HISTORY OF ELECTROACOUSTIC MUSIC THROUGH FILMED SOURCES: AN EXAMPLE AT IRCAM

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ABSTRACT

Musicologists are interested mostly in sources that take the form of scores, sound recordings, and writings of composers or commentators. Beyond all these sources, for about a century, filmed documentaries or fiction have existed. And they have spread considerably in recent decades.

Usually, the musicologist studies scores and other documents of great value in their final artistic or academic form, as well as various drafts of music or text. As such, raw footage filmed “on the spot” cannot be neglected. Thus, both raw materials and professionally produced movies are among the filmed documents studied in this project.

The first step of the project FIELD involved the filmed documents available at Ircam. The goal was to build the concept of a database which would be useful for studies of contemporary music. A first draft of this database limited to Ircam is already finished. This paper describes this first step. In the future, the project will be expanded to all filmed sources, in France and abroad.

1. INTRODUCTION

Musicology doesn’t often work on videos or films. Some of them are not edited, or even listed in libraries or research centers. They are sometimes eyewitness accounts without esthetic worth, or sometimes they are widely broadcast fiction movies. The project FIELD (Film on Electroacoustics Database) is essentially a database of filmed documentaries on electroacoustic music. It is part of a larger program titled Filming Artistic Creation, to be held at Rennes 2 University in France. This project is funded by the French National Research Agency for four years (2009-2012). Previous status reports on the state of the project were given at Mar del Plata Destellos Conference in 2009, Buenos Aires Electronic Music Studies Network Conference in 2009 and during the Journée d’étude L’activité de composition musicale: des esquisses aux traces indirectes held at Ircam in Paris in 2010.

The main goal of this paper is to describe the structure of the database and to show the quality of its content. To do this, the study focuses on the documents available at Ircam, before expanding the field to other research centers. Some temporary conclusions about the history and esthetics of electroacoustic music have already been elaborated as a result of this project.

2. FILMED DOCUMENTARIES

The musicologist has to find patterns and invariants in his different sources, as described in one of our previous papers [2], to elaborate precise and general thoughts about history, in the manner of Chadabe [3]. Sometimes, archive creation and electroacoustic composition even converge as explained by Chasalow [4]. The first difficulty is in finding documents. The musicologist has to put together all the scores, the writings, the sound recordings and the filmed documents. The latter can be interviews with composers and performers, instrument makers, software engineers, rehearsal and concert recordings. There are also a few fiction movies on musical creation (based on the life of a composer or an interpreter for instance).

In 2008, working on FIELD, two hundred videos were found at Ircam, either in the form of published recordings, or raw documentaries.

2.1. Published recordings

In the group of published recordings, the documentaries made for TV are very professional. They are clear, acute, and with pedagogic intentions. One of the best examples is the document titled Luciano Berio. Directed by Olivier Mille in 1991[1], it shows several interviews with Berio himself. Berio speaks about opera, and the difficult and painful subject of fascism. Musical extracts are explained by the composer, for example his Sinfonia.

Apart from several videos about a composer, some professional documentaries are focused on an institution, such as Musique et sciences: Voyage au centre de l’Ircam (1991), or the series Ecoutez votre siècle[2]. The fifth film of this series, Musique et électronique[3] contains interviews with Karlheinz Stockhausen and George Lewis.

2.2. Unpublished recordings

The second group is comprised of one hundred video cassettes found in a cabinet at Ircam. These cartridges,

in H18 format\(^4\), were forgotten there for at least 20 years. First hand documents, they were in danger of loss [1]. These cassettes focus on work behind the scenes. Unedited, they provide footage of the creation process.

Four cassettes contain the Académie d’été that was held at Ircam in 1994. This is a top quality source on the esthetics of electroacoustic music. These cassettes show a composition course by Jean-Claude Risset, some interviews with Tristan Murail, Philippe Manoury, Miller Puckette, and rehearsals of En Echo\(^5\) with comments by Puckette and Manoury. Other cassettes are the recording of the symposiums La Synthèse and Composition, modélisation, ordinateur, held at Ircam in 1995 and 1996. The sound examples that are heard in these presentations are also rare and precious for musicologists. In fact, these musical works are not so easy to find.

