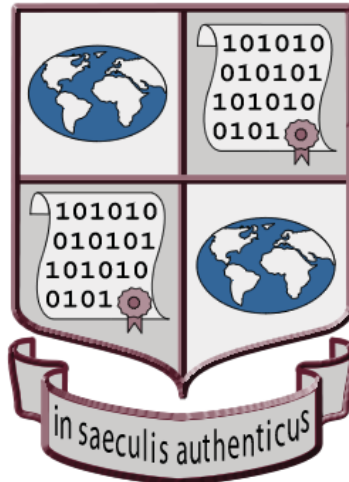# InterPARES 2 Project

International Research on Permanent Authentic Records in Electronic Systems

Focus 1 Report

Vancouver, B.C.

September 30, 2004

Overview

- **Objectives**
- **Research Projects**
- **Dissemination Activities**
- **Preliminary Findings**

Objective

- …the primary role of **Focus Task Forces** is to gather and analyze case studies and other data of relevance to each type of activity across multiple domains of inquiry

  (Milestones Report, item 1.5, page 2)

Focus 1 Case Studies (1)

- **CS01 Arbo Cyber, théâtre (?)**
- **CS02 Performance Artist Stelarc**
- **CS03 Horizon Zero/Zéro Horizon**
- **CS09 Digital Moving Images**
  - **Computer-based Animation Studio**
  - **Altair 4 Multimedia**
  - **National Film Board of Canada**
  - **WGBH Boston**

Focus 1 Case Studies (2)

- **CS10 The Danube Exodus**
- **CS13 Obsessed Again**
- **CS15 Waking Dream**
- **CS16 Unstable and variable techniques**
- **CS22 Electronic Café International**

General Studies

- **MUSTICA**
- **Composers' Survey**
- **Photographers' Survey**

Bibliography

- **Accuracy, Reliability and Authenticity**

Dissemination Activities

- **Association of Moving Image Archivists (2002 and 2003)**
- **Wedelmusic (2003)**
- **Association of Canadian Archivists (2004)**
- **American Institute for Conservation of Artistic and Historic Works (2004)**
- **Society of American Archivists (2004)**

Preliminary Findings (1)

- **Individual artist vs. corporate entity**

- **Digital vs. traditional records**

- **The work vs. the performance**

Preliminary Findings (2)

- **Re-use**
- **Authenticity**
- **Intent**
- **Metadata**

InterPARES Project
Yvette Hackett
Chair, Focus 1

Slide 1 - Title

Slide 2 - Overview

Good morning.

My presentation this morning will include a brief review of the objectives of the Focus 1 Task Force, and the research projects and dissemination events it has undertaken in the first half of the project. I will conclude with some preliminary findings suggested by the research to date.

Slide 3 - Objective

As the Milestone Report so succinctly put it:

the primary role of **Focus Task Forces** is to gather and analyze case studies and other data of relevance to each type of activity across multiple domains of inquiry.

You may have noticed, in reviewing the original research proposal, that the Focus Task Forces were the only groups with no research questions of their own. We quickly set to work to remedy this, eventually coming up with 49 questions which Luciana has already described.

As anticipated in the original research proposal, the Focus Task Forces have directed a good deal of their energy into case studies. An early, cross-Focus decision was made to create a core case-study questionnaire designed to elicit all the information required by the 3 Domain and the 4 Cross-Domain groups. This was, in part, suggested by the experience of InterPARES 1, which used a standardized set of questions in their case studies, a method which greatly facilitated subsequent comparative analysis.

But the wider scope of inquiry of InterPARES 2 was also recognized, in that the case study questionnaire could be adapted for use in artistic, scientific or government environments and even more specifically, could reflect the known vocabulary and practices of the many specialized groups we would be investigating, be they composers or choreographers, biologists or geomatics experts, bureaucrats or information technology personnel.

In the case of Focus 1, this scope of inquiry is of course limited to records generated in the course of Artistic Activities. Focus 1 profited considerably from the fact that issues related to music using digital technologies had already been raised in InterPARES 1, particularly through the participation of John Roeder, the Associate Director of the Music School at the University of British Columbia who will be addressing you later today, and Brent Lee, IP2's first post-doctoral fellow who now teaches at the University of Windsor. Their extensive knowledge of InterPARES 1, its findings, and the relationship of those findings to the digital concerns of musicians and composers helped the many new Focus 1 researchers to situate their work within InterPARES 2's research parameters. Focus 1 has also benefitted from a large and stable membership.

Slide 4 - List of Case Studies

From the very first meeting, members of Focus 1 began forming groups and drafting case study proposals. At this mid-point in the project, Focus 1 has had 9 case studies approved, though Case Study #9 on Digital Moving Images could more properly count as four case studies in their own right, making the total 12.

It is difficult to be absolutely precise about which artistic disciplines these case studies cover because, as is the case with so many things in the early 21st century, boundaries are blurring. But there is performance art, theatre, dance, moving images, installation art, music, and on-line publication. In several cases, we will study different manifestations or perspectives on the same discipline.

