



# InterPARES 2 Project

International Research on Permanent Authentic Records in Electronic Systems

## Overview

### Case Study 13: *Obsessed Again...*

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#### **The Creator Context / Activity**

Creator: Dr. Keith Hamel (composer), under commission from Dr. Jesse Read (bassoonist), who seems to have influenced the creation of the work studied.

Creator Type: Artistic focus, private sphere (individual)

Juridical context: The Canadian *Copyright Act*, intellectual property laws and laws related to contracts, although these “do not constitute a pressing concern for Dr. Hamel.” (FR 11) As the work is commissioned, any terms agreed upon by Dr. Hamel and Dr. Read would need to be considered within the legal framework, as well as agreements with the publisher. According to the Canadian Music Center, the publisher of *Obsessed Again...* is Hardcore, located in Vancouver, BC.

Activity: Composition of a musical score for bassoon and interactive electronic equipment, entitled *Obsessed Again...*, written in 1992. Activities under study included those surrounding both the compositional and performance processes. The specific procedures used to create *Obsessed Again...* are detailed in the report and include:

1. Sketching of ideas in an initial draft, using pencil and paper
2. Creation of the interactive elements using a computer
3. Testing of the interactive elements, utilizing the Proteus synthesizer as a virtual performer and modifying the draft score and software files as necessary
4. Creation of a final version

To achieve the sonic event, two creative processes are involved—the composition of the musical work (i.e., the preparation of the score) and the performance (i.e., the act of realizing the musical work through an accurate interpretation of the score).

#### **Nature of Partnership**

“The primary individual responsible for the creation of *Obsessed Again...* is the composer, Keith Hamel. He is the sole creator of the musical work. However, as performer, Jesse Read plays an essential role in contributing to the dissemination of this work and is also responsible for

additional entity creation (i.e., recordings). Additionally, Dr. Read collaborated with Dr. Hamel during the compositional process, testing many aspects of the work...Also of importance is that by virtue of being the commissioning agent, Dr. Read did provide the initial impetus for the creation of this work and dictated the basic framework within which Dr. Hamel would create *Obsessed Again...* (i.e., a specification for a musical work for solo bassoon involving the use of interactive electronics).” (FR 2)

### **Bureaucratic/Organizational Structure**

There is no formalized internal structure. The creator, as an individual, must administer his own activities. However, it may be possible to state that the creation process is somewhat governed by the commissioning agent, the composer, and/or the performer. The documents produced in the administrative function are not detailed in the available documentation, but would in all likelihood include correspondence and contracts.

### **Digital Entities Studied**

Digital entities are related to both the process of composition and performance. The composition is represented by a musical score that provides notations with instructions for the interaction of all elements comprising the piece.

Three digital entities are maintained by Dr. Hamel:

1. The representation of the musical score of *Obsessed Again...* (NoteWriter music notation software computer files). Four files are stored, located in the file folder on Dr. Hamel’s Apple PowerBook computer (Additionally, these files have been converted to Postscript for backup storage).
2. The software patch for Max/MSP, which contains a digital description of the computer “instrument” and additional MIDI sequencer data.
3. The Proteus Editor/Librarian file, which describes the sounds to be used by the Proteus 1 synthesizer.

The format of each digital file is dictated by the specifications of the individual software programs with which they were created. The NoteWriter, Max/MSP and Editor/Librarian files are proprietary, binary formats, and as such, their specifications are unreleased. The MIDI files used by the Max/MSP patches are standard text files following the MIDI specification.<sup>1</sup>

### **Documentary Practices Observed**

The documentation process is chiefly the responsibility of the composer. While the existence of a records management or archives program is not applicable to an individual creator, there may still be a systematic method to record keeping by an individual. However, there is no such system in place here—no generally-accepted rules or schemes are used.

“There is currently very little in the way of formalized policies, procedures or standards involved with *Obsessed Again...* The creation of such elements is seen as a priority for the composer, with respect to both this specific work and as a means to introduce standardized procedures and policies for archiving electro-acoustic music as a whole.” (FR 10)

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<sup>1</sup> See <http://www.midi.org/about-midi/specshome.shtml>.

### Records Creation and Maintenance

The creation process seems not to have been formally **documented**. Although initial compositional work for *Obsessed Again...* occurred away from a digital environment (involving basic sketches of overall form and determination of pitch material and rhythmic aspects for the bassoon part), most of the remaining work occurred at the computer. Each digital entity was created with the use of commercial software.