The two groups, on one hand the edited, and on the other hand the non-edited films, have similar subjects: the composition process with computers; the electronic instruments invented at Ircam; the relations between machines and music; the interpretation process; the common work of composers, interpreters and scientists; explanations and analysis by the main actors of music creation; the rehearsals and their difficulties.

These different kinds of subjects may be divided into four categories: composition; interpretation; instrument making; life in an institution.

From these observations, a database is needed to work more easily in the field of history, analysis and aesthetics. The structure of this database has to be useful for working on these matters.

3. THE CONSTRUCTION OF THE DATABASE

In order to obtain a structured ensemble, it is important to specify more precisely the goals to be reached. Beyond databases which can be found on the internet for a large public, such as the references proposed by Dal Farra [5] on the Unesco website, this one is specifically meant for researchers.

Generally, the musicologist uses some sources to validate or invalidate certain hypothetical ideas. He has to know the physical or virtual location of the documents, he also has to find the content of each document with the help of fine descriptors. These descriptors, key words or short phrases, give a powerful tool to the researcher. Thanks to this already completed first look, the musicologist is able to select, then to sort a large number of sources. Beyond this first part of his work, he will be able to structure his own thoughts and to give accurate examples.

3.1. Material reference fields

The most obvious fields are the material reference ones:

- the catalog number (arbitrary, or with the normal format used in the libraries);
- the text written on the label or other support (with the problem of readability that may involve misunderstanding);
- the title of the event if existing;
- the film-maker and producer name if available;
- the date of the shoots;
- the duration of the whole document;
- the location where one can find the cassette;
- the video format.

Other fields involve a rough description of the content:

- the name of the events quoted;
- the kind of event: concert, rehearsal, course, conference, workshop;
- the name of the musical works quoted;
- the name of the composers quoted;
- the main parts of the film with time cues.

3.2. Content analysis fields

Beyond these rather easy to determine fields, other ones lead to a deep content analysis. This stage is more the work of a musicologist than of an assistant. At Ircam, three major families of subjects were finally defined: the composition process, the interpreter’s work, the instrument-making.

As one can imagine, it is more difficult to fill these three new fields:

- the type of subject (composition, interpretation, instrument-making);
- the type of filming esthetic (whether it involves raw footage, a bit of editing, full editing, off screen voice, beautiful landscapes);
- comments from the institution.

In a last stage, all these fields have to be completed by more advanced and deeper comments.

In any case, the researcher will find in these texts some tracks for high level work for an essay, a conference or any other academic duty.

Presently in FileMaker, the database should be available online. The users will be allowed to suggest new references and corrections. In order to provide all these functionalities, the software will be a Content Management System for easy collaborative work online.

4. FACILITATING RESEARCH ON COMPOSITION AND INTERPRETATION

The database contains more than 200 videos. The main part of these documents is related to the ’90s; among them, there are: 10 interviews, 10 rehearsals, 35 symposia and conferences, 7 courses, 15 workshops.

The four general domains required to run a study are well represented in the filmed documents, that is to say: composition, interpretation, instrument-making and institution life.

\(^4\) Formatted in the analog format H18, these cartridges are ageing quite quickly and the players become rare. Unfortunately, their status of raw documentaries doesn’t facilitate any funding for a digitalisation.

4.1. Compositional process

It’s a priori difficult, and even impossible, to film the act of composition, with the thoughts, the intuition and the imagination of the composer. But an exterior look gives a good idea of this imaginary and intimate landscape. For example, *Écoutez votre siècle – 16 : Instantanés*, directed by Robert Cahen in 1987, shows the personality of a few composers close to Ircam: Marco Stroppa, Thierry Lancinot and Philippe Manoury. Beyond that, the composers themselves sometimes try to explain some concepts existing in their music. Thus, in 1988, Luigi Nono speaks about the esthetics of his music in the documentary *Archipel Luigi Nono* by Olivier Mille. The document *Académie d’été* at Ircam in 1995 offers talks by Fausto Romitelli, José Manuel Lopez Lopez and Emmanuel Nunes.