The case study on digital moving images, which I have already mentioned, covers computer-based animation in a corporate, for-profit environment; in a non-profit government production house; and in a non-profit, non-government broadcaster - all 3 operating in a North American setting. The fourth partner in this case study is a smaller, independent European production company focused primarily on computer-based products.

Performance Art is the focus of Arbo Cyber théâtre and Stelarc, though on closer examination both will also provide information on web sites, which will link with case studies in Focus 3 (e-government). [Slide 5] Danube Exodus, and Unstable and Variable Artistic Techniques deal with installation art with digital components. Music is the focus of Obsessed Again and a significant aspect of Waking Dream. The Electronic Café began experimenting with interactive art in the 1970's, originally using analog video formats.

One disadvantage of this early enthusiasm in Focus 1 was that most of the case studies were approved before the core questionnaire was ready, causing a delay. And the questionnaire, unfortunately, was required for Ethics Clearance in various Canadian or American universities, generally generating a second source of delay.

Slide 6 - General Studies

Focus 1 has not, however limited itself to case studies. Three General Studies have also been designed and approved. The first of these - MUSTICA - stands as a lone example within Focus 1 of a collaborative research project with external partners. MUSTICA presented an opportunity to become part of a research initiative with two major French research institutes - the Institut national de l'Audiovisuel (INA) and the Institut de recherche et coordination Acoustique/Musique (IRCAM). The development of this collaboration was primarily driven by Jill Teasley, a Graduate Research Assistant and her interest in electro-acoustic music. As with other Focus 1 projects, the project will attempt to identify the various generations of digital components generated during the artistic creation and performance processes, and confirm which ones are necessary for long-term preservation and access. It will also be able to tap into and analyze significant long-term experience at IRCAM with metadata, its creation and subsequent utility in providing long-term access. Finally, the project harks back to InterPARES 1 in its interest in the construction of a typology of digital music files. There aer 2 posters across the room describing this project.

Focus 1's second General Study involved a research methodology which would complement the case studies. It was developed by Professor Michael Longton, Director of the School of Music at University of Victoria. Rather than the in-depth study of a small number of examples entailed by a case study approach, this more general survey instrument would ask fewer questions about recordmaking and recordkeeping practices, but elicit responses from a much larger group of composers using digital technology. This would place individual case study results in a much wider context.

A web-based survey instrument was developed with the assistance of Vincent Schillaci-Ventura, one of the Graduate Research Assistants at UBC. Potential respondents were invited by e-mail to complete the questionnaire. The results of this first general survey were reported at our last research workshop, in February 2004.

The Composers' Survey gathered information about the use of digital technology, composers' intentions and strategies for maintaining records, and the forms that their interactive and dynamic records might take. With a response rate near 33% of the 500 composers contacted, the results show a profession well-established in what can already be termed a "traditional" digital era, with a small minority already moving forward into interactive and web-based environments. The scope of the preservation problem is illustrated in the statistic that 47% of respondents have already lost valuable files through hardware or software obsolescence. 76% of respondents use commercial, off-the-shelf products, a number that offers reassurance by limiting the scope of the needed preservation strategies. The fact that most composers work alone has so far limited their degree of concern about plagiarism, intellectual property, protection of copyright. It also suggests that it will be composers as individuals, rather than institutions, that InterPARES will eventually have to reach out to with its analysis of the situation and its recordkeeping advice, recommended metadata sets and possible preservation strategies.

The concept of what actually constitutes the "work" or the "oeuvre" continues to vary widely in this community, ranging from the score to the performance, with a significant segment in this survey insisting that the "work" does not exist. Clearly, for this group, preservation will mean different things to different people. This mirrors the experiences of museum curators who are participating in the Variable Media Initiative, another external research project with which Focus 1 has established contact. When dealing with installation art with digital components, they have found a wide divergence among artists in their choices of what, if anything, needs to be preserved to correctly represent their artistic intent.

These survey findings reflect to a large extent the findings of a number of other Focus 1 case studies, with one exception - there is no mention of hardware dependency problems, though these have been a significant aspect of the study of digital composition and performance in "Obsessed Again", in the performance piece "Waking Dream" where it was affecting a visual component of the work, and in Brent Lee's personal experiences as a composer using digital technology, which were first described at an InterPARES 1 symposium in 2001. One of the first suggestions for a preservation strategy in this field is to attempt to end this hardware dependency problem by moving the functionality to the software. This will not solve the problem, but it will reduce the scope of the problem to the software.

I think our experiences to date suggest that both the case study approach and the general survey approach offer individual strengths, and that their parallel use in Focus 1 will eventually produce a more accurate picture of the current state of digital technology use in the arts. In the short term, the success of the Composers' Survey has prompted the development of a second general survey, targeting digital photographers, which has been available on-line since September 13. This was developed by Marta Braun and a researcha ssistant, Jessica Bushey. As of this Monday [September 27], 272 photographers had completed the survey.

