# FIAF Film Restoration Summer School 2014 – Report



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Fondazione Cineteca di Bologna Fédération Internationale des Archives du Film Association des Cinémathèques Européennes

L'Immagine Ritrovata – Film Restoration and Conservation

1. Introduction

The sixth edition of the Film Restoration Summer School / FIAF Summer took place in

Bologna from June 28<sup>th</sup> to July 18<sup>th</sup> 2014. Once again the Fédération Internationale des

Archives du Film (FIAF) and the Association des Cinémathèques Européennes (ACE) have

combined their efforts with Cineteca di Bologna and L'Immagine Ritrovata film restoration

and conservation laboratory to organize the Summer School held each year between 2007

and 2010, and every second year since 2012.

2. Structure

The Film Restoration Summer School / FIAF Summer School 2014 was structured along three

main course steps:

a) Film restoration online theory course: distance learning

May 14<sup>th</sup> to June 18<sup>th</sup> (each Wednesday)

For one month preceding the classes in Bologna, participants have been provided with texts

and papers to download weekly from an ftp account dedicated to the Film Restoration

Summer School. The distance learning preparation included topics on new digital film

restoration, access and conservation. The online distance learning has been curated by

Camille Blot-Wellens with the support of the FIAF Technical Committee.

All documents are still available at the following ftp:

http://files.immagineritrovata.it:8080/WebInterface/login.html

Username: distance learning frss2014

Password: 7mOcvM

Please find below the weekly topics and in the attachment 1 of this report a detailed

bibliography:

Week 1 – Terms and Definition

Week 2 - Materials

Week 3 – Preservation Techniques

Week 4 - Color

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Week 5 – Digital

Week 6 - Versions Reconstruction

Week 7 – Ethics Methodology

b) Theory lectures and II Cinema Ritrovato film festival

Bologna, June 28<sup>th</sup> to July 5<sup>th</sup>

The first week in Bologna took place during the 28<sup>th</sup> Il Cinema Ritrovato film festival. Over 28

meetings, lectures and round tables with international experts made up the daily program of

the course. The entire schedule of this first week was focused on both historical, philological,

technical and methodological issues, as well as specific case studies. Lessons were held in

English, French or Italian with the option to have a translation into English.

Please find attached the program of the theory classes (attachment 2).

c) Restoration practical training

Bologna, July 7<sup>th</sup> to July 18<sup>th</sup>

The practical training was held at the laboratory L'Immagine Ritrovata. The high-specialized

staff was closely involved in the intensive 2-weeks program. Students worked 8 hours per

day for 10 days.

Please find attached to this report the schedule of the different groups in laboratory

(attachment 3).

3. Program

The Film Restoration Summer School / FIAF Summer School 2014 was conceived both for

archivists and staff working at FIAF archives, and students. The project's main objective was

to teach and update participants on how to restore and preserve a film through the use of

photochemical and new digital technologies. Participants had the chance to experience

everyday work in a highly specialized laboratory, following every step of the process through

all departments and developing and practicing a specific set of skills: operating all digital and

photochemical equipment in an archive and/or laboratory, following a complete restoration

workflow, performing all the primary necessary operations needed to restore a film,

evaluating the state of conservation of a film and choosing the best practice to restore,

3

reconstruct and preserve it.

Students have been divided into 8 groups (7 groups of 5 students, 1 group of 4 students) and were working in each of the laboratory's departments:

Film Identification

This very first step involves the identification, study and analysis of film materials, different elements (negative, positive, intermediate), trademarks, edge codes and marks, shape and size perforation, etc.

Film Repair and Cleaning

Film handling and inspection: how to use clear film sprocket tape to fix tears and breaks; analysis of old splices; restoring splices by hand or with a cement splicer; repairing film to prepare it for cleaning and printing; analysis of intertitles; cleaning 35mm and 16mm film nitrate, triacetate and polyester with an ultrasonic cleaning machine.

**Film Comparison** 

Film comparison and analysis to chose the best prints for restoration.

Scanning

Scanning of a motion picture image from 35mm and 16mm negative, positive and intermediate materials to a digital file (4K and 2K).

**Digital Restoration** 

Digital treatment of images using dedicated software to eliminate physical damage to the film resulting from usage and the manual handling of film, as well as the restoration of visual clarity of images by working on problems like grain, instability and flicker without affecting the original material. Digital restoration has a wide range of tools and possibilities; therefore it is vital for archivists to know what can be done in order to establish their specific restoration workflow.

