology and classification of technological objects and concepts that accompany the development of cataloguing structures for the works. Such a typology will be an innovative and invaluable instrument in understanding the contribution technology has achieved to the works in terms of both their structuring and functionality. It will also play a key role in the conservation of works featuring technological apparatus. This typology should be designed to reflect the many levels in describing technological artifacts. For example, a Sinclair Spectrum 16K computer is:

- a) a commercial product bearing a trademark;
- b) one of a number of examples of popular technological architecture (the 16K processor); and
- c) an example of the state of development of a given technological category (the personal computer) at a specific moment in history.

The relationships between the works themselves and the technologies of various epochs must also be described in order to establish a historical directory. A

historical directory of technologies or a time-dependent table will encourage an understanding of the role technology has played in the works of art and the development of artistic practices using technology.

## **Terminology**

Another *service committee*, the Terminology committee, is in the process of developing a bilingual glossary and thesaurus (French and English), to manage a descriptive vocabulary applying to the documentation, themes, instruments and works, including technological devices. The Terminology committee has started its work by gleaning already existing tools such as, among others, the Variable Media and the V2 glossaries. The TC researchers have also been collecting vocabulary and expressions from all DOCAM researchers to provide terms to this glossary so that in the long run a common language will be used not only by the DOCAM community, but also by the museum and academic communities at large, once the project is over. The thesaurus will be designed to complement existing methods and models or those under development, such as the *Categories for Description of Works of Art*, the Getty Research Institute's *the Art and Architecture Thesaurus* and the *Dictionnaire des arts médiatiques* developed by the Groupe de recherche en arts médiatiques (GRAM) at the Université du Québec à Montréal (UQÀM).

A modeled description of the concepts involved and the logical relations they maintain will be an indispensable tool to standardize and above all share the various layers of data generated by the research project. This description will take the form of ontology. When combined with the thesaurus, the ontology will allow for the development of a cataloguing tool and a technologies typology. The ontology will also permit interoperability strategies to be developed, through which the research project's data will be grafted to other sets of data.

<http://www.docam.ca/terminologie/db/>

## **Dissemination of the results**

### DOCAM's Annual Summit:

The DOCAM research Alliance holds an annual international Summit, every year in the fall, since its inception in 2005. DOCAM just held its 3<sup>rd</sup> Summit on September 26<sup>th</sup> and 27<sup>th</sup> at the Montréal Museum of Fine Arts. The first two Summits were held respectively at the Canadian Centre for Architecture (2005) and at McGill University's Schulich School of Music (2006). The Summit is a privileged moment for all DOCAM researchers and international collaborators to meet and exchange on the advancement of all research on the documentation and conservation of media art. One private day is dedicated to various workshops and panels animated by DOCAM researchers and research assistants, as well as by international guest speakers. During this year's public conference day, the committee chairs and RA's divulged part of their research results, throughout the

morning session. The afternoon session was devoted to international guest speakers such as Dieter Daniels from the Boltzman Institute in Linz, Austria, who presented, the research the Institute is delving into, the Ars Electronica festival and Symposium and various academic programmes. Later, Rina Pantalony, from the Canadian Department of Justice, New York and Richard Rinehart (Berkeley Museum and Pacific Film Archive) spoke about Intellectual Property and Media Art. Last but not least, Vancouver artist Stan Douglas delivered a keynote address on his latest endeavours, always keeping in mind the issues of documentation and conservation of his artworks. Both days of the Summit have been videotaped and are accessible on DOCAM's website, as are the presentations from the two preceding Summits (2005 – audio; 2006 – video).

DOCAM's website (public, [www.docam.ca](http://www.docam.ca)), Tech Watch (public, <http://www.docam.ca/techwatch/>), Researchers Blog (private) and Intranet (private) :

#### Publications:

*Leonardo* – *Journal of the International Society for the Arts, Sciences and Technology*, MIT Press, has created for a period of three years an editorial section entitled *Documenting – Archiving – Collecting*, for which Jean Gagnon and Alain Depocas are guest editors. They are thus engaging the community to submit texts and essays on the issues raised by DOCAM. The Alliance has also formed an editorial committee that is responsible for the selection of the articles that will be submitted to *Leonardo's* peer review committee. Two articles have been published so far in *Leonardo* : Richard Rinehart's «A System of Formal Notation for Scoring Works of digital and variable Media Art.» and Jessica Santone's «....» Furthermore a special issue of *artpress 2* will be devoted to thematics related to DOCAM's research, during the year 2008. Members of DOCAM have also published essays in various anthologies and professional or art journals throughout the project's duration.

#### International conferences, events:

Many of DOCAM's researchers have attended, as guest lecturers, conferences such as *Refresh!*, Banff, Canada (2005), *Theory & Semantics of Installation Art*, Inside Installations, Maastricht, The Netherlands, (2006), *Interact or die*, DEAF, Rotterdam, The Netherlands (2007), *Art, Conservation and Authenticities*, Glasgow (2007), *re-place*, Berlin (2007), and many others where they have presented DOCAM's case studies, their typologies and methodologies, or simply the Alliance's 5 year plan.