Slide 7 - Bibliographies

When IP2 started, there already existed a number of lists of bibliographical citations, grouped under a number of headings such as authenticity, recordkeeping, preservation and others.

Focus 1 chose to concentrate on the one dealing with Accuracy, Reliability and Authenticity, driven in part by my previous role as a member of the Authenticity Task Force in InterPARES 1, and by John Roeder's dual membership in Focus 1 and in Domain 2, the working group addressing this issue.

John will speak later this morning, so I will not attempt any summary of what he will say. My point in mentioning the bibliographies is a procedural one. I think the group would have been more successful in its bibliographical research if the early lists had not existed. These lists contained hundreds of titles each, selected because of keywords in the titles. Before any reading could even start, the lists had to be sorted by Focus area, and sub-sorted by discipline, the articles assigned and copies of them tracked down, sometimes with great difficulty.

In the end, John and I agree that the initial lists provided little of interest. The bibliographic review process only started to yield results when Focus 1 researchers were asked to survey the literature in their own areas of expertise and summarize relevant articles.

Slide 8 - Dissemination Activities

As far as Focus 1 dissemination activities are concerned, there have been a number of presentations since the beginning of the project. Sessions designed to introduce the research were offered at both the 2002 and 2003 annual conferences of the Association of Moving Image Archivists. Jill Teasley presented the MUSTICA project at the Wedelmusic event in 2003. With the completion of a number of Focus 1 projects, conference presentations increased during 2004. I discussed case study findings as part of an InterPARES 2 panel at the Association of Canadian Archivists annual meeting, while Luciana, Howard Besser and Sally Hubbard addressed the Emerging Media Group of the American Institute for the Conservation of Artistic and Historic Works. Finally, Jill Teasley and Vincent Schillaci-Ventura prepared material for a poster session at the Society of American Archivists conference.

Slide 9- Preliminary Findings (1)

For Focus 1, the first completed case studies were presented at the February 2004 workshop. These were Stelarc, Obsessed Again, and Waking Dream. Three more case studies have produced final reports for this workshop - Arbo Cyber théâtre, Horizon Zero and Altair 4, with interim reports being submitted by the Computer-based Animation Studio, WGBH Boston and Danube Exodus. They will not be subjected to in-depth analysis by the group until the February 2005 research workshop, when we will clearly have enough work completed to identify, with some degree of confidence, overall similarities and differences, trends and practices, problems and potential solutions applicable to the arts.

But even six months ago, based on the first 3 completed studies and a number of interim reports, some preliminary findings were already suggesting themselves. These will be re-visited as the analysis is expanded in February 2005.

We are seeing large differences - in attitude, in procedures and in concerns - between individuals, or small groups of artists and the business/entertainment environment. For the most part, the early adopters of any specific digital technology are not part of a mainstream industry; they are individuals working on the cutting edge and exploring new forms of expression. They do not use an archivist, they don't maintain recordkeeping systems, and they tend not to write down their procedures because they are very small operations.

In the corporate environment, such as the Computer-Based Animation company, there are significant financial interests to protect. They adopt digital technology once it is reasonably well-established and a favourable cost-benefit analysis can be done. The digital technology continues to co-exist with traditional records management practices which were already in place, such as printing to paper, or generating analog audio or video recordings.

However, these traditional record forms are incapable of capturing truly interactive or experiential aspects of digital objects, meaning some digital solutions do have to be found. Conversion to more stable analog forms is inadequate.

I have already mentioned the continuing debate between the "work" and the performance. We are uncovering conflicting information about the need to preserve the "means of production" vs. the record of performance. The first approach allows artists to re-use the work, and potentially to continually change the work, with or without the preservation of earlier versions.

The lack of concern about intellectual property rights among individual artists studied to date is obviously a major area of divergence from the corporate environment. The completed case studies suggest that, where there are large corporate interests at stake, copyright is protected using traditional methods which have been tested and accepted by the legal system.

For individual artists, a number of current practices are, unwittingly perhaps, offering some measure of protection of their intellectual property rights. A standard technical configuration sees files stored on a personal laptop, with back-up copies created on the write-once CD-R format and stored in various geographic locations (home, school, work).

The digital formats also seem to be encouraging collaborations, leading to the same files being stored on a number of different personal computers. Redundant storage practices can improve the chance of long-term survival, but create potential proof of ownership problems.

Slide 10 - Preliminary Findings (2)

Both the survey and the case studies are showing little interest on the part of artists, in "authenticity" yet we are getting a fairly consistent set of responses to our questions. First, they consider that the artist is the arbiter of authenticity of their work during their life time. Second, the artist is more concerned with the preservation of their "intent" rather than with the specific way in which they chose to manifest it as any particular point in time. This suggests the need for additional metadata to more fully capture this "intent" - their definition of what is important to preserve in each work - a finding which suggests a growing link between Focus 1 and the Description Cross-Domain in particular, in the second half of this project.

Thank you.