



InterPARES 2 Project

International Research on Permanent Authentic Records in Electronic Systems

Diplomatic Analysis

Case Study 15: *Waking Dream*

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INTRODUCTION

Waking Dream is a multi-media performance art piece that includes dance, sound and video recordings, live video, and remote controlled interactions between performers and these components. Because the software and hardware used to create the piece are in danger of becoming obsolete, it is necessary to identify the components of the piece that must be preserved. Although the creators of the piece are currently debating the purposes for which *Waking Dream* needs to be preserved, this analysis will assume that the purpose of preservation is to allow the piece to be performed in the future as its creators have intended it to be.

The purpose of the diplomatic analysis is to assess the status of the identified digital entity as a record. Once the status of the digital entity has been determined, preservation strategies may be proposed by Domain 3.

IDENTIFICATION OF RECORD(S)

A record, as defined by the InterPARES glossary, is a document made or received and set aside in the course of a practical activity. A record must also possess all of the following five components, as established by InterPARES 1 research conclusions: fixed content and form, embedded action, archival bond, persons and contexts. The application of the definition of a record to the creator's digital entities is therefore analyzed according to the following parameters:

1. To be identified as a record, the digital entity must possess fixed content and form,¹ and be affixed to a stable medium (or physical carrier).

¹ The InterPARES1 Authenticity Task Force has defined fixed form as the following: 1) binary content of the record, including indicators of documentary form, must be stored in a manner that ensures it remains complete and unaltered, and 2) technology must be maintained and procedures defined and enforced to ensure that the content is presented or rendered with the same

All of the elements of *Waking Dream* possess fixed content and form; however, although the content is stable, it can only be accessed on certain machines. Digital components are affixed in the following ways: the program code was written in a version of Visual Basic Project Manager developed to run on a Windows 98 platform and is stored on a laptop, a backup computer and in off-site storage; the video is stored as an AVI file on a hard drive; the original sound samples are saved as audio files and affixed to a hard drive; soundtracks created with these samples are affixed to CDs; PowerPoint files are affixed to a hard drive; and, the private side of Fels' Web site is affixed to a server.²

2. A record must also participate in an action, defined as the conscious exercise of will by an officer of the creator or by an external person, aimed to create, maintain, modify or extinguish situations. A record results as an unintended by-product or product of the action.

The overall act is the composition of the performance. Each element is developed to be a part of the performance as a whole.

3. A record must possess an archival bond, which is the relationship that links each record to the previous and subsequent record of the same action and, incrementally, to all the records which participate in the same activity. The archival bond is originary (i.e., it comes into existence when a record is made or received and set aside), necessary (i.e., it exists for every record), and determined (i.e., it is characterized by the purpose of the record).

Each element possesses an intellectual bond with every other element of *Waking Dream* in that all elements must be present for the performance to occur. File titling practices link the various elements of the piece and identify their association with a particular stage of the composition process (i.e., draft vs. final product). However, because the elements are stored separately, the physical archival bond remains implicit, rather than explicit.³

4. Record creation must involve at least three persons, whether or not they explicitly appear in the record itself. These persons are the author, addressee and writer; in the electronic environment, one must also take into account two additional necessary persons: the creator and the originator.

- The record's **author** is the physical or juridical person having the authority and capacity to issue the record or in whose name or by whose command the record has been issued.

There are three authors in *Waking Dream*. Professor Sidney Fels, Sachiyo Takahashi, and Baerbel Neubauer joined forces to compose *Waking Dream*. It was a joint effort and equally involved all three in the ultimate authorship of the content of the work.

documentary form it had when set aside. (See ATF Research Methodology Statement, available at: http://www.interpares.org/documents/interpares_ResearchMethodologyStatement.pdf).

² We are not sure at this point what server it is affixed to—most likely the server at his work?

³ The video and sound files are maintained by Sachiyo Takahashi; the program code is stored on Fels' laptop, in a backup computer, and in offsite storage; and the Web site is stored in a server.

- The **addressee** the physical or juridical person(s) to whom the record is directed or for whom the record is intended.

As *Waking Dream* is intended to be performed, the audience that views the performance is the addressee.

- The **writer** is the physical or juridical person having the authority and capacity to articulate the content of the record.