**Digital Colour Correction** 

Film colour correction and colour fade restoration.

4K, 2K, HD, SD conforming, Mastering, Primary and Secondary

Colour correction and Titling.

**Sound Restoration** 

Optical and magnetic sound acquisition (35mm, 16mm, 17,5mm) to digital data. Sound Restoration, with dedicated plug-in for editing.

**Mastering and Digital** 

Cinema

DCP Encoding and video masters recording.

Machine Room and
Network Management

How a machine room works and how all the machines are connected to workstations, and interconnected with each other. Data processing and data transfer, to make a copy of a film on digital support.

**Subtitles** 

Use of software to edit and add subtitles to different supports.

Film Recording

How to set a film recorder to generate master negatives.

**Analog Grading** 

Use of the Color master to set printing values to print from negative to interpositive for preservation, or a positive for screening. Study of the Desmet Method and practical application to recreate tinting and toning.

**Print and Processing** 

Principles of optical and contact printing and their differences; study of different printers, printer loading and usage. Basics of film processing and the analysis of the relationship between and parameters shared by printing and film processing.

Application of Lad, Strip, and other quality-control tools to check the correct operation of printing and development.

Quality control.

## 4. Participants

Since the laboratory increased its space and capacity during the last year, 46 people have been officially selected (instead of 30 like previous editions). 5 of the selected candidates rejected their participation in time before the course started. Due to visa problems 3 other people weren't able to participate, so that 1 student was adjoined afterwards. The number of participants who in the end actually participated at the Film Restoration Summer School 2014 was 39. The average age of the participants was 35,5 years. At this year's Film Restoration Summer School / FIAF Summer School participated 14 women and 25 men.

The students were coming from 28 different countries, among which 15 non-European countries:

American	2
Australian	1
Austrian	1
Austrian/Greek	1
Brazilian	2
Chinese	3
Colombian	1
English	1
French	1
German	1
Iranian	1
Iraqi	2
Italian	3
Italian /	1
Luxembourg	

Japanese	2
Korean	1
Lithuanian	1
Macedonian	1
Mexican	1
Montenegro	1
Nigerian	1
Portuguese	2
Romanian	2
Slovenian	2
Spanish	1
Swedish	1
Taiwanese	1
Thai	1

Please find attached a list of the participants (attachment 4).

## 5. Scholarships

The FIAF Selection Committee offered four 1000 € bursaries to the following candidates, based on the strength of their application and their relevance to the FIAF archive with which they are associated, and to the FIAF community in general:

- 1.) Jong-Woo Lee (Korea)
- 2.) Hitomi Matsuyama (Japan)
- 3.) Man-Suet Gladys Lau (Hong Kong)
- 4.) Nuchanat Saensiri (Thailand)

ACE offered four 750 € scholarships each to the following candidates:

- 1.) Tiago Ganhao (Portugal)
- 2.) Nemanja Becanovic (Montenegro)
- 3.) Mihai Dancaescu (Romania)
- 4.) Alexandar Trajkovski (Macedonia)

The Film Foundation/World Cinema Project assigned two scholarships of 2.700 € each to the following candidates:

- 1.) Esther Jemila Chukwuma (Nigeria)
- 2.) Martiros Vartanov (USA)

## 6. Fee, Accommodation and lunch

The participation fee for this year's Summer School was 2,700 Euros. The participation fee included: registration, festival pass, accommodation for 21 days (from Saturday June 28<sup>th</sup> to Friday July 19<sup>th</sup>) and lunch for 16 days (every day from June 29<sup>th</sup> to July 5<sup>th</sup>; Mondays to Fridays from July 7<sup>th</sup> to July 18<sup>th</sup>).

#### 7. Results

At the end of the training, an evaluation form was issued to all the participants, to gauge their understanding of the different topics and level of satisfaction with the content and structure of the program. The overall rating of the course was very satisfying. All of the students would recommend the Film Restoration Summer School / FIAF Summer School. Every student received a certificate (attachment 5) of his or her successful participation. For further details you find attached the summary of the questionnaire (attachment 6) and also the blank questionnaire that has been distributed to the participants (attachment 7). If you wish to receive the individual questionnaires filled in by the students, we would be pleased to send you the scanned files.

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- 2) Program theory classes
- 3) Groups schedule practical class at the laboratory
- 4) List of participants
- 5) Certificate
- 6) Summary questionnaire
- 7) Blank questionnaire
- 8) Group picture
- 9) Brochure