The lack of formal documentation during the creative process is probably due in large part to the fact that “no generally accepted or documented procedural **rules** or schemes exist for entities created through musical composition and performance.” (FR 2)

There was some use of file **naming conventions**. Each of the digital elements is identified through the assignment of a semi-descriptive filename. The organization method is at the sole discretion of Dr. Hamel. “The digital entities reflect the creation process in so much as they are **organized** by file type (i.e., the individual files are dictated by the software program used to create them)” (FR 9)

All **changes**/alterations to the digital entities are made by the composer himself, and he does not record these changes in any formal manner.

### Recordkeeping and Preservation

The digital entities are **stored** on Dr. Hamel’s Apple PowerBook computer. As a result, “specific information concerning filenames and versions directly employed by *Obsessed Again...* are available only through communication with Dr. Hamel.” (FR 7) The NoteWriter files containing the representation of the musical score (created on the Apple computer) have been converted to Postscript for **backup** storage on a different computer than the original files (NeXT computer).

Two levels of **aggregation** are identified:

1. The digital score entities. Four files are stored, located in the file folder on Dr. Hamel’s Apple PowerBook computer.
2. The digital elements that provide the electronic interaction.

While the composer feels a **moral** dedication or **obligation** to ensure to the life of the work and ensuring its future existence, there is “no real compulsion towards preservation for **archival purposes**.” (FR 11) “Dr. Hamel sees the process of archiving not as an act of historical preservation, but instead, as a means of ensuring his composition’s future existence.” (FR 9) “Many works have only a short-term existence, and this is most evident with those involving technology...All of the digital entities for *Obsessed Again...* are treated in a utilitarian, not archival, sense.” (FR 8)

Although the composition was designed to use state-of-the-art commercial hardware and software, the equipment required to perform *Obsessed Again.....* is quickly becoming **obsolete**—the computer files are incompatible with current operating systems and some are stored on older single-sided computer disks, and much of the hardware used is ageing and will soon be inoperable.

Initially, no action was taken to protect against technological obsolescence, but Dr. Hamel has (at the time of the report) begun to consider this problem. His main **preservation strategy** has been to attempt to reduce the hardware dependence and technological obsolescence of *Obsessed Again....* To be easily performed using current technology (both hardware and software), the composition will require recovery and a substantial **reworking** of both the interactive and electronic elements. Dr. Hamel has begun to translate many of the original entities into forms accessible by current technology in order to recreate the piece, including using newer software (Max/MSP version 4.2, NoteAbility—the replacement for NoteWriter). It appears, however, that certain entities, such as the editor/librarian patch for the Proteus 1 synthesizer, will not be updated due to software obsolescence and will thus need to be created. Migration strategies will need to be investigated so that the current scenario does not repeat itself.

This process of re-coding and re-implementing certain aspects of *Obsessed Again...* may be seen not as *keeping* or maintaining the records, but rather as continuing the composition (i.e., **record-making**) process by re-creating many of the records. “The compositional process can be considered an ongoing event, directly involving the act of maintaining and updating the musical work and component elements.” (FR 3) The dual purpose of the digital elements in this study supports this view. In addition to providing the necessary data and instructions with which a performer can (re)produce a performance of the musical work, another purpose of the digital elements is to “provide a framework allowing the composer to *continue the compositional process* as deemed necessary (i.e., updates, revisions, etc.).” (FR 3, emphasis added)

### **Accuracy, Authenticity and Reliability**

Specific procedures are not in place to assure the quality, reliability and authenticity of the digital entities and their documentation.

#### Accuracy

It seems that from the viewpoint of the creator, accuracy amounts to faithfully rendering the musical score in the way that it was written and meant to be performed. “By accurately following the score, the sonic entity that is the musical work will be produced.” (FR 1)

#### Authenticity

“Dr. Hamel is the sole arbiter of authenticity and the only preserver/distributor of these digital entities, and as such, is confident that they are authentic. However, no specific procedures are in place that would allow a third party to independently confirm this authenticity. Additionally, no technological method (i.e., encryption technique, digital signature, etc.) is employed to prevent a third party from redistributing these digital entities and/or compromising their authenticity. However, the creative work as a whole is copyrighted, and Dr. Hamel feels this is a reasonable deterrent against unauthorized alteration and reproduction.” (FR 7)

“By being the sole possessor of all the digital elements in question, Dr. Hamel is able to maintain what he views as an adequate level of control over the distribution of authentic digital elements to performers or other agencies.” (FR 7)

The idea of ensuring the composition's future existence will require "the inclusion of a digital recording of an authentic version of the work by which future performances can be judged." (FR 10)

There may be a connection between the juridical context of the creator and the notion of authenticity. It is said that the legal obligations that exist for Dr. Hamel are "focused mainly on copyright and authorship issues (for authenticity verification, performing rights, etc.)" (FR 11)

#### Reliability

Dr. Hamel has sole possession of all the digital elements under study and through this, maintains control over the distribution of these elements to performers or other bodies.