Although the overall concept was conceived by all three co-authors, they individually wrote different parts. The program code and Web site were written by Fels, Takahashi wrote each version of the soundtrack, and Neubauer wrote the file containing sound samples and the original video file. Therefore, there are three separate writers of *Waking Dream*.

- The **creator** is the person in whose fonds the record exists.

In *Waking Dream*, there are two co-creators as the records are maintained by both Fels and Takahashi.

- The **originator** is the person to whom the Internet account issuing or the server holding the record belongs.

In *Waking Dream*, there are multiple originators. The originator for the program code is Fels. For the Web site and backups, the originator is most likely UBC, and for the video, soundtrack and sound samples, the originator is Takahashi.

5. Finally, a record must possess an identifiable context, defined as the framework in which the action in which the record participates takes place. The types of context include juridical-administrative, provenancial, procedural, documentary, and technological.

- The **juridical-administrative context** is the legal and organizational system in which the creating body belongs.

While there are no legal controls or a specific mandate for the project, Fels' work is subject to the conditions set forth in grants he receives. His position as a professor in the electrical and computer engineering department of UBC also guides the direction of the project.

- The **provenancial context** refers to the creating body, its mandate, structure and functions.

The *Waking Dream* "team" consists of Professor Fels, Baerbel Neubauer, Sachiyo Takahashi, as well as Professor Fels' students. Because *Waking Dream* is a collaborative project, the team as a whole must be considered to be the provenancial context.

- The **procedural context** comprises the business procedure in the course of which the record is created.

No formal procedure was followed during the creation of *Waking Dream*. The three co-

authors conceived of the idea together. Each person then worked on an aspect of the project based upon his or her particular creative talent and area of expertise. Accordingly, Fels wrote the computer code, Neubauer captured the original sound samples and video footage, and Takahashi edited these samples to produce the soundtrack. Takahashi also determines her movements in each performance.

[Editor's note: Analysis of the **procedural phases** was not carried out for this case study.]

- The **documentary context** is defined as the archival fonds to which a record belongs and its internal structure.

The records of *Waking Dream* belong to the fonds of two of the co-authors, although they are not maintained in any structured way. Fels keeps records of performances in several notebooks. Computer code is saved in a program directory on Fels' laptop as well as on a backup computer and in off-site storage. Takahashi keeps audio and video files on the hard drive of her computer. No procedures are in place to control the storage, retrieval or maintenance of any of the components.

- **The technological context** is defined as the characteristics of the technological components of an electronic computing system in which records are created.

The technological system used to produce *Waking Dream* involves interaction between human performers, the audience and various digital and non-digital technologies. During a performance, Takahashi moves around the stage wearing a headpiece with a video recorder with which she records her movements and the audience's reactions. Takahashi uses a remote control device to switch between her recording and pre-recorded video footage. A PowerPoint file allows Takahashi's video feed to alternate with another pre-recorded video, and to be shown on a screen. The PowerPoint file, the code used to operate the remote control device, the pre-recorded video footage and soundtrack files are stored on, and transmitted through, two computers. The code will only run on a Windows 98 platform. Besides the records identified in this analysis, there are other technological components that contribute to the look and feel of the *Waking Dream* performance. These include infrared lighting, the use of remote control technology, and the various hardware and software components used to achieve desired visual effects.

CONCLUSIONS

According to the above analysis the performance cannot be considered the record, because it is an end product. The public Web site is also an end product. But records are made in the process of mounting a performance, evaluating a performance, revising a performance, and publicizing a performance (e.g., Fels' notes, the code, the video and soundtrack, the private Web site and grant applications).

The authoritative record to be preserved comprises both digital and intellectual components. Sidney Fels would like the *Waking Dream* records to be preserved so that a performance can be mounted by another person that will adhere to his vision and intentions for the piece. Fels is not concerned

with whether the same technologies are used, or how they are altered to achieve the effects he is looking for. His concern is primarily that any future performance will manifest the idea of *Waking Dream* as the team conceived of it. Currently, this is not possible because no explicit link has been made between the digital and intellectual components of the piece. If the piece is to be performed by anyone other than the authors, a record needs to be created that will explain the intended effects of the various technologies employed. This record would act as a type of formula or recipe that would link the digital components to the intellectual conception of the piece.