In another documentary from 1996, Gerhard E. Winckler describes the model of chaos theory applied in his piece *Koma*. The piece is recorded in video with the Arditti quartet during the last rehearsal before the concert.

4.2. A music analysis by the composer

The subject of some documents is more specifically focused on the esthetics of one piece, through the discourse of the composer himself.

In 1984, in the series *Écoutez votre siècle*, Georges Zénatti offers in the #9 some interviews with Pierre Boulez who analyzes the genesis of *Répons*. He also talks about the influence of contemporary painting, of sculpture and urbanism on all his work. In the same series, Hélène Valeyre directs the #15 titled *Le compositeur d’aujourd’hui* (1986). Alain Damiens, a clarinetist, discusses *Domaines* with Pierre Boulez before interpreting the piece with the advice of the composer. During a composition course filmed by Jean-Luc Léridon in 1987, Philippe Manoury talks about the compositional concepts for his piece *Jupiter*. Beyond that, he talks about the way of using the computer as an instrumentist’s partner, in live electronics.

4.3. Rehearsals and interpretation process

Video traces are particularly important for contemporary music because video allows the visual observation of how instruments are played and electronic devices are used. Filming the rehearsals is irreplaceable for musicologists and interpreters of the future.

A H18 cassette from 1992 contains a rehearsal of *Alma Lavio* by Florence Baschet. In the first item of the series *Écoute* in 1993, the composer Georgy Kurtag is filmed during a rehearsal and interviews about the subject of hearing. Several rehearsals, which were held on the 9th of March in 1995, concern *Metallus* by Yann Maresz and *Psappha* by Iannis Xenakis. The same year, during the *Académie d’été*, the dress rehearsal of *Etymo* by Luca Francesconi and of *Spira Manes* by Florence Baschet were filmed in H18.

In addition, some concerts of electroacoustic music have been broadcast by televisions; …Zwei Gefühle… by Helmut Lachenmann, and *Dialogue de l’ombre double*, played during the Salzburg festival in 1992 and available at 3sat & Loft.

5. HISTORY AND ESTHETICS

5.1. Electronic instruments

Studying electroacoustic music has to take into account the specificities of the analog, digital, programmable devices, as well as those of the user/machine interfaces. The work of many musicologists, such as Battier [1], Chadabe [3] or Manning [7] among a lot of books and papers, take account of these specificities. The series *Écoutez votre siècle* offers a lot of items about the electronic instruments. The first film: *L’Ircam, un portrait* shows Pierre Boulez working with Andrew Gerzso on machines; the 4X explained by Giuseppe Di Giugno; René Caussé, about the Ircam *Espace de projection*; Pierre-Yves Artaud and new ways of playing the flute. The other items of the series evoke, for example, the industrialization of the 4X by the French corporation named Sogitec, the 4X violin and the digital bow.

In 1995, a conference by Philippe Manoury on *Jupiter* and *Neptune* gives the opportunity to hear some examples played by Pierre-André Valade. They show how the computer is reacting to different interpretations of the same fragment drawn from *Jupiter*, in particular the rhythmic interpolations from the fifth section.

5.2. Life at Ircam

*Zig-zag à l’Ircam* (1987), by Joël Farges, shows a visit through Ircam. Some people, with very different esthetics, like Pierre Boulez, Georges Lewis, Karlheinz Stockhausen and Frank Zappa are presented. Four years later, *Musique et sciences : Voyage au centre de l’Ircam* shows a tour of Ensemble Intercontemporain in Russia in 1990.