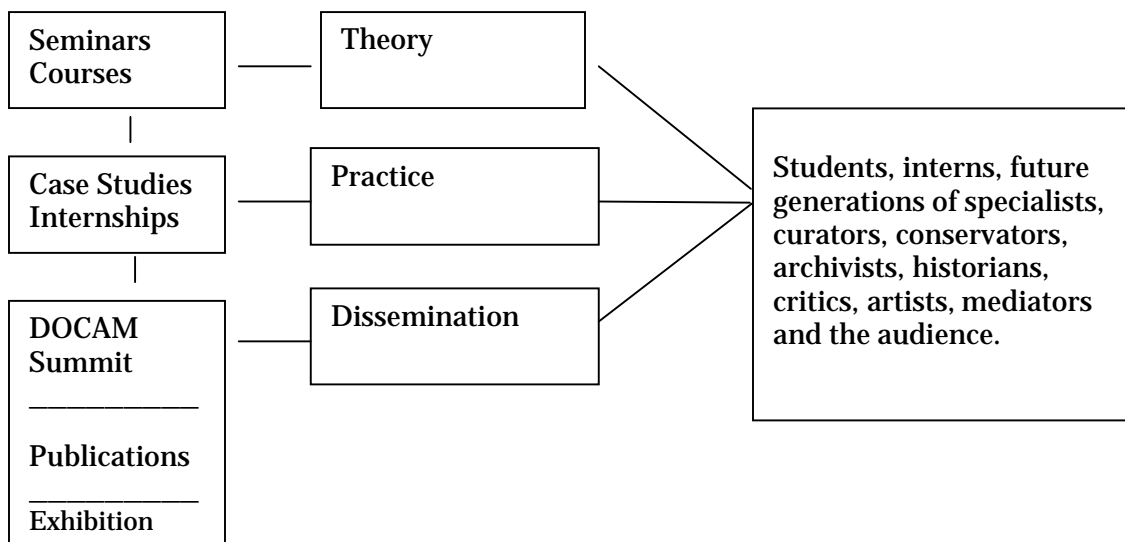


Development of policies:

One of the Alliance’s partners, the Canadian Heritage Information Network (CHIN) whose mandate is to develop and implement policies and standards for the Canadian museum community, will make sure to sensitize the stakeholders by meeting with them and supplying them with tools, such as best practices guidelines, on the issues and challenges around the documentation and conservation of media art.

Development of tools and specialized curricula in the documentation and conservation:

The Alliance will allow the creation of tools such as a repertory of technological resources, databases, a portal providing access to documentation, as well as disseminate the research through courses and seminars that will authorize the elaboration of a specialization in the conservation and the history of media arts.



## **Conclusion: DOCAM' Issues and challenges –**

To conclude, let us brush up a schematic portrait of the issues and challenges DOCAM has been grappling with so far and will be facing until the end of the project.

- a. Issues: of integrity, authenticity when reinstalling a media artwork through emulation or migration or other processes.  
Challenges: finding technical, aesthetic and ethical solutions;
- b. Issues: Intellectual property when acquiring digital files, or pieces created with *Open source* or Proprietary software;  
Challenges: Who is the owner of the Software or the license, through the artwork? How to avoid lawsuits?, etc.
- c. Issues: Multidisciplinary and Interdisciplinary research endeavours, requiring cross fertilization between disciplines and milieus with different sets of perspectives, conceptual schemes, methodologies and terminology;  
Challenges: Harmonizing cross-disciplinary research and methodologies.  
Creating links between two very different cultures of researchers: scholars within the academe and researchers within the museum such as curators, conservators, archivists, registrars, educators, etc., as well as harmonizing the work within the different infrastructures through establishing research protocols and a common language. (
- d. Issue: Funding body is traditionally an academic grant agency.  
Challenges: Bearing in mind the perspective that the Social Sciences and Humanities Research Council of Canada's (SSHRC) Community University Research Alliances (CURA) program is relatively new. Thus it is essential that researchers from the community end of the Alliance help SSHRC change its philosophy from that of an exclusively academic perspective to one of exchange between community (museums) and university. It is crucial to have the funding body accept the Community's research cultures and methodologies as legitimate, even though they differ from the universities.

- e. Issue: Creating pedagogical content on the documentation and conservation of media art in order to train, artists, professors, theoreticians, historians, art conservators, museum registrars and archivists, curators and new specialists within the museum field and the art world in general.  
Challenges: Finding the financial and institutional support to open new curricula (programs, courses, seminars and continuing education training) in Canadian universities.

On a more positive note the research, through the case studies conducted within the partner museums has enabled museum professionals to sensitize their hierarchies to the importance and urgency of such endeavours for the preservation of media art for which the museums are the custodians. Finally, after three years, we can say that a fruitful dialogue has emerged between the researchers from the realm of the academic world and those of the museum community. But some of the richest contributions to this vast endeavour were brought forth by the artists and the research assistants, whose precious collaboration allowed the researchers to delve more deeply into these issues.

Sylvie Lacerte, Ph.D.  
Coordinator,  
(August 15, 2005 – December 14, 2007)  
DOCAM Research Alliance

Montréal December 10, 2007