Various other events, exceptional or not, are recorded, such as *Journées Portes Ouvertes* at Ircam in 1994, some sessions of the *Cursus*, the concert of the EIC at Ircam for the 70th anniversary of Boulez in 1995. The documentation on an institution is also a part of musicology, such as documents about the Köln studio explored by Morawska-Büngeler [8] or about the GRM studied by Gayou [6].

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1 Produced by Artline films et La Sept.
4 This documentary is the 17th of the series and is titled *Cours de composition, Philippe Manoury présente Jupiter.*
6 Directed by Mirosław Sebestik and produced by JBA-production, La Sept, Cnac, Mikros Image and Sacem.
8 For soprano, electronic and chamber orchestra (1994).
10 A documentary directed by Gilles Capelle.
11 Corporation specialised in flight simulators.
12 By Olivier Mille and Pierre Bourgeois, coproduced by La Sept, Ircam, Cnac Georges Pompidou, and Artline Films.
5.3. Esthetics of mixing sounds and visual arts

The work of Cécile Le Prado and Christian Boustani on images and composite sounds appears as the opening of Irrcam toward various artistic domains. A H8 cassette from 1992 documents a conference by Le Prado on his work *Le Triangle de l’incertitude*. This project focuses on the transposition of the concept of spotting by triangulation into the musical world. Three cassettes concern *Le Messager*18 by Catherine Ikam, Louis-François Fléri and Jean-Baptiste Barrière. Synthetic images and live electronics are associated. The following year, a round table *La Musique et l’image, vers de nouvelles interactions* evaluates the state of the relations between visual arts and music, in particular in the cinema (for example *Metropolis* by Fritz Lang19 with a new music by Martin Matalon).

The art of dancing is not neglected. The documentary *Cage-Cunningham* directed by Eliot Capla and produced by the Cunningham Dance Foundation in 1991, contains several interviews with Nam June Paik, John Cage and Merce Cunningham.

5.4. Visual art on pre-existing musical pieces

Music that was written at Irrcam for commercial silent cinema is better known than artistic films associated with music previously composed at Irrcam. A video20 directed by Robert Cahen consists of artistic images placed along an interpretation of *Réponses* by Pierre Boulez. *Les Douze heures de la nuit*21 directed by Jean Baronnet in 1988, is similar to a documentary on ancient Egypt, set to the eponymous piece by Pierre Henry about the book of Am-Douat.

Finally, *Ecuatorial* by Marc David in 1992 shows some artistic images on the eponymous piece by Varèse.

6. CONCLUSION: THE ACT OF CREATION AS AN OBJECT OF STUDYING

In conclusion, the act of creation in music involves composition, interpretation and instrument-making. At Irrcam, Boulez has promoted the links between scientists and musicians, notably through the invention of new instrumental devices, such as the 4X, the Midi flute or software specialized in synthesis, treatment, assistance in composition and interaction.

Documentary and fiction are the two possibilities in filming the act of creation. Documentaries are the most common form for films about electroacoustic music. These films or videos are created by professional film makers, or merely consist of unedited raw footage.

In addition, all these documents show life at Irrcam through technological events or an analysis of works whose aesthetics are often influenced by structuralism. These recordings also unveil a dense intellectual and artistic activity, as well as the opening of the institution toward different aesthetics and artistic domains such as the art of installation or digital visual art.

The Irrcam documentaries often focus on thought about aesthetics, formally or informally. Thus, *L’Ircam sur le vif: le temps musical*, bears witness to this intellectual life remarkably. This video is the recording of the synthesis session which was held on the 23rd of February in 1978. It shows a discussion between Roland Barthes, Gerald Bennet, Luciano Berio, Michel Decoust, Gilles Deleuze, Michel Foucault, Jean-Claude Risset and Pierre Boulez. The presence of such philosophers underscores the importance of a deep and pluridisciplinar thought about the aesthetics of contemporary music, and in particularly of electroacoustic music.

7. REFERENCES


18 A work shown at *CitéS CinéS* 2 in 1995.
19 Music for the well known Fritz Lang’s film.
20 Produced by Ina, Col-ima-son and Irrcam.
21 Produced by La Sept and Ina.